

Central Oklahoma Radio Amateurs

COLLECTOR AND EMITTER

SINGLE COPY

50¢



AN INFORMATIVE MAGAZINE
PUBLISHED MONTHLY BY AND
FOR OKLAHOMA RADIO
AMATEURS

AND ANYONE INTERESTED IN
LEARNING ABOUT IT

Vol. 5

DECEMBER 1979

No. 59



PERSONAL SKETCHES - CHUCK WILHITE, K5NK

Chuck is shown here at his station operating the keyboard. Notice that there is no microphone visible. Chuck is one of Oklahoma City's universal amateurs, being active in the 76ers MORI, Autopatch and CORA. Read Chuck's story of determination and enthusiasm in the 76ers club section beginning on page 8.

DO YOUR CHRISTMAS SHOPPING
Now!
AT

KRYDER ELECTRONICS

YOUR COMPLETE AMATEUR RADIO STORE

OWNER/MGR. IN OKLAHOMA CITY: CHUCK GUSCHKE N5SW



YAESU



STOCKING THESE AND ALL OTHER MAJOR LINES

LOCATED AT:

5826 NORTHWEST 50TH
MACARTHUR SQUARE SHOPPING CENTER
OKLAHOMA CITY, OKLAHOMA 73122
AC 405/789-1951



HOURS:


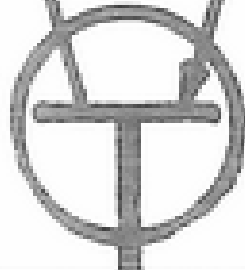
TUESDAY & FRIDAY 10-9
WEDNESDAY, THURSDAY & SATURDAY 10-5
CLOSED SUNDAY & MONDAY

ALSO LOCATED IN

FT. WAYNE, INDIANA & PHOENIX, ARIZONA

Central Oklahoma Radio Amateurs

COLLECTOR AND EMITTER

Published monthly by CORA Inc 1020 Arthur Dr Okla City OK 73110
ADDRESS ALL COMMUNICATIONS TO:
CORA C&E, P. O. Box 15013, Okla City OK 73155
Unless otherwise indicated contents may be reprinted by club type, non-profit publications without prior permission. Credit: CORA Collector & Emitter

SECOND CLASS POSTAGE PAID AT OKLAHOMA CITY OK
[USPS 116-150]

Managing Editor Joe Harding, WA5ZNF 737-1044
Subscription: CORA members \$1.50 a year. All others \$6.00 a year.

Central Oklahoma Radio Amateurs, Inc. (CORA) is a not-for profit association of radio amateurs, founded for the promotion of interest in amateur radio communication and experimentation, for the advancement of the radio art and of the public welfare and operates to enhance the cooperation of member clubs in sponsoring activities of mutual interest to the clubs and all radio amateurs.

President	Chuck Wilhite	K5NK 721-4926
Vice President	Bob Graham	WB5NSV 677-8685
Secretary	Kay Northcutt	WD5DYJ 842-1086
Treasurer	Ron Recer	WD5FRQ 751-5378

The following item concerning the "Russian Woodpecker" was inserted into the Congressional Record by Senator Goldwater:

SOVIET INTERFERENCE IN THE AMATEUR RADIO BAND

Mr. Goldwater. Mr. President, I want to bring to my colleagues' attention a matter which I am afraid demonstrates once again the one-way street that cooperation with the Soviet Union has become.

Recently, the amateur radio frequencies have been subjected to an increasing amount of radio frequency interference. The source of this interference has been traced to the operation by the Soviet Union of an over-the-horizon radar system in the amateur band. Both the Federal Communications Commission and the Department of State have attempted to resolve the problem, but have been met by a lack of cooperation from the Soviet Union.

Mr. President, in my view -- both as an amateur radio operator and a U.S. Senator -- this is a serious matter which must be resolved satisfactorily. The public service that this country's amateurs perform must be able to continue.

I do not pretend that this is a matter which should hold up the SALT treaty. However, I hope that my colleagues at least will have this in mind as we hear about Soviet cooperation and good intentions from the White House.

CLUB NUMBERS: (1) Aeronautical Center. (2) Okla. Central. (3) MORI. (4) Autopatch. (5) OU. (6) Altus. (7) 76'ers. (8) Paid subscribers. (9) Wheatstraw. (10) Choctaw. (11) Edmond SOCIETY (12) Shawnee. (13) Kay County (14) ATVS (15) SCARS (16) Edmond CLUB (17) Tri-City.



MEETS: 8:00 pm First Friday each month
 Flight Standards bldg, FAA Aero Center
 PRES Bob Pace WA5CJG 376-3569
 V-P Bill Oliver K5KDR 329-6333
 SEC Bob Graham WB5NSV 677-8685

Club Editor, Bob Graham, WB5NSV

RANDOM WORDS FROM THE PRESIDENT:

The turn out at the November club meeting was great, and the program was a lot of fun, even though Joe and Bob kept shooting down Holly. For those of you who can't figure out what's going on, I'll tell you. Our program in November was presented by Mr. Craig Burson from the FAA. Craig is the FAA's expert on computer based instruction, and he presented a very good program on how the computer is being used in education. We all had a ball... Thanks again for a super program Craig. Ask Joe, Bob and Holly about Dog Fight.

Our DECEMBER MEETING will be a dinner meeting, and it will be held on December 8th this is a Sat. Night, Time is 7:00 pm, Place is the ROYAL FORK RESTAURANT located at 948 s.w. 36th this is one block west of western on 36th. The food will be good and there will be prizes too. So come on out and bring your better half with you..

Be sure you mark the 4th of January on your calendar as this is the night that ACARC elects new officers. Be sure you come out and support your club.

I would like to wish everyone a very MERRY CHRISTMAS and HAPPY NEW YEAR.....

73, Bob Pace, WA5CJG.

REQUIESCAT IN PACE

Amateur Radio lost one of the rare and nonreplacable types with the death of J D Odneal, W5TMY. J D (those letters are names, not initials) was a true master of mechanical and of electrical problems. His ability in these fields was not short of genius. In each, he was a perfectionist. Everything he built was completed to the highest degree of perfection. And, it seemed, there was nothing he couldn't build once he set his mind to it.

J D was always ready to assist others. From making coffee for the early meetings of the ACARC to turning out on his lathe mechanical parts that couldn't be bought, J D was there, volunteering his assistance.

The Warr Acres daily coffee shop mini-hamfest owes its start to J D. After his forced retirement because of disability, J D used the coffee shop gathering as his contact point with the world. There he discussed technical matters, and there he gave the solution to many electrical and mechanical problems besetting his friends.

Just before the FCC initiated its late and unlamented Marxist "noble experiment" of a classless society by giving Advanced Class operating privileges to all holders of Conditional and General Class licenses, J D took and passed the Advanced Class examination. He wanted no privileges he had not merited.

Words fall short in paying tribute to J D's character and ability. Those of us who know him will cherish the memory; the better we knew him, the more we honor his memory!

W5JJ

FOR SALE: Many microphones of several types, variable capacitors, co-ax connectors, many small parts. W5JJ, 5824 N. W. 58, Warr Acres, 789-3788.

CORA Collector & Emitter

MINUTES OF THE NOVEMBER MEETING OF THE ACARC

The November meeting was called to order at 8:02 PM by President Bob Pace, WA5CJG. There were 38 members and guests present. After welcoming the crowd for the evening, Bob, gave a special welcome to Bob Ashby, W5HXL, following his hospital confinement. Welcome back Bob.

Following the usual round of self-introductions, Bob Pace asked for a report on the latest CORA meeting. This meeting was reported on by Bob Graham, WB5NSV, with help from Joe Harding, WA5ZNF. Joe reported that due to rising costs to publish the C & E we are now left with two choices. 1)Cut back on the size and content of the magazine, or 2)Raise the subscription costs to the clubs. Joe reported that CORA had requested input from the clubs as to what action they would recomend. A motion was made by Charlie Greene, WA5JGU, and seconded by George Lagaley, W5NTL, that we recommend to CORA that C & E costs to clubs be raised to 25¢ per copy with a percentage return to clubs for sale of advertising by the clubs. The motion carried.

A discussion followed concerning the fact that when C & E costs are increased current club dues will not cover the cost of the C & E. President Pace made clear that in order to raise club dues a constitutional change must first be made. A motion was made by George Lagaley, W5NTL, and seconded by Paul Asplin, WA5HTL, that our constitution be amended limit dues at \$5.00 maximum. This motion carried.

A motion was then made by Bob Graham, WB5NSV, and seconded by Bill Oliver, K5KDR, that dues be set at \$3.00 effective immediately. The motion carried.

Following some discussion Carl Drumeller, W5JJ, was given a vote of thanks for his work in forming, and advising our club.

President Pace announced our annual Christmas dinner will be Dec 8, at 7:00 PM, at the Royal Fork Restaurant, 938 SW 36th. The cost will be \$3.85 for "all you can eat". This will be an excellent meal, and will be followed by door prizes. Hope to see you there.

The program for the evening was given by Craig Burson of the FAA. Craig spoke on the Computer Managed Instruction system known as PLATO, and followed up by giving everyone present "hands-on" exposure to the system. Everyone was fastinated by this system, and the program was enjoyed by all. Thanks Craig.

The meeting was adjorned for coffee and donuts at 9:45 PM.

Bob Graham, WB5NSV, Secretary/Treasurer

CHECK YOUR LABEL NOW!!!!!!!!!!!!!!

<u>club #</u>	<u>expiration</u>
	<u>year</u> <u>month</u>

017912 128003

JOHN DOE WA5XYZ

146 NW 85

OKLA CITY OK 73152

If you haven't done so lately, this is a reminder to look now at the mailing label on the front cover of your C & E. Please take the time to verify what's on your label, including the expiration dates at the top. Please remember that if a particular club # does not appear, then either you are not a member of that club or your dues have already expired (in that club). Your call will only be replaced by XXXXXX if you are expired in all clubs. If you have any changes or corrections, please contact your club secretary, so that he or she can submit the change. Thanks for taking the time to help.

WB5NSV

MEETS: 7:30 PM 3rd Thursday of month.
Security Bank Basement, Ponca City
PRES Chuck Willis WB5DOT 765-5366
V-P C. L. Hallmark W5ZWM 762-8620
SEC/TR Jay Williams W5TXF 765-9440
CLUB EDITOR Chuck Willis, WB5DOT

It doesn't seem possible, but it is time for another article for the C&E again. Since I was out of town for the October Club meeting, I can't comment much on what transpired. However eleven members were present for the November meeting. Grady Skillern, WB5SAG, made a motion to move the December meeting from December 20 to December 13 because of the holiday season. All present agreed, so set your calendar one week earlier. A rather lengthy discussion was held concerning the types of programs the club members would like to see at future meetings in order to attract more attendance. Many good suggestions were made, and we will attempt to offer more programs of the type mentioned. For those of you who were unable to attend the November meeting, if you have some specifics that you would like to see presented, please call or let me know your wishes. Unfortunatly, my crystal ball broke and I no longer can read your mind.

Our November presentation was on making printed circuits, such as found on the pages of QST. For a minimal investment, (5 or 6 dollars), the average ham can make many varied and workable printed circuits.

I still haven't finished all my fall antenna work, so I can't really comment on the success of my endeavors yet.

With Christmas quickly approaching, I'm sure that some of us have been leaving copies of ads from 73 or QST in obvious places about the QTH as hints for Santa. The only problem I have is trying to decide what items I just can't live without in 1980. Since this will be the last issue until year end, I want to take this opportunity to wish everyone in CORA a happy holiday season from everyone in the Kay County Amateur Club. Don't forget our club meeting for December is on December 13 instead of December 20. Until next time

73
Chuck

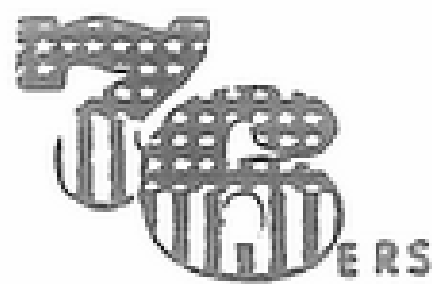
date	no.	primary	backup
12/3	150	WB5DOT	WB5JYC
12/10	151	WD5ACK	N5EO
12/17	152	W5ZWM	WA5UBO
12/24	153	WB5JYC	WB5DOT
12/31	154	N5EO	WD5ACK
1/7	155	WA5UBO	W5ZWM

ALL INTERESTED AMATEUR RADIO OPERATORS

Mark your calendars and watches for 2 pm Sunday, December 9, 1979 (the second Sunday in December), to listen to and heed 146.34/.94 MHz for a Simulated Emergency Test.

Test.
This test will conclude with critique and refreshments at the Red Cross center,
323 N.W. 10th, Oklahoma City. We'll look for you there! Bill Skipper, KB5BS

QST*QST***QST***QST***QST***QST***QST***QST***QST***QST***QST***QST***QST*****



BICENTENNIAL AMATEUR RADIO CLUB

MEETS: 7:00 PM on the 2nd Tuesday of each month
at Air National Guard - Will Rogers World Airport
President: Joe Couch WD5BMP 282-4353
V. P. : Kay Northcutt WD5DYJ 842-1086
Secretary: Tom Cassidy N5AOZ 751-1194
Treasurer: Jim Buswell N5BEQ 947-1180



The November meeting was called to order at 7:02 and :03 p.m. by new president, Joe, WD5BMP, with 40 members and 4 guests present.

The minutes of the October meeting were approved as published in the November Collector and Emitter.

The treasury report was approved as read by the new treasurer, Tom, N5AOZ.

Committee Reports: December Dinner Meeting: will be Tuesday, December 11, 1979, 6:30 to 10 p.m., Cattlemen's Restaurant, Corral Room, 1309 S. Agnew; a buffet for \$4.75 per person for a minimum of 50 people--so, y'all come!! (It was decided later to spend club funds to buy door prizes on a motion by Chuck, K5NK, and a second by Paul, WA5HTL.)

CORA: actions at the board meeting October 23 and plans of the Board were reported by Paul, WA5HTL, as will be found elsewhere in this issue.

Emergency Communications: Bill, KB5BS, reported the results of the new CORA Emergency Committee, which met November 12 & 19, 1979 and will again December 17, 1979: established a regular meeting date, time, place as the third Monday each month, 7 p.m., Red Cross, downtown OKC; 2. determined the needs of the Red Cross in an emergency to be OPERATORS, both VHF and HF: at the Red Cross station, W5LOW, and mobile, with survey teams; 3. decided to establish an Amateur Radio Emergency System (ARES) along the ARRL format; determined that we as amateurs and residents of this area need an Emergency Coordinator willing enough to do the job to volunteer rather than be appointed, yet acceptable to the appointing authority: with his volunteering, the committee resolved to support Bill Skipper, KB5BS, as E.C.; 4. decided to announce "on the air" and in the C & E the meeting(s) data and the need for volunteers! (See elsewhere this issue.)

Announcements: Bill is still taking orders for T-shirts at \$2.95 each; he's waiting for a total of 10 to order before sending the order in; only has four listed.

There being no old business we moved on to new business: after a full report from Joe, WA5ZNF, Managing Editor of the C & E, and much discussion, the motion was passed to agree to pay CORA up to 25¢ per club member per month for the Collector and Emitter and CORA dues and to accept up to 25% commission from C & E to the clubs as rebate for any new advertising sold. It was also agreed to raise club dues to \$4.00 per member per year effective October 10, 1979 with 4 negative votes.

It was moved, seconded and passed with 3 no votes to base members' renewal dates on the month joined or last renewed.

The club has agreed without dissension to make the 16/76 repeater available for emergency training and actual emergency use if needed.

The '76ers are on record as providing its Emergency Representatives full authority to represent the club and speak for the club in any business pertaining to Emergency Communications through the CORA Emergency Communications Committee.

Coffee/donut break at 8:21 p.m. till 8:40 was followed by Coy, N5OK, and his presentation on antennae, from why and how they work to the different designs available both commercially and homebrewed.

The club adjourned for the "aftermeeting" at 9:55 p.m. See you at Cattlemen's Restaurant December 11, 6:30 p.m.

Jim, N5BEQ
Secretary



DeGe And Associates
(Division of Buttrick of Mich.)

YOU CARRY A SPARE TIRE - JUST IN CASE
WHY NOT A SECOND INCOME - ????????

Gene A. Nailon
K5DLE

405-341-8289

Computer System

\$8997⁰⁰

Small Business Applications

- General ledger
- Accounts payable/receivable
- Payroll and Inventory
- Custom programming

MICROLITHICS Inc.

2918 N. MacArthur

Call 947-5646



BICENTENNIAL AMATEUR RADIO CLUB

"To Promote Radio Communications"

Sponsored by Oklahoma Air National Guard
ARRL affiliated



It all started by accident back in February, 1968. I went to visit a new couple who had moved into St. Joseph, Missouri and were members of our local church. During the course of the conversation, I found out that Ron was a ham, then KØDJF. We talked for quite a while, and I finally encouraged him to get out some of his equipment so I could see what all this business was about. So, out of his closet came this old beat up general coverage Heath receiver. We listened for a few minutes and he asked me if I wanted to take it home with me. Jumping at the chance, I did. Sue, my wife and I sat for hours intrigued at the enjoyment fellows were having on the air. I told myself then and there that I was going to get my license.

I didn't know anything about electronics, not even the difference between a resistor and transistor. I did have one thing on my side. In 1955, I started my tour of duty with Uncle Sam and was sent to a Morse Radio School. So, for three years, I copied lots of code. By the time I was out of the army in August, 1958, 40 w.p.m. of c.w. was as easy as falling off a log. So, no problem with the code.

Ron couldn't help me get a license since he had a conditional license at the time. He didn't know any of the local amateurs, nor did I. As luck would have it, about this time an editorial appeared in the local newspaper about a lady in St. Joseph who spent many hours passing traffic through the MARS program. It listed her phone number in case anyone was interested in having her handle some messages for them. I decided to call her through the encouragement of my wife. During the course of the conversation, she informed me that the writer of the editorial was my neighbor, who was also an amateur and for me to contact him.

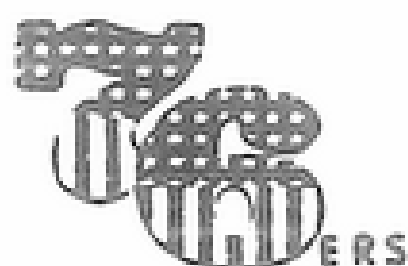
So, I contacted John and he invited me over to his home. We talked about my desire to get on the air, so he said, "Well, let's see how well you can copy code." So, he gets out his keyer and sends a few sentences and to the surprise of both of us, I could still copy code after almost 10 years. John told me he would help me get my novice license. I told him I didn't know the first thing about radio, that all my knowledge was limited to turning one of the things on and off. He assured me it would be no trouble to pass the novice and gave a license manual to me to study on while he was waiting for my examination to come.

I passed it, and on April 18, 1968, I made my first contact as WNØUCW. After several contacts with the nervous jitters, I finally settled down and really started enjoying one of the most wonderful hobbies I had ever gotten into. Not having to worry about building up a code speed, I started studying everything I could get my hands on. Man, this was so interesting, I couldn't stop studying. The theory of electronics fascinated me. So, on July 12, 1968, I was the proud holder of the General Class license.

My first contact as a General that day was one to remember. My friend Ron, who got this whole thing started, was about as anxious for me to get the new ticket as I. So, the day it arrived, we decided to try a little SSB. While waiting on the ticket to come, I had purchased an HT-37. Not being at all familiar with the thing, Ron and I decided 40 meters would be a logical band to work. I could hear Ron but he couldn't hear me. I was answering him in the novice band of 40 meters on SSB. I watched the mail for months in fear of getting a pink ticket for operating illegally out of the band. I always did detest SSB.

I finally figured out how to zero beat a signal, so I started having all kinds of fun. But, about this time, I started getting QST and from it and my contacts on the air, I started hearing about this Incentive Licensing thing. I heard they were going to take part of the bands from me on November 22, 1968. So, out come the old books again and in November I make another trip to the FCC in Kansas City. So, on December 11, 1968, I had in my possession the Advanced license.

I was still dissatisfied. Those lousy guys taking part of my c.w. privileges from me. Well, I decided right then and there that when my two year probation period was up, I was going to have the Extra or bust trying. It didn't turn out quite the way I had planned, for during this period I moved to Oklahoma City where you can't take the exams as easy as you can when you only live 50 miles from an examination point.



BICENTENNIAL AMATEUR RADIO CLUB

"To Promote Radio Communications"

Sponsored by Oklahoma Air National Guard
ARRL affiliated



Anyway, on April 9, 1971, FCC visited Oklahoma City and I was there. With Joe Buswell, then WA5TRS, and I comforting each other, we walked out of the place that day both knowing we had passed the Extra Class. On May 8, 1971, I received in the mail what I had been waiting on for two years, the Extra Class License. After moving to Oklahoma, I was issued the call WB5CPR. I was issued my present call, K5NK in March, 1977.

We had lived in Oklahoma City for about 8 years before I realized there were more than 10 hams living here. There didn't appear to be anyone but me working cw. I had sworn that I would never be found on the glorified CB band, 2 meters. But, along came Chuck, N5SW and Bill, WA5YGX. They almost dared me to try it out. So, I thought about it and decided to give it an honest effort. To my astonishment, there were lots of folks in Oklahoma City that held licenses. Almost immediately, I started meeting people I didn't know existed. I became interested in the local clubs and started making some of the meetings. Even though I am much more comfortable with a keyer in my hands than a mike, I have made many friends through vhf.

I am finishing a term as President of the M.O.R.I. club. I am the past Vice President of C.O.R.A. and the President for the coming year. I am the Vice-President for the Oklahoma City Autopatch Club.

One of the things I enjoy about C.O.R.A. is working with Ham Holiday. It was most gratifying to be able to spend all that money for prizes. I will be working on this for Ham Holiday, 1980.

My wife and I both grew up on cotton farms in Southwestern Oklahoma, in Greer County, near Mangum. We have been married for 27 years and have 3 sons. The oldest, David, now N5AKU holds a general class license. He is married and works for the Phillips Petroleum Company in Bartlesville in the computer department. Dean is a senior, getting his degree in Commercial Art. The youngest son, 15 is still home in school. Sue, my wife is a kindergarten teacher in the Putnam City Schools. I work for the Equitable Life, being a farm and ranch loan appraiser.

===== PERSONAL SKETCHES is submitted by Bill, WA5RAQ =====

FOR SALE: Complete Collins station. KWM2, 30L1, 312B5, 56F2. If you are really interested call for details. ALSO Drake TR22-C, xtaled for 7 frequencies, \$150.00. Genave GTX-2, 25 watt, xtaled for 8 frequencies, \$125.00. Call Ken, WB5ECJ, 751-4917.

EXTRA CLASS
AMATEUR RADIO
WSKE

FIRST CLASS
RADIOTELEPHONE
LICENSE

ELLARD'S EX EL

ELLARD W. FOSTER, OWNER

5905 N.W. 42nd Street, Phone: 405/789-6702
OKLAHOMA CITY, OKLA. 73122

TELETYPEWRITER
ASSEMBLIES

USED TEST
EQUIPMENT

EXCESS
ELECTRONICS

Tektronix
COMMITTED TO EXCELLENCE

MIKE RILEY
Sales Engineer
Measurement Products

Tektronix, Inc.
800 N.E. 63, Suite 201
Oklahoma City, Oklahoma 73105
Phone: 405-848-3361 or 800-522-8196 (Okla. WATS)





CLUB EDITOR

George Lee, WB5NMK, 946-2754

MEETS: 8:00 PM First Tuesday of month
Okla City EOC, 4600 N Eastern
Pres Fred Taylor KA5CXM 528-1537
V-P Bob White WB5PWZ 681-92224926
Sec Jim Buswell N5BEQ 947-11806984
Tres Jim Jones K5PER 634-52355235
Dues: Sid Gerber, 829 Bouse, WMC 73110

The November meeting was called to order by the president, Chuck. The treasurers report was read and accepted, it was read by Chuck because Jim was absent. Chuck was a little uncertain about a few things because of lack of details. No big deal, though.

The usual round of self introductions followed, followed by an announcement of a change of program. Chuck did a partial strip, down to a "T" shirt with "?" and he did it, too." All a joke. C.Y. likes his jokes. Did I get that right?

Jim Buswell made some CORA announcements -- Among others, the Tri-City Club (Wewoka, Seminole, Holdenville), is the latest member.

The program was by Joe Harding, WA5ZNF, C&E managing editor.

It seems that he is the daddy of C&E, and he is looking for more input from readers - anybody, etc.- so long as it is suitable for publication. This publication is assembled for mailing by volunteers who are sometimes conspicuous by their absence. OUCH! He said that MORI used to have the poorest record, but they are doing better. MORI mails this issue and I hope they don't set a new record. Joe gave a history of C&E and its growth from its inception to its present position. I think it's a remarkable record, his dedication and accomplishments. He further, gave us a discussion of C&E problems, finances, and increased costs. These were quite interesting, and gave us an insight into the processes and problems involved. Thanks, Joe, it was interesting.

Break for coffee and calories. I wonder if Jim B. really did put away all of that big donut that Chuck gave him? Lookd like he took half of it home. They really are delicious, Jim, calored and all. With I had watched my calories in my younger years. Now, they are very hard to take off! Sometimes I think it is almost impossible. Of course it isn't but it is rough.

Reconvened at 9:00 pm - With a report of our Christmas meeting to be held at Furr's on Shields Blvd. Entrance at SE 74th & S Shields, East entrance. Mac is supposed to furnish the music. A motion was made and carried to use this month's prizes for the Christmas party. This party will substitute for our regular December meeting, 4 December.

New business - Charles Breene made a motion that was seconded and carried, that our CORA representative be authorized to vote for a 25¢ maximum price per copy for C&E, with a provision that the club be credited with 25% of any money earned by a club member selling advertising.

There was a discussion of 34/94 problems - understand that there are still some hard shelled insects in the new machine - bugs, to you. It was moved and carried to sell the old repeater. There was a discussion of replacing the 07/67 repeater, or the power supply - quite a discussion. It was decided to turn the questions over to the Executive Committee and other experts for further action.

There was a discussion, moved and seconded and carried that MORI take over from React to handle emergency calls on 2 meters at Scout-A-Rama. Volunteers to report to Fred Taylor, our next year's president. There was also a discussion of something (I couldn't read my cold note) for future action to be taken.

Appreciation is due to Chuck for his excellent service this past year. He is active in many things, and you might say he is one who is really involved. Good Luck, Chuck. We welcome Fred Taylor as our new president, and wish him the best for the coming year. George, WB5NMK

MORI GOES PUBLIC SERVICE

Officials of the Boy Scouts of America "Scout-O-Rama" applauded the fine service performed by Amateurs at all three sessions of the show held at the Oklahoma State Fairgrounds November 16 and 17.

Three Nets were organized with 24 operators volunteered to perform to communicate emergency messages by HAM Radio; We located "lost" parents, reported fires and various other duties using 2 meter portables and handies. K5NK, W5DDI, WB5PWZ, N5BEQ KA5FED and KA5CXW served as coordinators for MORI. Also the following Hams assisting in the Nets deserve special recognition: WD5DYI, Mark; WD5DYI, Kaye; WA5TAR, Sid; WB5TKG, C. Y.; K5HQP, Marvin and out-of-towners; WD5BMP, Joe and WB5TZQ, Bill.

The three Nets were as follows:

FRIDAY NIGHT

Net Controls: WB5PWZ, Bob, Alternate K5SJV, Don
Bob White checked in the following: WD5DYI, WD5DYJ, W5DDI, WA5TAR, WB5TKG, WB5TMW, K5HFN, K5HQP, WD5EDQ WD5BMP, N5BEQ, and K5VVZ. The net worked very smoothly with our velvet voiced Net Controls. Several lost children were located, and other duties performed.

SATURDAY AFTERNOON

Net Controls: WB5TFX, Ben and WB5TFY, Pat Gard (from Holdenville). They en-livened the afternoon with patter, with football scores, lost kids, lost ladders (?) and 1 fire report, Checking into the Net were: WD5DYI, WD5DYJ, WB5TZQ, W5DDI, K5HQP, WB5TKG, W5OZE, KAØP, WA5TAR and KB5BS (who brought his TS120 for a HF demonstration, and promptly made contact with WA5ETB, (Thanks Winston)

SATURDAY EVENING

Net Controls: WD5INZ, Greg, Alternate N5BEQ, Jim.
Greg and Jim performed magnificently with 14 check-ins as follows: WA5TAR, K2GKK, W5OZE, K5BJS, WB5TKG, WB5ZKY, WD5DYI, WD5DYJ, W5HXL, WB5PWZ, KA5CXW, W5DDI and KA5FED. Jim reports that we found a lost parent to a lost boy, reported a clean up problem and solved a fire lane blockage (blocked by cars)...

All Net Controls/participants performed in a manner which compliments Ham Radio. Every one was impressed by our organization and performance. A beautiful certificate was presented to honor us, and we were asked if we could return next year... How about that!!!!. Bring your club along too, next year. Special thanks to Susie, KA5FED, and George, W5DDI for the great coffee, beautiful signs (telling who we were) and the organization charts used by net controls. A great time was had by all and we are looking forward to the next opportunity to serve our community, by use of Ham Radio. Thanks again.

KA5CXW Fred
Typed By KA5FED Susie

November Meeting

The November meeting was called to order at 8 p.m. on the 6th at E.O.C. with 50 members and guests present. Membership now numbers 313.

In the absence of the treasurer, the current president, Chuck, K5NK, read the bank balance compared to known income and outgo since last meeting, entertained a motion by George, WB5NMK and second by Ellard, W5KE, and a passing vote by the membership to accept the report as read.

CORA Representative, Jim, N5BEQ, reported that the new chairman of the CORA Emergency Committee was Don Duck, AE5N, and had scheduled his first committee meeting Monday, November 12, 1979 at 7 p.m. in Room 1G5 at South Oklahoma City Junior College. Since the balance of the CORA report predominantly concerned funding the Collector and Emitter, the floor was relinquished to C/E Managing Editor, Joe, WA5ZNF, for accurate specifics. At the conclusion of Joe's presentation the members decided to convey to CORA through the representatives that MORI favored raising C & E dues to, but not over, 25¢ per member per month and as much as 25% commission to the club for any member's advertising sold in C & E.

The meeting broke at 8:45 for coffee and donuts to reconvene at 9 p.m.

The December Meeting Committee announced that December 4, 1979 (the regular meeting night) MORI will meet at 7345 Shields at Furr's Cafeteria between 7 and 10 p.m. It was moved, seconded and passed that the club provide door prizes at this December meeting.

Fred, K5HPN, moved, George WB5NMK, seconded and it was agreed to accept volunteers early to mail C & E on November 28 at the Red Cross center because this month is MORI's turn, who, until October '79 had held the record for fewest C & E mailing volunteers--that extinction is now another club's for only having four show up.

Ron, WA5EAI, made the motion, Tom, W5OZE, seconded and it passed with no opposition, to sell the old repeater equipment from the 34/94 machine for whatever Ron deems reasonable as a Trustee.

The motion was made by Mac, K2GKK, seconded by Paul, WA5HTL, and passed with one opposition vote to replace the 07/67 machine with one like was bought for .94 and retain the transmitter and receiver strips pulled from service as spares if the Executive Committee determines that the club can afford it.

The future president, Fred, KA5CXW, moved and the secretary seconded that MORI provide communications for "Scout-O-Rama" at the Oklahoma State Fairgrounds, November 16 and 17 and it was agreed to allow the .94 machine to be used as the primary repeater Friday evening and Saturday.

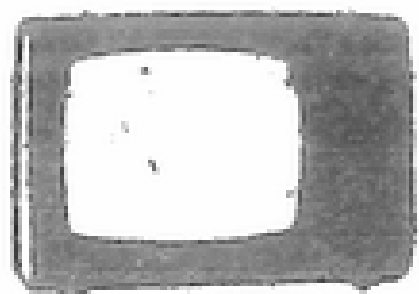
There being no further business the club adjourned to the "aftermeeting" at 9:50 p.m.

Jim, N5BEQ

SWAN SONG With this issue of the Collector and Emitter, I will be stepping down as the President of M.O.R.I. club. It has been a fun year and a very fast one. I have enjoyed every minute serving as President of the club. I hope it has been a good year for the club. We have had some problems, but I think these have all been worked out satisfactorily. I appreciate the other officers who have served with me as well as those on the Executive Committee. A special thanks to George, who has done a very good job serving as club editor. I feel I am being followed by a very good man in Fred, who will be serving as your President for the next year. Fred has a good slate of officers to serve with him and I know it will be a good year. I would like to say "Thanks" to everyone for helping me and making it a fun year. K5NK

CHRISTMAS PARTY Our final meeting for the year will be our annual Christmas dinner. This year, this will be held at Furr's Cafeteria, located at South Shields Mall on South Shields Blvd and Interstate I-240. This will be dutch treat, but a room will be provided for us. We can start going through the line at 7:00, and will have the room until 10:00. Be sure and come and have a good time. Bring your wife or husband as the case might be. We'll have some prizes and perhaps you will win one. I hear tell that Mac, K2GKK is going to come up with some good entertainment. So, we hope everyone turns out for this party. See you there. K5NK

One of the items discussed at the recent Executive Committee meeting was the need of a new repeater for our .07/.67 facility. This was brought before the club during the regular meeting and some lengthy discussion followed. It was decided to turn this back to the Executive Committee to see if the club could afford to purchase the repeater. After carefully going over the books, it was felt that this would not put us in any danger of not being able to meet our needs on a monthly basis. Therefore, a new repeater will be ordered comparable to the new machine on our .34/.94 repeater and hopefully will be in and installed before severe winter weather arrives. K5ELL, our trustee is handling the purchase of the repeater. K5NK



AMATEUR
TELEVISION
SOCIETY

MEETS: 7:30 PM 2nd Thursday each month

PRES Larry Griffin WB5NYX 733-8110
V-P H. E. Hutchins K5SUD 677-5272
SEC/TR Virgil Kerr W5LIL 787-5834
CLUB EDITOR: Larry Griffin

It's that time of year again when the members of the Amateur Television Experimental Society members decide on who is going to lead us through another year. Nominations for and election of all club officers will occur during the December meeting.

The ATV meetings are now being held in the Communication Building at CSU. We want to welcome all amateurs interested in video communications equipment and technical information to join us.

The ATV repeater has been on order for about two months now so the long wait is just about over. The input to the repeater will be 439.25 MHz, the output at 427.25 MHz and the bandwidth of the machine will accomodate both the video and audio sub-carrier. The repeater will be located on the KCSU radio tower in Edmond.

There will also be an ATV cross-band repeater constructed in the northwest section of the city by Tony, K5CFK. This repeater will have an input frequency of 434.0 MHz and the output will be at 1265.0 MHz. Tony says this repeater will be open to all amateur television operators.

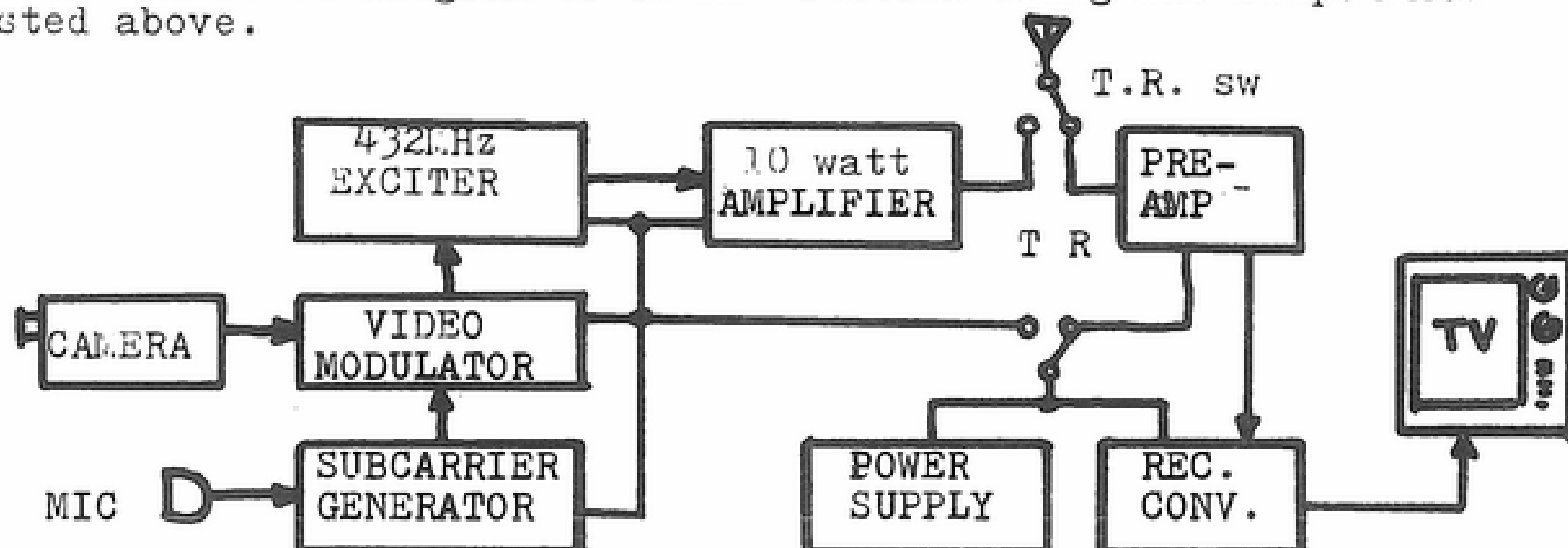
The society wants to thank the following amateurs for contributions made toward purchasing the club repeater:

K5CFM	W5WL	K5HQP
W5LIL	K5SUD	WB5YJP
N5ANG	W5JGC	WB5VQG

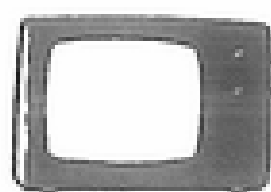
There have been several questions on how to get on ATV economically. Here is some information which will help. Below is a list of components needed to get on ATV and there approximate cost.

8"X10" cabinet.....	\$20.00
12VDC power supply (res).....	15.00
4.5MHz subcarrier board.....	25.00
432MHz exciter.....	49.50
Video Modulator.....	19.50
10 watt power amplifier.....	79.00
Camera (new black&white).....	180.00
UHF down converter.....	8.00
UHF receive preamp.....	20.00
Total.....	415.50

I got on ATV for just under \$200, but I like doing things the hard way. Below is a block diagram of an ATV station using the components listed above.



Thanks to Hutch, K5SUD for his help on this article.
SEE you on the air..... 73, WB5NYX



AMATEUR
TELEVISION
SOCIETY

The Amateur Television Experimental Society proudly announces that its new in-band repeater should be on the air within the next 60 to 90 days. It was ordered from Apron. It is in the process of manufacture at this time, and it will be located in Edmond, Oklahoma, at Central State University. The repeater input frequency will be 439.25 MHz and the repeater output frequency will be 427.25, a 12 MHz split. If you transmit in color, the repeater will repeat in color. If you transmit in black and white, the repeater will repeat in black and white.

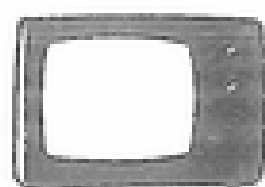
The club is growing and is alive and well. There are over 20 stations on the air at this time and the list is growing. K5CFM, Tony, a member of the ATVES, has also at his own expense, ordered a new cross-band repeater, which will be installed at Northwest Highway and Portland on one of the three buildings on that corner. The input frequency for this repeater will be 434.00 MHz and the output frequency will be 1265 MHz. To receive this repeater, it will require a special converter and a special type of antenna. This repeater will in no way conflict with the other repeater and is simply an additional repeater in the area for those who wish to use it. One interesting aspect of cross-band repeaters is that you can watch your repeated signal coming back at you, whereas with an in-band repeater, you overload your receiver so badly when you transmit there is no way to watch the repeated signal, but with a cross-band repeater, you can actually watch the signal coming back from the repeater. It will have a digital readout that you can see in the corner of your own television screen showing your relative signal strength into the repeater. As you turn your antenna towards the repeater, your signal strength will be indicated by a higher number. As you start to turn away from the repeater, your signal will start to go down and you can see it on the screen. Also, if you change from one antenna to another, you can see it as you peak your transmitter. So, it will be a great tuning aid, a great antenna pointing aid and an interesting method of comparing signals. If you put an amplifier on and really get into the repeater solid, you can immediately see the benefits of what you have done with your power level.

Another thing that we considered at the ATVES meeting was the fact that we have been using horizontal polarization since the beginning of ATV here in Oklahoma City. But, the fact is that repeater operation is done best with vertical antennas at the repeater. Consequently, we decided we would leave our antennas horizontal, since they are already up anyway, but will have some vertical antennas that will point in fixed positions at the repeater. This way, we will be able to access the repeater, we will be able to see the repeater simply by having a fixed antenna pointed directly at the repeater. When we go direct, we will be able to switch to our other set of antennas and be able to talk point to point with horizontal antennas. This may be changed later, but for the present we will use horizontal for direct communications and vertical for repeater communications.

Many people feel it costs several thousand dollars and a degree in electrical engineering to get into ATV, but this is simply not the case. A total expenditure of approximately \$250 will get you into amateur television. One of the big obstacles is simply getting a camera. Cameras can be obtained for \$50 or so if you can find the right source and new cameras can be obtained for \$150 if you can find the right source. Any member of the ATVES will be happy to give you advice in this regard.

One of the most fertile sources of amateur television information is A5 magazine. You need to be a subscriber. Subscription price for one year is \$6.50. That pays for six issues, it comes out every other month. Send your money to: Amateur Television Magazine, P.O. Box 1347, Bloomington, Indiana, 47402. A5 magazine also sells the world's most complete fast-scan book entitled ATV In A Nutshell. This 72 page book has all the information you need to get into ATV. It sells for \$5.00 plus 50¢ for fourth class postage, or you can order the buddy pack, two copies for \$10.00 and they will pay the postage. You really can't beat it. A5 magazine will give you more information than any other source I know of as to the happenings in the amateur television world. Places to buy things, prices, descriptive articles, all the latest poop on amateur television. If you have'nt seen the magazine, do so today.

If you have never seen ATV, the ATVES councils you to contact any of its members for a demonstration. It is possible to get on the air to simply receive ATV for a total



expenditure of less than \$50. The receive converter is \$7.95. You can order it from Science Workshop, P.O. Box 393, Bethpage, New York, 11714. You simply tell them that you want the UHF tuner for amateur television. They are \$7.95 each or two for \$15.00. With this tuner, which many of us are using, you can immediately receive ATV and with the repeater going in at Edmond, you'll simply have to point your antenna at the repeater and be able to see all the action.

To obtain an antenna, one of the local amateur radio stores in Oklahoma City stocks the Cushcraft DX 420, a perfect antenna for ATV work. Also, you might ask for the KLM-420-470-14, a 14 element KLM antenna for ATV. If you really want to go all the way, you can ask for the KLM-420-450-27, which is a 27 element beam, also available from the same local radio establishment.

One of the most important things is your coax. It is important that you have the best coax possible. Helix is the best of all, but use nothing less than Belden 8214, foam coax, which is also available at the above mentioned radio establishment.

Another important consideration is that the antenna be at least 40 to 50 feet in the air to clear all trees in your area. If you are blessed with an exceedingly high location and no vegetation immediately around you, you might get by with a shorter antenna, but at this frequency and using this wide-band mode, you'll find that proper operation can not be achieved without a line-of-sight situation between your antenna and the other antenna.

Marked improvement may be made in your signal with the use of a pre-amp. These pre-amps are available for \$18.95 from Hamtronics, although better pre-amps are on the market. You might check with some of the members of ATV club for advice in this regard. But, you do not need to buy the pre-amp in order to see ATV, you can do it with a \$7.95 tuner from Science Workshop. When you get your pre-amp, it will make your picture much less snowy, much improved. But, if you have a straight shot to the repeater, you may not need a pre-amp anyway. If you're like most of us, you'll get hooked on ATV and you will want to transmit, so you can be seen as well as being heard. Look us over.

Doc Goodhead, WA5CZN

The November meeting was called to order at 7:48 p.m. on the 8th by Vice-President, Hutch, K5SUD, with 14 of the current 34 members present with one guest. The meeting was held in the Media Center, Communications Building, Central State University campus, Edmond, OK. Two more arrived by 8:30 and one more at 9:00 p.m.

In the absence of the minutes we dispensed with their reading.

The treasury report by Virgil, W5LIL, was approved as read, followed by a plea for more funds in view of future expenses. Paul, WA5HTL, suggested we sell Gold C coupon books at \$4 each, with \$2 each to go into the club treasury--he volunteered to acquire 25 to 100 books from the sponsoring bank downtown for club members to sell.

The CORA report identified the newest member club, the passage of the Ham Holiday amendment, the attempt at Lincoln Plaza again for HH '80 "if price is right," continuing check into Tax Exemption status and C & E financial status. There were no volunteers to the CORA Emergency Committee.

After much discussion the club decided to pay up to 25¢ per member per month to CORA for the C & E and to agree with up-to-25% advertising commission to clubs, approved by motion, second and vote.

By motion, second, discussion and voice vote it was decided to raise the club's annual dues to \$12.00 per member effective November 9, 1979.

Announcements: the UHF repeater (439.25/427.25) is due in 4 months; the SHF repeater (434.00/1265.00) is due in 4 months; there were 2 \$470.00 color cameras with herringbone in video still available at last check; SHF varactor triplers are available around \$120 each; Bill, K5SKA, volunteered to submit some technical articles to the C & E editing by November 21 under the club heading. Any other submittals will be greatly appreciated.

There being no further business or dissension, the meeting adjourned at 10 p.m.

N5BEQ



CLUB EDITOR

Chuck Wilhite, K5NK, 721-4926

MEETS: 7:30 PM 3rd Tuesday each month
Okla. Military Academy, 36th & Grand.
PRES: Doc Goodhead WA5CZN 721-8592
V-P: Chuck Wilhite K5NK 721-4926
SEC/TR: Karen Recer WD5HBX 751-5378

THE THOUGHTS OF CHAIRMAN GOODHEAD

I would like to announce the first annual novel two meter antenna contest& auction to take place at either the February or March meeting in 1980. The purpose of this contest is to have the membership design antennas that will resonate on two meters and will actually work. Antennas that are unique and very interesting and curious design. Funny antennas, practical antennas, whatever, but genuinely novel 2 meter antennas that will actually function. Judges are to be selected, prizes are to be given and the antennas are to be auctioned off to the highest bidder. Half of the money going to the genius who designed the antenna and the other half to the club. This will create a lot of interest, a lot of activity, and a lot of fun and raise money for the club all at the same time.

In the future, we would like to have a home-brew contest which includes semi-home-brew. For instance, if your home-brew project includes some sub-assemblies that you have obtained through various manufacturers, this would qualify for home-brew if it is incorporated into an original project. The main thing being that it all be mounted in a chassis or in a cabinet and properly interfaced along with some of your own original home-brewing. So, start to prepare your home-brew projects.

Of course, we have the upcoming Christmas party, on Tuesday, December 18, 1979, our regular club meeting night. The party will be held at Furr's Cafeteria, located at N.W. 63rd and May, in the French Market Mall, beginning at 7:30. Be sure and bring your White Elephant gifts, both men and women. Prizes will be bought from the club funds which will also be given away. If you haven't sent your notice to Karen, be sure to fill out the form found in this issue and do so immediately, so we will have some idea of how many to expect. Be sure and bring your spouse.

I would like to thank the Constitutional Revisional Committee and all who served on it. It is very important we have such fine dedicated members who are willing to do these things. The executive committee will soon be reviewing the constitutional amendment proposals and bring them before the club for approval.

In the future, there will be awards to various members of the club for various activities and many surprises in that regard.

We would like to welcome the new members of the club. I do not have before me their names or calls, but I think perhaps it would be a good idea to do this monthly, actually have the name and the call of each new member that is voted in on a monthly basis and have that member's name and call written up in the following C & E.

Many thanks to the program chairman, Mr. Chuck Sullivan, known to us as Sully, for providing all the fine programs we have been having, WB5YLZ. Also, we would like to give thanks to the immediate past president, N5FM, Mr. Frank McCullom and to the technical committees of the various repeaters, the trustee, K5JL, and to all members of the club, including of course Mr. Wilhite, K5NK.

Your president, WA5CZN, is very pleased to have been given the opportunity to serve. I do regret that I really don't have more time to devote to it. I do enjoy the club very much and do appreciate the warm friendships in the club and the fellowship that we all have one with another. At the same time, I do regret that I don't have the time to be the kind of president I would like to be. Nevertheless, I solicit your support and I am willing to do whatever I can when called upon to make the club a better club.

If anyone is interested in having special jackets made up for the club, jackets we can wear our name monogrammed on, if anyone is interested in special decals being made up for our windshields, special bumper stickers made up, we would appreciate you bringing the subject up at the upcoming meetings.

Another absolutely momentous occasion has taken place. WA5CZN has been threatening to put up his tower for quite some time. As you know, I moved last January, 1979, and all this time I have been threatening to put up my tower, and I finally did put it up in a half way fashion; but it's been standing in a hold all this time, guyed to the fence. With the held of WA5EYV, Charlie, and my son Dan, cement was poured, the tower is now solidly based in concrete and I am getting ready to go up to maximum height. I hope this does not cause anyone to have heart failure. I know that



you have heard about it for a long time and it's hard to believe, but ladies and gentlemen, it is a fact, the tower is now set firmly in concrete and is going to go skyward very soon.

And now a happy note. Most of you have heard about WB5POW, Larry, who was very tragically injured in an airplane crash at Tinker Air Force Base this past year. He is now back on the air and is in Oklahoma City on weekends and recuperating from that accident and says all is going to be well, and before it is all over, he is going to be almost totally recuperated. It has been a long comeback period for him but Larry, it's good to hear you on the air again. It's good to know you're here with us and we wish you the very best.

WD5FXP, John, has one of the world's most fantastic antenna farms located in his own yard in Yukon, Oklahoma. You need not have John's address, all you need to do is head westward on Reno and as you reach the Yukon area, you look slightly to the north and there you find a mini antenna farm on a city lot. John, what are you trying to do, burn the tips off the Russian antennas? Apparently John has a new secret weapon of some sort. Word has also reached El Supremo that John, WD5FXP, just mentioned, has a new Shetland Sheep dog, otherwise known as a Sheltie, and has given it the name of "DOC" in honor of your president, El Supremo, WA5CZN.

For those of you who have not heard, we have a new ham radio fraternity-sorority. The charter members are WB5YLZ, Sully who has the letters "YL" in his call, and Kappa Alpha Five Dog Dog Epsilon. Kappa Alpha Five Dog Dog Epsilon received his special title from Mr. Reuben Castleberry, WD5FKF. El Supremo would also like to announce that Mr. Reuben Castleberry also has been heard back on the air again with his Yaesu FT 901DM. For those of you who are not aware, Mr. Castleberry does more trading than a cranberry merchant. If you've not tuned into the early morning drive to work net, with acting net control WD5FKF and forty seven other net control operators, then you've really missed something. One of the members of the net has been having an extremely difficult time in the past few weeks having a clear thought. You need to tune in and see if there is any progress in this regard.

A new call has been heard on the repeater lately. UU Dawg Five Charlie Uncle Xray, Pete, from Edmond, Oklahoma. If any of you hear of the whereabouts of WD5CUX, Pete, please contact El Supremo at 721-8592, that's 721-8592.

Many members of the Oklahoma City Auto-Patch Association are meeting on 28.800 Mhz, 28.8 on the dial on single side band and having a real great time. The other day I heard something very unusual happen. As most of you know, except on two meters, K5NK, the illustrious Vice-President of the Oklahoma City Auto-Patch Association, never uses a microphone, but he broke precedence when he checked in the other night on 28.8 Mhz and several members of the club almost had pulmonary and cardiac arrest.

K5URJ, Perry McWhirter, is the head of the technical committee for the Oklahoma City Auto-patch Association's Six Meter repeater. Most of you have not had the opportunity of using that repeater, but the repeater is alive and well. The input frequency is 52.680 and the output frequency is 52.525, the national calling frequency. The advantage of six meter fm operation is that it offers very interesting world wide skip possibilities, as well as a lot of local fun and fellowship. As you all probably read in the literature, Yaesu offers three new rigs, synthesized, one for 220 Mhz, one for two meters and one for six meters. So, now a synthesized six meter rig is available. You can get on six meters very simply and easily, or if you prefer, you can check with K5URJ or any others who participate on the six meter machine and find out how you can get on for much less cost with converted commercial gear.

Most of you are aware of the fact that K5NK recently had an operation at Deaconess Hospital in which tissue from his stomach was transplanted into his sinus cavity. What most of you do not realize is that tissue from his sinus cavity was transferred to his stomach which now requires the constant use of Dristan Nasal Mist in his belly button.

Well, this concludes all the high points for the month, but we want to invite everyone in the Oklahoma City Auto-patch Association to be certain to be to each meeting. Remember, your president's goal for the 1979-1980 presidential year is for the Okla-



WA FCZN

.....

NEW MEMBERS: We would like to welcome the following new members into OCAPA: K5GKX, Willis; N5BLJ, Jerry; WD5EGB, Edgar; WD5INJ, Dean; WB5NYX, Larry; K6DBR, Dick; WA5EYV, Charlie; WB5TKG, C.Y.; N5BRK, Randy and Randy's father Jim Deltorto.

QUESTION: Why haven't you been attending our meetings? You are certainly missing some very interesting meetings this year. Sully, WB5YLZ, our program chairman has done an excellent job in arranging these programs. An example: We have some 150+ members in the club and at our November meeting only 23 of you were present. This is not a very good showing percentage wise. Sure it was a stormy night, but not a soul drowned that I know of. Let's turn out and help the club meetings with your presence. Sometimes the second meeting is more interesting than the first.

NOVEMBER MEETING: We would like to express our appreciation to Marc, WA5REC and to Martin, WD5FEI, our Technical Committee for our two meter repeaters, for the very interesting program they presented at the November meeting. Slides were shown of our equipment both on the tower and in the building. They have spent many hours, along with others on our Technical Committee in coming up with some proposed changes in our present system. These will be in a future edition of Collector and Emitter.

CHRISTMAS PARTY: Let's not forget our Christmas party which will be held on our regular meeting night, the third Tuesday of December, the 18th. It will be held at Furr's Cafeteria, located in French Market Mall at 63rd and North May. We will have a room to ourselves and can start going through the line at 7:00 p.m. The meal will be on each individual, but the room will be provided. Be sure and bring a "White Elephant" gift, both for you and the spouse. This can be anything not wanted and something you would like to see your worst enemy get. In addition to the white elephant gifts, we will have gifts bought from the club treasury which will be won by perhaps you. To give us some idea as to how many will be at the party, be sure and fill out the form at the bottom of this page or one similar and send it to Karen Recer, NO LATER THAN DECEMBER 11, 1979. Let's have a good turnout for the party.

K5NK ON 10 METER SSB: For some time, the vfo on my rig has been stuck down in the c.w. portion of the bands. Desiring to listen to the gang on 28.8, I finally got the thing moved up frequency. After finding out that the rig would actually tune up this high in frequency, I hit the "BK" key to join the gang. Only WD5FXP and WD5FRQ would talk to me on c.w. All the others were quiet, quiet that is except for badmouthing Wilhite for not having a microphone. After an enjoyable QSO (cw), I figured I had worn out my welcome, so sent my SEVEN THREE to all. I won't name anyone, but I caught it from all sides. I've never heard such grumbling from grown men. After hours and hours of searching, I finally found a microphone and a night or two later, with a quiver in my voice, I very meekly hit the mike button and said "This is K5NK". Dead silence. I just knew Amcare was going to get rich. K5NK

MAIL TO: KAREN REGER, WD5HBX, SECRETARY
OKLAHOMA CITY AUTOPATCH ASSOCIATION
10912 N. MCKINLEY
OKLAHOMA CITY, OKLAHOMA 73114

I, (), () will attend the Christmas dinner to be held
name call

at Furr's Cafeteria, N.W. 63rd and May, December 18, 1979 at 7:00 p.m. There will be () in my group. To make my reservations, I understand this form must be in Karen's possession no later than December 11, 1979.



THE CHRISTMAS STORY

CHUCK WILHITE - K5NK

Twas the night before Christmas, my eyes were all bleary,
And up on his house, was Reuben Castleberry.
Unaware of the wind, and the ice, and the snow,
In his mind was the vision of a future QSO.
With pliers in his left hand, and wire in his right,
He groaned as he cinched the guy wire up tight.
Then in his eye, I detected a gleam,
As he looked up and admired his new tri-band beam.
Then, down from the roof, and he ran through the door,
And glanced at the clock; twas a quarter to four.
Down the stairs, round the corner, his feet did a jig,
He ran up to his desk and he snapped on his rig.
With ear to the speaker, as he turned the dial,
I dare say what he heard, would make anyone smile.
For, there on ten megahertz, who should it be,
Why, it's WD5FKE working WWV.
He thought to himself, there's a perfect example,
When God passed out brains, Jack got only a sample.
Then without a thought, it slipped from his mind,
When on the ten meter band, who should he find?
A very weak signal from across the sea,
Calling CQ, twas an English G3.
With thoughts of his beam, what would it work like,
He snapped on the final and spoke into the mike.
Fully expecting at the other end of the line,
A good forty to fifty over S9.
Much to his surprise, and he groaned as he found,
From the G3, came nary a sound.
He continued his vigil and on through the night,
But, so far as DX, he got nary a bite.
Twas Christmas Day, I happened to see,
Up on the roof, with pliers, twas he.
There in his eyes, was nary a gleam,
He struggled and pulled, til down came the beam.
Then said, for this beam, I know a buyer,
I'll sell it to him and put up a long wire.
Sorry to say, his plans went up in smoke,
For, sure enough, WD5FKG was broke.



MEETS: 2:30 PM /~~14~~ Sunday. Location varies. See Text.


PRES Marvin Stokes WA5JHB 893-2221
V-P Ted Vanlangham WD5JNT 262-1675
SEC/TR Ralph Wilder WA5PFK 623-5421


CLUB EDITOR Virginia Beneda, WB5WTH, 825-3302
CQ CQ CQ CQ

This is WB5WTH (commonly known as "Open mouth-Insert foot")

CALLING THE WHEATSTRAW NET

Especially WD5JNT, K5GBN, K5GGL and WA5FSN and all other former Wheatstraw co-horts who participated in an obvious conspiracy, may it be known from this day forward your Wheatstraw has been pulverized into Chaff! And may a Bumble Bee sting your antenna!I'm not finished with you yet.

A group of 25 comedians met in Kingfisher the first Sunday in November to "Talk  Turkey" about amateur radio but apparently drifted into monkey business. After the President WA5JHB got them all into one cage the meeting was called to order, introductions made, and minutes read and approved.

George K5GGL reported that the new antenna the club voted to buy had been purchased AND was already installed by Joe WA5FLT and Ted WD5JNT. Boy! give those two monkeys a banana and no telling what they could accomplish. Us Pilgrims  appreciate it boys. K5GBN reported that some of the tubes for the transmitter have arrived. Also a motion was made and carried to purchase 40' of tower made available to the Club.

Ted WD5JNT, Joe WA5FLT, Jim K5VRL and Bill N5WM are the delegates appointed to represent us at CORA for the coming year. The question of how to tell when C&E subscriptions are due was explained by Ralph WA5PFK. I needed to be in on that one - The illustration in C&E was so simple but the label on my magazine is still scrambled.

K5GGL will be net control for November. Leonard WA5FSN suggested the possibility of a 2 meter net meeting for a short time each evening for handling traffic, so consider your support for this kind of project and let it be known at the next meeting. This kind of service could create more activity on the repeater. Net check-ins were real good in October, so Orchids to those who are faithful, and Onions to those of us who are either asleep or gone at net time.

The President opened the floor for nomination of officers for the coming year and these will be voted on at the next meeting. Nominations are as follows:

President: K5GBN Johnny
WD5JNT Ted
WA5FLT Joe
Sec.-Treas: WA5PFK Ralph

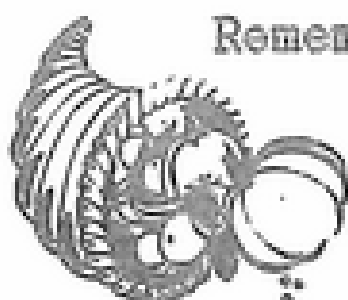
Vice President: WA5GLD Dick
AB5Z Ray
Reporter: WB5WTH Virginia
(Nominations from the floor open)

December meeting will be the annual "Dutch Treat" Christmas dinner to be held at the Country Fare Restaurant (formerly Lighthouse) in Watonga. To date we have 29 making plans to attend, so You'all Come! The group decided to again make a donation to Crippled Childrens Hospital as a service project in lieu of exchanging gifts, so the opportunity to participate will be made available.

Remember to mail reservations or check in to the net to be counted.

HOPE YOU HAD A HAPPY THANKSGIVING!

See you December 2



73 - WB5WTH

The South Canadian Amateur Radio Society

MEETS: 9:30 a.m. third Saturday each month,
Red Cross Building, North Campus, Norman
PRES Jess McKenzie AF5X 329-1543
V-P Joe Green KA5AXQ 364-4301
TREAS Chas. McCown WBSUUX 321-1061
SEC Jack Bickham WBST2Z 329-1311

KENWOOD, OH KENWOOD (To Have Or Not To Have)

Having recently attained the level of Technician, my interest in 2-meter radio equipment has been stirred. My first choice is the new Kenwood TR-2400. After checking availability, I found none to be available. The advertisements project the first week in November as the release date of the new unit. The second week is here and still no TR-2400.

I understand that this type of ad campaign is common in the business world. The idea is to first whet the appetites of the buyer and then saturate the mind with all the wonders of the new super toy. The buyer is then denied the pleasure of owning this new wonder for an extended period of time. By now we are ready to hock the station wagon, mortgage the house, and give up Saturday golfing to own this new computer controlled unit.

The Kenwood Corporation, like many of its competitors, stage long and impressive ad campaigns to inform prospective customers of a new product.

It would be a wonderful thing if the business world would respect the consumer's intelligence. There are some of us who would like to see a company do what it says, when it says.

REPEATER REPEATER

The new Norman emergency repeater has moved one step closer to completion. The crystals have now been installed and will operate 147.66 input and 147.06 output. The Norman Police Department tower will be the site of the antenna to be used for the station.

CHRISTMAS PARTY

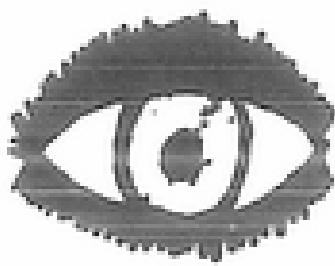
The SCARS Christmas Party has been scheduled for December 11. A buffet type dinner was agreed to by the majority of the membership at Saturday's meeting. The event will start sometime between 7:00 and 7:30 p.m. at the Norman Holiday Inn. For further details contact Joe, KA5AXQ, or Bill, K5KDR.

CLUB ELECTIONS

The membership election that was planned for November was postponed until December. Due to unforeseen circumstances, the election committee was unavoidably detained elsewhere. The new target date is the December meeting.

VISITORS

At the November meeting we were visited by State Communications Manager Leonard Holler, WA5FSN. SCM Holler advised the membership on net activity and the latest regulations. Leonard also encouraged more net participation by area amateurs.



THE EYEBALL
CHUCK WILHITE - K5NK

One day recently, I was invited to have an EYEBALL with a ham friend of mine. After much discussion on my part to myself, I decided to go. I had no idea as to what I was getting into, but thought it would be a very interesting trip.

Now I have been invited to have coffee with friends before, and as one would think, we would sit around and drink coffee and shoot the bull. A time or two, I have been invited to have lunch with friends, and once again, we would usually sit down to a plate of food and enjoy a bite or two. When friends invite me to come and have a little homemade ice cream, I usually wind up eating a couple bowls of some yummy frozen stuff.

But, an eyeball? Yuck!! I just couldn't imagine enjoying an eyeball. This brought back memories as to the first time I tried Mountain Oysters. I remember thinking that when I put my knife and fork to that rascal, it would go scooting across my plate, being more like a big grissle than anything else.

Being something of a fanatic about the types of foods I eat, I wasn't too thrilled about the whole idea. I don't like delicacies such as raw oysters, snails, liver, or fried snake meat, so why did I think this would be anything different.

An eyeball, as most folks know, is that organ of the body with which both man and most all animals use to see or observe things. Some are blessed with better seeing ability than others, but, by and large, most have a couple of these things embedded in their skull. The eyeball is made up of many parts, such as the retina, cornea, pupil, iris, etc. It makes no difference if they come from human or animal basically they are all the same. Some are a little bigger than others, and that's about all. An eyeball is an eyeball.

Anyway, off I went to have my eyeball. I still kept thinking about that mountain oyster. I wondered what kind of eyeball we were going to enjoy. I arrived about on time and there was Bill waiting on me. He asked if I was hungry and I told him I had about lost all the appetite I had ever had.

Bill poured me a cup of coffee and off we went to his ham shack. He showed me his new rig and he even let me twist all the knobs. We sat around and shot the bull for a couple hours talking about the things most hams talk about. I noticed a new Bencher paddle and asked Bill if I could try it out with his new rig. Assuring him that I wouldn't burn it up, I proceeded to make a couple of contacts. Considering the nervous condition I was in, I handled the keyer and rig pretty well.

Bill told me that his wife had fixed up a little something for us and invited me in to his den. Oops, here it comes. We walked into the den and Mary handed me a big piece of pecan pie with a cold glass of milk. I took my time eating this and enjoyed every bite. She asked me if I was still hungry and I assured her I wasn't.

We visited for a little while longer. I noticed my watch and it was almost 10:00 pm, so I told Bill I had better go home. He asked me to stay longer, but I felt I had better leave while the opportunity presented itself.

I thanked Mary for the pecan pie and milk and headed for the door. Bill, following me to the car, invited me back for another eyeball sometime. I told him I would sure do that and invited him to come visit me some day.

On the way home, I kept wondering just what had happened. Where did I lose out? I didn't remember any eyeballs. Bill must have known something I didn't. I really did enjoy the visit with him though. I'll always wonder just what that pecan pie had in it.



THE UNIVERSITY OF OKLAHOMA

CLUB EDITOR

Nathan Kirby, KB5BF

Alpha Sigma Delta Radio Fraternity

MEETS: 2nd Tuesday, 8 PM, (Sep-May)

Room 449, Carson Engineering Center

PRES James Gardner KA5DHF 321-8779

V-P Alan Wormser WB5QLF 325-2194

SEC/TRES Peter Richeson KA5COI 325-3015

DUES Nathan Kirby KB5BF 364-7979

W5TC TRUSTEE, JOHN N5ABC, GETS HARMONIC

When John Stehr, the trustee for the HF station, is not tracking down harmonics on his job as a Motorola communications systems repairman, he is tracking down harmonics in the club's HF station W5TC. This new harmonic must be placed in the "precious" category. John and his attractive wife Robin acquired this new harmonic together at the wee hour of 3:02 AM on Thursday morning November 8, 1979. The new addition to the family is named Matthew Karl Stehr. The Karl is to honor John's father and Matthew's grandfather. Little Matthew weighed in at 8 lbs 1 oz. at South Community Hospital. Mother and baby are doing just fine. This is their first. To date, your editor has not received word whether John can change diapers with the same skill with which he replaces an IC or diode, but we will keep you posted. I know I reflect the sentiments of the OU Club and the many Norman hams who know John when I extend our sincerest congratulations to John and Robin.

DERYL WILHITE, WB6WZC, TO BE TRANSFERED

The club has been fortunate to have two active duty Air Force sergeants stationed at Tinker to assist us in our activities. First it was Rus Cable we lost. As you remember Rus went to Officer Candidate School. Deryl is being transfered overseas. Many times it was Deryl who brought a door prize to a club meeting. He also helped in other activities. We wish you the best in your new adventure, Deryl, and hope you can come back and be with us soon.

WR5AFW REPEATER DONATIONS LAGGING

At this time donations to support and improve the 28/88 repeater are lagging far behind the level they were last year. Last year I would make a simple phone call to remind the ham when his donation was due. This method was convenient for me, but a few hams objected. The large majority of you thanked me for the reminder. Nevertheless, because of the few, I no longer will call you on the telephone to remind you when your donation is due. I maintain a 3 X 5 card system on all donors as a way of doing my small part to help keep the repeater in operation. I set up the system for keeping track of the donations last year in response to the concerns of some hams who were complaining they never knew when their donation was due. The irony is these few hams that were complaining about not knowing when their dues were due were the same ones who objected when I telephoned them to remind them that their annual donation was due. If this were my employment and the way I fed my family, then I would consider any objections "a part of the job", but keeping track of the repeater donations is an "extra" job I have assumed because I thought I was doing the Norman hams a favor. At this time, I am wondering if anyone really cares. At this very time many of your subscriptions to the Collector and Emitter will also be expiring, because a part of your donation pays for your subscription. At this time I am feeling just a bit low because donations are down, and I would very much like to hear from each and every one of you. My work phone is 734-5885 and my home phone is 364-7979. Leave a message for me to call you if I am not in when you call.

Another way to tell when your donation is due is to look at the mailing label on your Collector and Emitter. The month and year printed in the last four digits is the month your subscription expires and your next years donation is due. For example,

057907

means your dues or donation to the "05" club which is the OU Club were due during the "07" month (July) of the year 1979. When you make your donation I extend the date one year on a computer printout furnished by CORA on a monthly basis. If the "05" or OU Club was the only club you belonged to, you should get a series of XXXXX where your call sign is to remind you your subscription and donation is expiring with the next issue. If you also belong to another club the XXXXXX 's will NOT appear to remind you that your donation is due. I could telephone you to remind you that your donation is due, but I don't, so I hope to hear from each of you soon.



Alpha Sigma Delta Radio Fraternity
since June 10, 1924

Dedicated to serving *The University*, the community
and introducing amateur radio to tomorrow's leaders.

MARINE COMMUNICATIONS

A Series by Nathan A. Kirby, KB5BF

For centuries men have gone down to the sea in ships. Poets and Historians have written about it, and entire nations have risen and fallen dependent on ships they have launched on the oceans of the world. The geographer will tell you that most of the earth's surface is ocean not land. The ocean is that great bottom line from which just about all elevation is measured. If you, far removed from the sea here in Oklahoma, take an airline flight from Oklahoma City to St. Louis, your pilot will fly perhaps at 35,000 feet MSL (35,000 feet above Mean Sea Level) Of our nation's five military services, three are associated with the sea. The basic mission of the Navy is to "maintain United States commercial and military access to the sea at all times". Many many movies and books have been written about the sea. The sea is a part of us.

When the Marconi "wireless" made it's debut on the first steamship a new dimension was opened for those who go down to the sea in ships. With many ocean voyages taking weeks to complete the mariner now had a way to be in touch not only with other ships but with land. The mariners isolation was ended. Indeed, the new "wireless" was well suited to shipping. At first the wireless was used so that the owner of the ship could keep in touch with his ship. As more and more of these wireless contraptions were installed, their importance in emergencies became well known. The many movies made about the great age of the ocean liners usually depicted the ship's radio room as an important place. It is easy to imagine all the meters and wires with efficient uniformed radio operators pounding their brass telegraph keys while intently listening over their headsets for an answer. In the old movies we have seen it was usually an answer to a frantic but efficient "SOS" sent out just as the water rushes in the hatch and foams around the radio operators ankles. To this very day, the basic and most important function of marine communication is safety.

While safety is what we are most familiar with, marine communication provides three basic functions. These functions in order of priority are:

SAFETY FUNCTION

The safety function is provided by internationally designating ONE FREQUENCY from each system for safety communications between all stations whether ship to ship or ship to shore. Within the 2 - 4 MHz SSB system 2.182 MHz (2182 KHz) has been designated by international agreement as the International Distress and Calling Frequency. Within the 156 - 162 MHz VHF-FM system 156.8 MHz has been designated the International Distress and Calling Frequency. These frequencies are used as calling and answering frequencies to insure a maximum number of stations are listening to these distress frequencies. This dual function requires all marine radio operators maintain strict discipline in their use. Distress communications have absolute priority over all other communications. This is the tradition of the sea, the code of the inland lakes here in Oklahoma, it is international agreement, and it has been codified for all marine operators into the FCC rules and regulations for compliance. All marine radio operators continuously monitor or guard 2182 KHz or 156.8 MHz, except when they are on a working frequency. For example, you would call another boat or ship on 156.8 MHz or 2.182 MHz. When contact is established, your next transmission is to agree on what frequency both of you will change to so the distress frequency is left clear. The only time 2182 KHz or 156.8 MHz may be used as a working frequency to carry on a conversation is in the event of a bona fide emergency. Later we will delve into the various types of distress. At this time the important thing to remember is that there are two distress frequencies available for the two principle marine communications systems. The distress and calling frequency for the 2 - 4 MHz system is 2.182 MHz, and the distress and calling frequency for the 156 - 162 MHz system is 156.8 MHz (Channel 16). If you only have one radio then you must guard 156.8 or 2.182 Mc while your radio is on.



OPERATIONAL FUNCTION

The next priority of marine communication is the operational function. By the operational function we mean the exchange of any information concerning the navigation or movement of any vessel. An example is where the skipper of a vessel may want to let another ship know his exact position to prevent a collision in times of poor visibility such as fog. It may also be a routine position report to a coast station. The operational function may also be used to report a hazard to navigation. Information concerning navigation or movement of vessels or hazards which may affect their movement has priority over all other communications except distress communications. Ship to ship operational frequencies in the 2 - 4 MHz system include 2.003 MHz on the Great Lakes, 2.830 MHz on the Gulf of Mexico, 2.738 MHz on all waters except the Great Lakes & the Gulf of Mexico, and 2.638 MHz on all waters. In the VHF-FM system a number of frequencies are available. Foremost, is 156.3 MHz (Channel 6). If you have a VHF-FM radio installed in your recreational boat you must have 156.8 MHz and 156.3 MHz crystals installed. Commercial and military vessels keep a separate radio that continuously guards 156.3 MHz. This is called "bridge to bridge" communications and allows instant communications between the bridges of two ships in case of imminent collision or difficult maneuvering perhaps in a narrow channel. If you were in a narrow channel with one of these large vessels and thought things were getting to close for comfort, you would simply switch your frequency from 156.8 MHz to 156.3 MHz and with a "flick of the bic" you would be in instant touch with the bridge of the commercial vessel to warn him of danger (perhaps yours).

BUSINESS FUNCTION

The third priority of marine communications is the business function. This is a category where the vessel can exchange information related to the reason the vessel is afloat such as fishing. Yes, while you can't order a Pizza on our two meter repeaters, you can order a Pizza from your boat provided the Pizzeria has a marine radio authorized with which to communicate with you (unlikely) and your boat can reach the Pizza place. The business function is the all other uses of marine radio. The important thing to remember is you establish contact on the distress and calling frequencies of 2.182 MHz or 156.8 MHz then immediately shift to one of the business function working frequencies. You do not conduct your business on a distress or operational frequency. To intentionally or unintentionally interfere with distress communications can carry a pretty stiff fine from the FCC. Even worse using a distress frequency for the business function could cause loss of life. If you own a marine radio it is just not worth the risk.

As you can see marine radio is an important part commercial, military, and recreational boating. There are two major systems used. These are the 2 - 4 MHz SSB system which uses 2.182 MHz as its distress frequency, and the 156 - 162 MHz system which uses 156.8 MHz as its distress and calling frequency. All stations must guard or continuously monitor their distress frequency except when they are using a working frequency. The distress frequencies are also used as calling frequencies whereby you can call another ship station, quickly agree to a working frequency, then quickly shift to a working frequency thus leaving the distress frequency open in case of a valid distress. Because marine communications is a disciplined service, certain priorities are placed on transmissions. First priority is distress communications, second priority is operational communications concerning movement and navigation of vessels, last is business which includes all other uses of a marine radiotelephone. Marine communications has ended the isolation that once was a part of the mariners life, but it's value to all of us depends on how we discipline ourselves to use it properly. The crews and passengers of ships and boats literally trust their lives to marine communications, so it is important to use it properly.

Next month we will go into more detail about the 2 - 4 MHz SSB system and the 156 - 162 MHz VHF-FM system and how it relates to the recreational boatman.

The OU Club wishes each of you the best during this holiday season! 73, KB5BF



CLUB EDITOR
Joe Buswell, K5JB
732-0676

MEETS: 8:00 PM Third Friday each month
American Red Cross, 10th & Hudson OKC
PRES Ken Ford WB5KHU 528-8770
V-P Jim Williams K5VRL 789-0769
SEC Joe Buswell K6JB 732-0676
TREAS Ellard Foster W5KE 789-6702

MINUTES OF MEETING

MEETING WAS CALLED TO ORDER BY PRESIDENT KEN, WB5KHU, AT 8 PM WITH TEN MEMBERS PRESENT.

PLANS FOR THE CHRISTMAS PARTY WERE MADE. IT WILL BE DEC. 21, 8 PM, AT RED CROSS HEADQUARTERS. MEMBERS WILL BRING FAVORITE DESSERTS AND THE CLUB WILL FURNISH THE PUNCH. PRESENTS BROUGHT TO THE PARTY WILL BE TAKEN BY KEN, WB5KHU, AND DISTRIBUTED TO NEEDY CHILDREN AS IN YEARS PAST.

ELLARD, W5KE, REPORTED ON LAST CORA MEETING. COLLECTOR AND EMITTER IS OPERATING IN THE RED AND NEEDS TO INCREASE ACCESSMENT TO CLUBS. TO COVER THIS, MOTION WAS MADE TO INCREASE CLUB DUES FROM THREE TO FIVE DOLLARS BUT IT FAILED. MOTION WAS MADE AND PASSED TO AUTHORIZE ACCESSMENT INCREASE OF UP TO 25 CENTS PER MEMBER TO COVER COST, WITH PROVISIONS FOR A POSSIBLE REBATE FROM ADVERTISING REVENUE GENERATED BY THE CLUB.

A NOMINATING COMMITTEE FOR SELECTING A SLATE OF NEW OFFICERS WAS APPOINTED. IT CONSISTS OF ELLARD FOSTER, TOM STINSON, BOB ASHBY AND AL PRINCE.

THE CLUB VOTED TO RESTORE THE OLD CLUB NAME OF OKLAHOMA CENTRAL VHF AMATEUR RADIO CLUB IN WRITTEN CORRESPONDENCE AND THE C&E.

MINUTES TAKEN BY BOB, W5HXL, RELAYED BY KEN, WB5KHU. JOE, K5JB

ANTENNA PARTY

KEN, WB5KHU, WANTED TO NOTIFY THOSE INTERESTED THAT THERE WILL BE AN ANTENNA PARTY THE FIRST GOOD WEATHER SATURDAY IN DECEMBER. KEEP EARS OPEN FOR THE COFFEE CROWD AND JOIN UP. JOE, K5JB

QCWR

EVER HEARD OF THE QUARTER CENTURY WEINER ROASTER? I'LL BET NOT 'CAUSE I JUST MADE IT UP. WHILE IN NEW YORK, I ACCEPTED AN INVITATION TO THE HOME OF BOB ASHBURN, W2OCZ, AND HIS YL, SVEA. NOTICE THE SIMILARITY TO SOMEONE WITH THE CALL, W5HXL? WELL THE PLOT THICKENS. BOB ASHBURN AND BOB ASHBY GOT TO KNOW EACH OTHER IN WORLD WAR 2. I GUESS THEY MUST HAVE BEEN SERVED CHOW IN ALPHABETICAL ORDER.

BOB ASHBURN SHOWED ME A COUPLE OF PICTURES OF BOB ASHBY CLOWNING AROUND SOMEWHERE IN OHIO OR PENNSYLVANIA, OR WHEREVER IT WAS HE WAS LEARNING THE ARMY WAY BEFORE GOING OVERSEAS. I TURNED ONE OF THE PHOTOS OVER AND ON THE BACK SIDE IT SAID "WEINER ROAST".

NOW I KNOW WHY, WHEN THE CLUB IS SCRATCHING ITS COLLECTIVE HEAD AND TRYING TO PLAN MEANINGFUL ACTIVITIES, BOB IS OFTEN FIRST TO SUGGEST, ALWAYS IN HIS TACTFUL WAY,...OF COURSE...A WEINER ROAST. JOE, K5JB

RADIO CLUB OF AMERICA

AT THE INVITATION OF LOU TISCHLER, W2EMM, WHOM I MET ON 34/94, IN NEW YORK CITY, I DROPPED IN ON THE 70TH ANNIVERSARY DINNER AND AWARDS DINNER OF THE RADIO CLUB OF AMERICA. THIS IS THE WORLD'S OLDEST ELECTRONIC SOCIETY AND THOUGH IT IS NOT AN AMATEUR RADIO CLUB, WHEN AMATEUR RADIO OPERATORS PRESENT AT THE DINNER WERE ASKED TO RAISE THEIR HANDS, OVER HALF OF THE PEOPLE PRESENT RESPONDED. I HAD READ OF THIS GROUP AND WHEN I HEARD THAT THE MEETING WAS SCHEDULED

FOR NOVEMBER 6, I ARRANGED MY WORK SCHEDULE TO ATTEND. IT WAS AN ALL DAY AFFAIR BUT I WAS NOT ABLE TO BE PRESENT UNTIL ABOUT 6 PM.

WHEN I ARRIVED AT THE NEW YORK SHERATON, "ADJUSTMENT PERIOD" WAS IN EFFECT. I TOOK A QUICK TOUR TO SEE IF I SPOTTED ANYONE I KNEW AND RAN INTO ARRL PRESIDENT HARRY DANNALS, W2HD. I CHATTED WITH HIM FOR A MINUTE AND WENT ON TO THE 807 SUPPLY.

MIKE GURKA, K2UGH, SAW ME STANDING AROUND GAWKING AND TOOK ME IN TOW. HE PROCEEDED TO INTRODUCE ME TO FRED LINK, PRESIDENT, FRED SHUNAMAN, EDITOR OF THE PROCEEDINGS, LLOYD, W2DG, FROM THE FAA, JUAN, KP4B, AND SEVERAL OTHERS. FRED LINK IS THE LINK IN LINK RADIO AND LINK TRAINER.

BY THE TIME DINNER WAS READY, LOU, W2EMM, HAD FOUND ME AND LEAD ME TO HIS TABLE. THERE WERE SEVERAL FOLKS FROM HIS COMPANY, WESTWOOD ASSOCIATES, WHICH SELLS COMPUTER PERIPHERAL EQUIPMENT, AT THE TABLE. IT LOOKED LIKE LOU HAD EITHER MAKE AMATEUR RADIO LICENSE A CONDITION OF EMPLOYMENT OR CREATED A FAVORABLE ATMOSPHERE FOR EMPLOYEES TO GET LICENSED BECAUSE I BELIEVE THEY ALL HAD CALLS.

THE PROGRAM BEGAN WITH WELCOME BY FRED LINK AND PRESENTATION OF AWARDS. AWARDS GIVEN BY THE RCA INCLUDE THE DUMONT CITATION, SARNOFF CITATION, PIONEER CITATION AND BATCHER AWARD. THESE WERE AWARDED RESPECTIVELY TO DR. T. T. GOLDSMITH WHO PIONEERED DEVELOPMENT OF THE CATHODE RAY TUBE; DON FINK, W2AFX, WHO MADE MANY CONTRIBUTIONS TO WAR TIME RADIO, NAVIGATION, RADAR, AND SINCE THEN, TELEVISION; CLAIR FERRAND, WHO OPERATED IN 1908 AS WN, HANDLED HEALTH AND WELFARE TRAFFIC AFTER THE TITANIC DISASTER, AND ESTABLISHED FARRAND OPTICAL COMPANY WHICH MADE BOMB SIGHTS FOR THE NAVY; AND, BOB MERRIAM WHO STARTED AN OFFICIAL RADIO MUSEUM IN RHODE ISLAND AND FOUNDED THE NATIONAL MARINE ELECTRONICS ASSOCIATION.

WITH PRESENTATION OF THESE AWARDS, THERE WERE STORIES OF EVENTS AND PERSONALITIES OF THE PAST THAT ABSOLUTELY SATURATED THE DINING ROOM WITH NOSTALGIA AND EXAMPLES OF FELLOWSHIP AND COOPERATION BETWEEN THOSE WHO DEVELOPED THE ELECTRONICS INDUSTRIES.

FELLOWSHIP AWARDS WERE PRESENTED TO THIRTY RCA MEMBERS WHO HAD MADE SOME KIND OF SIGNIFICANT CONTRIBUTION IN THE FIELD OF ELECTRONICS. ONE FELLOW, JORMAN I. KOSKI, WAS CITED FOR DEVELOPMENT OF PUBLIC SAFETY AND AMATEUR RADIO EMERGENCY COMMUNICATION SYSTEMS. ANOTHER FELLOW, ROBERT E. LEE, COMMISSIONER, FCC, WAS CITED FOR MORE THAN A QUARTER CENTURY OF SERVICE AS A COMMISSIONER OF THE FCC. COMMISSIONER LEE, KNOWN AS THE NUMBER ONE STAND-UP COMIC OF THE FCC, WAS THE KEYNOTE SPEAKER. HE TICKLED THE GROUP WITH SOME IRISH HUMOR FROM HIS OWN FAMILY BACKGROUND.

HE SAID WHEN HE WAS A KID, THE BOYS AND GIRLS USED TO WRESTLE, PRO- NOUNCED 'RASSLE', TOGETHER. FROM THIS HE LEARNED THE MEANING OF THE ADAGE "IT MATTERS NOT WHETHER YOU WIN OR LOSE, BUT HOW YOU PLAY THE GAME"! HE MADE SOME SERIOUS COMMENTS ON WARC, INDICATING THE NEXT TWO WEEKS WOULD BE CRITICAL.

AFTER THE DINNER I SAID SO LONG TO MIKE, K2UGH, AND JUAN, KP4B, PROMISED TO MEET THEM ON 29.140, 3 PM SAT. OR SUN., AND WENT TO COFFEE WITH LOU, W2EMM, HIS YL AND ONE OF HIS STAFF, WHOSE NAME I MISPLACED. AFTER SEVERAL GOOD STORIES AND CUPS OF COFFEE, WE DISPERSED AND I LEFT FEELING I HAD FINALLY HAD A GOOD EVENING IN THE "BIG APPLE". JOE, K5JB

RADIO ROW

I GUESS MOST HAVE HEARD OF RADIO ROW IN NEW YORK CITY, THAT FABULOUS PLACE WHICH USED TO EXIST ALONG CORTLANDT STREET AND WHERE SURPLUS BARGAINS GALORE COULD BE FOUND, PARTS, ELSEWHERE UNAVAILABLE, WERE PILED HIGH ON TABLES FOR PENNIES IN 1932. AFTER THE WAR TREMENDOUS QUANTITIES OF MILITARY SURPLUS EQUIPMENT WERE AVAILABLE IN THE AREA.

THEY SAY THAT RADIO ROW IS NO MORE BUT OUT ON CURIOSITY, I WENT TO THE AREA TO SEE IF THERE WERE LEFT ANY REMNANTS WORTH EXPLORING. STARTING AT BARRY ELECTRONICS ON BROADWAY, I WAS GIVEN A TOUR OF THAT STORE BY RALPH SUNCHILD, W2SAJ, AND PAUL MAZER, N2PM. THEY WERE VERY HOSPITABLE AND INFORMATIVE. JACK LEVEY, THE PROPRIETOR, THOUGHT I WAS A CB'ER BECAUSE I WASN'T BUYING ANYTHING SO HE TRIED TO THROW ME OUT. OH WELL, SOMEONE HAS TO MAINTAIN NEW YORK TRADITION. BARRY, BY THE WAY, SUPPLIES CONTEMPORARY AMATEUR RADIO EQUIPMENT AND IS ABOUT THE ONLY WORTHWHILE DEALER I COULD FIND IN MANHATTAN.

GRAND CENTRAL RADIO AT 44TH AND LEXINGTON HAS SOME AMATEUR EQUIPMENT BUT SALES ARE 99% NON AMATEUR AND IT APPEARED THAT ABOUT ONE PERCENT OF THE SALESMEN KNEW WHAT WAS GOING ON. SOMETIME WHEN WE HAVE SPACE I'LL DESCRIBE WHAT IT IS LIKE TO TRY TO BUY A WATCH, CAMERA OR RADIO IN NYC!

STUART ELECTRONICS IN FLUSHING WAS CALLED A CB SHOP BY THE GUYS AT BARRY'S BUT I HAD TO CALL ON THEM FOR HELP ON COMMERCIAL UHF PARTS. I NEVER DID GET A CHANCE TO RUN OUT TO STUART. AS FAR AS COMMERCIAL EQUIPMENT GOES, WE ARE AS WELL OFF IN OKLAHOMA CITY AS THE HAMS IN 'THE BIG APPLE'.

OVER ON CANAL STREET, BETWEEN BROADWAY AND WEST BROADWAY, I FOUND A NUMBER OF SURPLUS DEALERS. ONE OF THEM, RAMCO, WAS WELL LAID OUT. COMPONENT PARTS WERE IN BINS ON DISPLAY AND THROGS WERE THERE ON SATURDAY PAWING OVER THE GOODIES. ONE STORE WHOSE NAME I FORGOT, HAD A BARGIN IN BATTERY ELIMINATORS. ONE MODEL HAVING 20 VOLT, 230 MA OUTPUT WAS JUST WHAT I NEEDED TO RECHARGE MY HT BATTERY. I HAD DONE A LITTLE MORE TALKING THAN I PLANNED SO THE CHARGER WAS A BARGAIN FOR ME AT \$1.19.

AT ONE PLACE I SPIED SOME LEATHER CARRYING CASES WITH BELT LOOPS JUST ABOUT THE RIGHT SIZE TO CARRY A HT-220 OMNI BATTERY. THERE MARKED PRICE WAS 99¢. I SELECTED TWO WHICH WERE NOT TOO BATTERED AND TOOK THEM TO THE COUNTER. IN TYPICAL FLEA MARKET FASHION, I OFFERED A BUCK FOR THE PAIR. THE MAN BEHIND THE COUNTER IN STEROTYPE NEW YORK FASHION REPLIED, "YA WANNA DO ME A FAVOR? BEAT IT!" I DIDN'T WANT HIS OLD LEATHER CASES ANYWAY SO I DID HIM A FAVOR AND LEFT.

THERE WAS A SMATTERING OF RADIO EQUIPMENT IN SOME OF THE STORES BUT NOT MUCH TO WRITE HOME ABOUT. MANY ITEMS WERE WAY TOO HEAVY TO LUG TO THE SUBWAY. I DID SPOT A MEISSNER MODEL EX SIGNAL SHIFTER. I DIDN'T PRICE IT THOUGH, AFTER THE LEATHER CASE INCIDENT...PHOOEY!

I GUESS IN SUMMARY, I WOULD NOT ADVISE ANYONE TO GO TO NEW YORK LOOKING FOR BARGAINS. A TRUE COLLECTOR OF RARE JUNQUE MIGHT FIND JUST THE THING HE HAS BEEN SEEKING BUT REMEMBER THAT THE AREA HAS BEEN COMBED OVER FOR YEARS BY COLLECTORS AND IT WOULD BE UNUSUAL INDEED TO FIND SOMETHING REALLY DESIRABLE. ONE MANS JUNK MIGHT BE ANOTHER'S TREASURE, SO I MAY HAVE OVERLOOKED SOMETHING WORTHWHILE. FOR EXAMPLE, RALPH SUNCHILD FOUND AN AUDIO AMPLIFIER FOR A BATTLE TANK OR SOMETHING AND FLIPPED OVER IT. I WAS RATHER HO-HUM ABOUT IT AND HE TOLD ME HE WAS LOOKING FOR THAT ITEM TO COMPLETE A RADIO SET OF SOME KIND OR OTHER. I WAS STILL HO-HUM AND HE WENT ON TO EXPLAIN THAT HIS MOTHER HAD INSTALLED AND TESTED THE THINGS DURING THE WAR. HE SAID HE WAS GOING TO ASSEMBLE THE THING AND GIVE IT TO HER AS A GIFT. I THOUGHT, WOW WHAT A NEAT THING TO HAVE SETTING ALONG THE WALL IN THE DRAWING ROOM ALONG WITH THE DRESDEN AND HUMMEL... JOE, K5JB

A BEARCAT FOR ALL REASONS

(I recall how to tune other frequencies in the Bearcat 250)

No doubt about it, the Bearcat "Nifty" 250 is one of the most versatile receivers I have seen in a long time. This microprocessor controlled receiver is capable of "searching and destroying" any number of "secret" frequencies and storing them for later recall at your leisure. I have fiddled with the Bearcat to (what I thought were its limits) and have even had the opportunity to play with its newer brother, the Bearcat 220. This nifty stepbrother of the 250 covers many of the same bands and frequencies as the 250, but also includes the marine and aircraft AM bands for those who desire to stay in touch with what's "up in the air" aircraft wise. And as if that isn't enough, Electra has announced a new Bearcat 300 for those who haven't enough. It is expected to cover the same bands as the 250 and 220 and will be a 50 channel scanner just like the 250 instead of 20 channels like the 220. It is also expected to include a new fluorescent display to make viewing easier when you take the scanner mobile. This is a point well taken. I have slogged the old 250 in the car and motored around and found that it worked great as long as two things didn't matter. First, it must not be necessary for one to read the display because the LED's were completely washed out in the sunlight. They did however, do a bang up job at nite. Second, the 250 had an occasion to go into some type of tilt mode every now and then and scramble its position and memory. Humm, this didn't make much sense, but I was especially puzzled when it had no correlation to anything electrical around the car. Seemed to work just fine when I was in the cruising mode, but would go everywhich way at lower speeds. I thought that the alternator might have been making some low frequency hash that the receiver was susceptible to, but the answer came at the next series of traffic lights. Apparently the brake light switch was outputting a current pulse that put the Bearcat on its head. It really did a job on the memory. I haven't had the opportunity to put the scanner back in the car or revise my electrical system, but I would suspect that a simple inductor capacitor filter would solve the problem. In any case, I don't totally have the cure.

Several months ago when I was preparing material on the article for the Bearcat 250 to be published in the C & E, I heard about a fellow who had worked out a scheme to teach the 250 to scan outside its normal range. I thought perhaps that this would be unique to the article and I made a few polite inquiries, but wasn't able to locate the chap before the C & E deadline. In the interim, I have had the time to track down the fellow through a lead provided by K5CFM. I thought that this might have been the same method that I suggested in my article to use the IF image to receive something lower than the 250 limits. This was not the case and when I finally got a chance to talk to Milford Light, I found that he had indeed found a method for fooling the Bearcat 250 into listening outside its range. I have never heard of anybody else finding this glitch in the 250 software and this should be exclusive to C & E.

Milford lives in Oklahoma City and has had a 250 for some time and also fiddles with computers. He doesn't have an amateur license yet, but is working on it. The technique that he suggests is good only for the 250 since only the 250 contains the "search and store" frequency feature necessary to implement this technique. Milford described how to make it work and I tried it with my 250 when I got home and sure enough, it worked.

Let's say that you want to have the Bearcat scan down from its lower frequency limit to, say, 10.85 Mhz. Nothing to it. Just follow these instructions:

Enter 30.00

Enter 30.00 again

Press Limit

Press Limit again

Press Store

Open the Squelch to store 30.00 Mhz in one of the 64 storage registers

Enter 172.00

Enter 172.00 again

Press Limit

Press Limit again

Press Recall until 30.00 shows on the display

Press Search Down

The Nifty 250 should began searching down from 30.00 Mhz until it reaches 10.85 Mhz. This frequency is the IF of the 250 and is as probably as low as the local oscillator chain will go. When the display reaches 10.85 Mhz, it will jump up and begin with 307.45 Mhz and scan upward to 512.225 Mhz. More on this later. Generally, I store all the frequency limits in the radio and initiate a scan outside the range by recalling the frequencies from storage until it displays the appropriate limit, then search up or down as appropriate. A quick test of the limits and scanning steps reveals the following information:

30.00 Mhz down	10.85 Mhz	5 Khz steps ¹
50.00 Mhz up	51.805 Mhz	5 Khz steps ²
146.00 Mhz down	143.85 Mhz	5 Khz steps ³
172.00 Mhz up	184.80 Mhz	5 Khz steps ⁴
420.00 Mhz down	307.45 Mhz	12.5 Khz steps ⁵
512.00 Mhz up	512.225 Mhz	12.5 Khz steps ⁶

¹If 172 Mhz or 146 Mhz are used as the limits before recalling 30 Mhz, the scanner will scan with 5 Khz steps, otherwise, it will scan with 10 Khz steps.

²Just as footnote 1, if 172 or 146 are used as the limits, the scanner will scan up in 5 Khz steps, otherwise, with other limits, the steps will be 10 Khz.

³To scan down from 146 in 5 Khz steps, 172 must be used as the limit, otherwise the scanner will scan in 10 Khz steps.

⁴To scan up from 172 in 5 Khz steps, 146 must be used as the limit, otherwise the scanner will scan in 10 Khz steps.

⁵To scan from 420 Mhz down in 12.5 Khz steps, the scanner must use 172 or 146 Mhz as the limit, otherwise, the scanner will scan in 25 Khz steps.

⁶To scan from 512 Mhz up in 12.5 Khz steps, the scanner must use 172 or 146 Mhz as the limit, otherwise, the scanner will scan in 25 Khz steps.

It can be seen from the charts that the smaller scan rate will apply if you choose a limit in the 146-172 Mhz band as the limit. This means that you can make the scanner scan in 12.5 Khz steps in the UHF band instead of the 25 Khz steps the Bearcat is programmed for. I never quite understood why Bearcat didn't have the 250 scan in 12.5 Khz steps like the Bearcat 101 and 210, but I would suspect that the problem had to do with birdies and the reception of certain frequencies that may have been governmental. I have heard many comments that the Bearcat 250 may have fewer birdies than the 210. Well, if you cover half as many frequencies in the UHF band, you certainly are going to have fewer frequencies with birdies. Sorta makes sense. In any case, it can be seen that you should use a frequency in the 146-172 Mhz band as a limit in order to take advantage of the smaller frequency steps.

My usual modus operandi is to store all the frequency limits in the Bearcat storage following the example listed above for 30.00 Mhz, then simply recalling the limit I want to search from. If during your travels through the scanner, you find a frequency that peaks your interest, you can store it in one of the 64 storage registers by punching the Lockout key. You can then recall the frequency

for later use.

Now, one important question is, What, if anything do you hear on these frequencies? Well, I am not sure if you are actually receiving the frequency displayed. I have found out that in the 146 Mhz search down and 172 Mhz search up, the receiver actually seems to be picking up the indicated frequency. This I determined by a search up one day from 172 and running into the Channel 7 audio carrier from Lawton skipping in on a frequency I don't recall at this time. In addition, I have instituted a search down from 420 Mhz and found a set of frequencies that supposedly belong to the FBI appearing where they are supposed to be. I have heard conversations in the scan from 307 to 400 Mhz, but these have included IMTS conversations and others that appear on other frequencies leading me to belief that there might some complement of some of the other VHF or UHF frequencies that don't correspond to the frequency displayed. I must confess that I really haven't had the opportunity to map out the entire frequency schedule. Perhaps some enterprising soul out there with a calibrated signal generator will sit down and do so. I have also heard images above 172 Mhz for the various IMTS frequencies as well as Lawton TV. I haven't really heard any CBers when slipping through the CB band, but Milford said that he has heard a variety of things there. I am not sure whether or not the track tuning will go through these various ranges, so you might expect a possible decrease in sensitivity through some of the various ranges.

What is really happening here? Well, the way to fool the scanner into thinking that it can do something its programmer says it shouldn't do is really quite simple. Apparently, the manufacturer verifies every keyboard entry made to the scanner by checking them against the limits of the scanner. Any invalid entry is kicked out with an error sign. You can put the limits into the scanner because these are perfectly valid entries. The verification is still performed. When the limit is placed in the 64 channel storage and later recalled, no verification is performed. The scanner assumes that no invalid entries will turn up in the 64 channel bank. By recalling a limit from the 64 channel bank and letting the scanner think that you are scanning other limits, it will start scanning from the limit that appears from the storage bank without verification. I have stopped the scanner on a frequency outside its range and tried to enter this in the channel selector (one of the 50 channels used for regular scanning), but have been unable to do so. However, by pressing lockout, you can store it in the 64 bank channel set since again no verification is performed before storage. The scanner assumes that no one could place an invalid frequency in the 64 channel bank since all frequencies and limits are checked by verification upon keyboard entry and would be rejected at that time. Not too difficult to figure out, all you have to do is think like a scanner, only deviously.

Another interesting fact is that when you play this little fool me trice game on the scanner, it will scan past normal limits into these magic channels without thinking. Especially when you set those limits on a single frequency. The scanner continues until it reaches that single limit.

I have also considered storing these frequencies in the 64 channel bank and developing a simple circuit that would pulse the recall circuit continuously until a carrier was heard so that you could listen to those frequencies on a scanning basis even though you cannot enter them in the 50 channel bank. The technique would be to start scanning outside the normal range, stop on those frequencies of interest, press lockout to put the frequency into the 64 channel bank, then activate your additional circuit to activate recall continuously and tie the scanning rate to a COR. Should work. If you have a Bearcat, get to work and let me know what you come up with.

Micheal Salem N5MS

SHOCKING NEWS FROM THE CB FRONT

The Consumer Product Safety Commission is worried. And now I am worried. Because when they are worried, that means that they might take some action. And to quote the old saying, "No man's life, liberty, or property is safe when the Consumer Product Safety Commission is in session." (Well, I did paraphrase that a little).

Well, the problem is genuine and it involves the fact that about 200 people in the U.S. are being electrocuted annually while installing CB antennas. I had always thought that CB was a capital offense, but has become a serious problem over the last several years. In any case, the Commissioner of the Consumer Product Safety Commission, R. David Pittle, feels that a mandatory safety standard is needed to protect the consumer from what is not the largest single cause of electrocution in the U.S.

The proposed standard would require manufacturers to insulate or otherwise insulate or design base station antennas to protect consumers. Now, if they can do this for CBers, they can do it for amateurs. Not that it is not a bad idea, it is, but it could seriously limit the types of antennas that are sold. No statistics are available that break down the number of electrocutions that were related to amateur radio installations. The standard is to be ready for consideration by the Commission by April 30, 1981 and you can submit material or obtain more information about participating in the drafting of the standard by contacting the Office of the Secretary, U.S. Consumer Product Safety Commission, 3rd Floor, 1111 18th St., N.W., Washington, D.C. 20207. Help them out and save a CBer.

Micheal Salem N5MS

FOGGY MOUNTAIN COMMUNICATIONS BREAKDOWN

Well, I didn't have anything in the last C & E last month and there is a reason for it folks. Well, actually an excuse. Not that you people couldn't survive if you didn't read any articles by me last month, you appear to have survived rather nicely. I did hear of one isolated case of rash, but it may have not been related to the absence of my material from C & E. I don't think. In any case, there is a reason and it can only be my fault. I did have an article or two and I usually accomplish a handoff to Joe K5JB while he is down here in Norman to bring back the C & E pasteup. However, Joe was not in Norman that day and I am not organized enough to put together my material early enough to seek alternate routes to pasteup. I had a meeting that night myself and couldn't deliver it in person. I regret the fumble. We'll try not to miss the handoff again.

Micheal Salem N5MS

FLY ME TO THE MOON, ETC

Well, NASE is not accepting applications for Space Shuttle astronauts and if you want to be one of this most elite group, you will need to submit your application by December 1 of this year. Oops! If you miss that date, you have to wait until next year for the next annual application period. But even if you are one of the successful applicants, don't buy your deep space underwear yet. You must report to the Johnson Space Center for a year long training and evaluation program. Pilot and mission-specialists will then be selected from that group and assigned to the Astronaut Office. Pilot astronauts get to fly the bird during launch, orbital maneuvers and landings. Specialists will take care of the vehicle crew activities, consumables usage and other activities affecting experiment operations.

What does it take to be an astronaut? Well, pilot applicants must hold a bachelor's degree in engineering, biological or physical science, or mathematics from an accredited institution. They should have at least 1000 hours of pilot in command time in high-performance jet aircraft, must pass a NASA spaceflight physical, and must be between 64 and 76 inches tall. Mission specialists do not have to be pilots, but must meet the same educational requirements and have at least three years of relatable experience (what is relatable?). They must pass a NASA spaceflight physical and must be 60 to 76 inches tall. Humm. There appears to be no age requirement.

Preference will be given to qualified U.S. citizens and minority and women applicants are encouraged.

Now, I would like for an amateur or two to apply because I could imagine the pileup on 2 meters or 450 if a space shuttle astronaut should turn up on the band. This could be the ultimate DX pedition. I am not sure that I will be getting in line to sign up especially if they don't let me take a Dramamine cocktail on board (my usual two Dramamines and a Glass of Milk), but if anybody out there would like to sign up, the civilian application forms are available by writing: Astronaut Candidate Program, Code AHX, NASA Johnson Space Center, Houston, Texas 77058. Military personnel should apply through their respective military departments.

What's the chance of getting on board if you are selected? Well, 27 astronauts are currently available to be space shuttle crew members, including 11 scientists and another 35 candidates were chosen last year and are currently in training to qualify for selection to space shuttle crews. The number of new candidates will be based on mission requirements and operational needs.

Micheal Salem N5MS

RFI COMMITTEE POSSIBLE

Apparently the response to the FCC Notice of Inquiry on Radio Frequency Interference was so great that the technical standards branch is apparently planning to recommend the creation of a government/industry advisory committee to study the responses and draft recommendations for consideration by the technical standards branch. The branch would then make recommendations to the full commission.

Interference has been a big problem (read that headache) to the Commission. Interference complaints have doubled since the early 70's, due largely to the popularity of CB radios since the second harmonic (around 54 Mhz) falls close to channel 2.

There is only so much that the Commission can do to transmitters by toughening their standards by making the spurious emission standards stricter, outlawing CB linears, and requiring the installation of low pass filters to interfering transmitters. Now, the RFI Notice of Inquiry is to determine whether or not receiver standards should be toughened. Now this may be putting the cart before the horse, because in some corners, there is some disagreement as to whether or not the Commission has the power to regulate receiver design. The commission has previously set two standards for television receivers-noise figure and peak picture sensitivity-but the consensus was that these standards were designed to make UHF reception comparable to VHF reception and were not to reduce interference. Legislators and attorneys do not know for sure whether or not the establishment of these standards for receivers allow the Commission to similiarly limit receivers in an interference setting.

So when in doubt, make a new law and three U.S. Representatives and one U.S. Senator have done just that seeking to give the FCC regulatory authority over receivers. However, none of the bills made it out of committee.

How do you regulate receivers? It is not easy. Two of the bills would have allowed the Commission to regulate hardware used in receivers while the other two bills would allow the Commission to specify performance standards used. How would this affect future receiver designs and experimentation? Well, it could lead to type acceptance of receivers, a costly and time consuming process. The Commission is really not eager to yet begin specifying hardware or performance required in the use of receivers because of the possibility that it would inhibit the design latitude of manufacturers, a very undesirable function. Besides the difficulty in specifying standards of, for example, shielding or filters, the Commission could well expect an upturn in business, a difficult upturn in regulatory matters during a deregulation mood at the Commission.

There could be some fallout for amateurs especially if interference standards are adopted. The Commission could require only certification that the receivers meet certain standards or they could required type acceptance, more difficult to achieve. Would amateur receivers be included? I don't think so since they are designed for particular use. It may be a physical impossibility to specify performance standards for communications receivers rather than the type of broadcast receivers that form the bulk of interference complaints to the Commission. Amateur transmitters may not escape so easily. It is logical to assume that some regulations may be written for all types of transmitters, including amateur. This is a difficult problem and may not be subject to easy solution. Amateurs however, should be vigilant to be sure than any standards issued don't impose impossible or costly burdens upon the design and construction of our equipment.

Micheal Salem N5MS

SONY

SUPERSCOPE

SPRAGUE

Amperex

3M

marantz

SUPERSCOPE

ATLAS SOUND

SONY

SHURE

XCELITE

DAKTRON

BIC

DISCOUNT ELECTRONICS

TUBES 50% OFF

Free Testing

Most Electronic

Engineers and

Technicians buy

from us

Kelly's

DISCOUNT

ELECTRONICS

4221 N. MacArthur

PH: 787-0822

Oklahoma City,

WORLD WIDE ELECTRONICS

J. C. BIDDY

(405) 525-9897

1715 N.W. 16TH

OKLAHOMA CITY, OKLA.

73106

atlin

AVIATION CO.

HANGAR 3B, WILL ROGERS WORLD AIRPORT

P. O. BOX 59906, OKLAHOMA CITY, OKLA. 73159

GENE NAILON - K5DLE

Avionics Manager

OFFICE 405-681-2331

HOME 405-341-8289

WANTS: AVIONICS TECHNICIANS FOR

REPAIR AND INSTALLATION OF AVI-

ONICS EQUIPMENT (NAV/COM, PULSE

FLIGHT CONTROL) IN IN GENERAL

AVIATION AIRCRAFT.

EXPERIENCE IN GENERAL AVIATION

AVIONICS PREFERRED - - BUT NOT

REQUIRED

5-10

34

December 1979

CORA Collector & Emitter

LET'S GO TO MARS (via VHF):

This is written for owners of Wilson Electronics Corporation's WE-800 model two-meter frequency (phase) modulated (FM) transceiver for 1 and 10-watt portable, mobile and fixed amateur radio (HAM) operation to convert to MARS (Military Affiliate Radio Service) frequencies of 142.155, 143.46 and 143.95 MHz. It is preferred that this radio pass warranty period reliably because the modification could void the warranty or, if the radio becomes unreliable, much modification effort will have gone for naught.

This transceiver has a circuit board made up for Binary Coded Decimal output using diodes of the common 1N914 type, silicon, in addition to 3 thumbwheel switches and a coggle switch. The board has five rows of diode matrix switched through a 6-pole rotary switch mounted on case front (see figure 1, front panel) allowing a user's choice of any of five fixed frequencies desired in any of the rows in any order, either simplex or with standard ± 600 KHz split (toggle switch, fig 1, front panel and 600 KHz slide switch, fig 1, rear panel). The fixed frequency is entered by soldering the diodes anode down, cathode up in the appropriate positions as exemplified in rows A and B (143.46 and 143.95 respectively) of figure 3. The matrix board should be removed from supports and turned over for ease of soldering and neatness, then re-attached. This gives the MARS repeater output/receive frequency and simplex frequency in the radio for a couple of dollars worth of diodes from Radio Shack.

To access the repeater requires a frequency of 142.155 MHz or a split downward from receive of 1.305 MHz, which subtracted from the local oscillator (LO) crystal at 21.4 MHz yields a requirement for a crystal at 20.095 MHz (available from Sentry Mfg. Co., Chickasha, Ok 73018, for \$9.50). A location, a fixed and an adjustable load are already provided for odd offsets in the LO chain (fig 2) with pre-drilled pin holes and capacitors located within an RF shield fence being the only constraints on crystal dimensions: .018" diameter wire pins greater than or equal to 1/4" long and .195" apart in a holder no more than .4" thick, .5" wide and .5" high. A choice of four crystal locations is provided and should be checked with directional toggle (fig 1, front panel) and offset slide (fig 1, rear panel) for proper operation per test equipment, as was not the case in the attached drawing, corrections in bold face.

In this case there are 10 options: 2 crystal placements for reduction offset transmitting and 5 diode matrix lines for reference/receive frequency(ies). The examples given in figures 2 and 3 attached provide A: Offset (back panel slide switch) and A: diodes (front panel rotary dial switch).

To operate, select: receive frequency of 143.46 MHz dial switch (fig 1, offset direction up or down on front toggle (fig 1, step 2) in this case down (R/D); and amount of offset on rear panel slide switch (fig 1, step 3) choosing the 1.305 MHz split (position A) instead of 600 KHz to transmit at 142.155 MHz.

VOILA! MARS VHF Repeater!

Next: The Tempo S-1! This is AFA4VR, out.

You know it's a bad day when you jump out of bed in the morning and miss the floor.

You know it's a bad day when the bird singing outside your bedroom window is a buzzard.

You know it's a bad day when you put both contact lenses in the same eye.

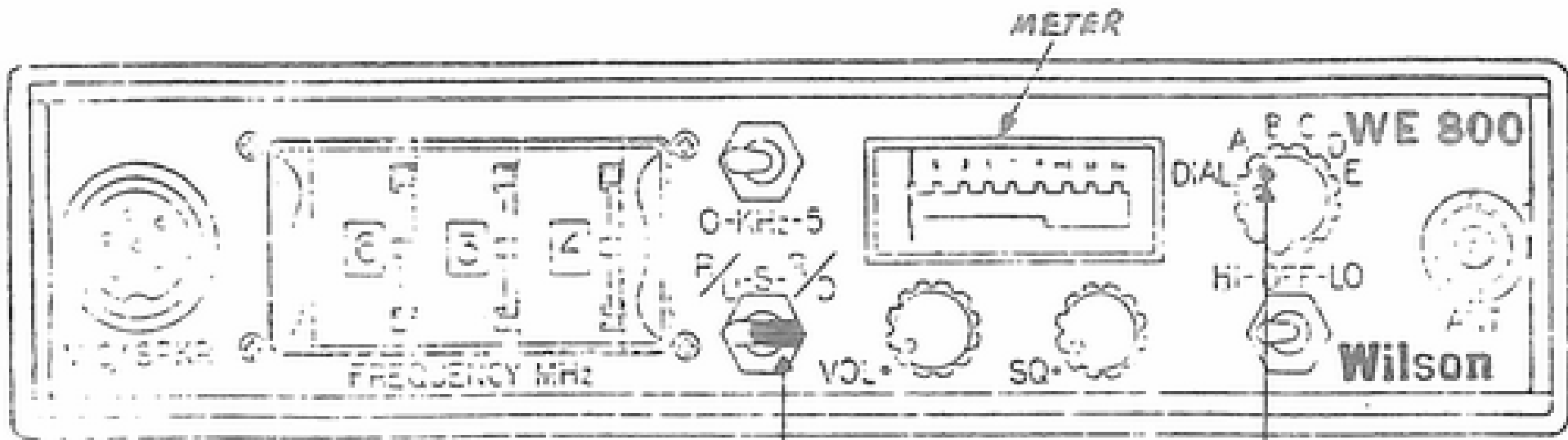
You know it's a bad day when your pet rock snaps at you.

You know it's a bad day when you walk to work and find your dress is stuck in the back of your panty hose.

You know it's a bad day when you call your answering service and they tell you it's none of your business.

You know it's a bad day when your wife says "Good morning Bill," and your name is George.

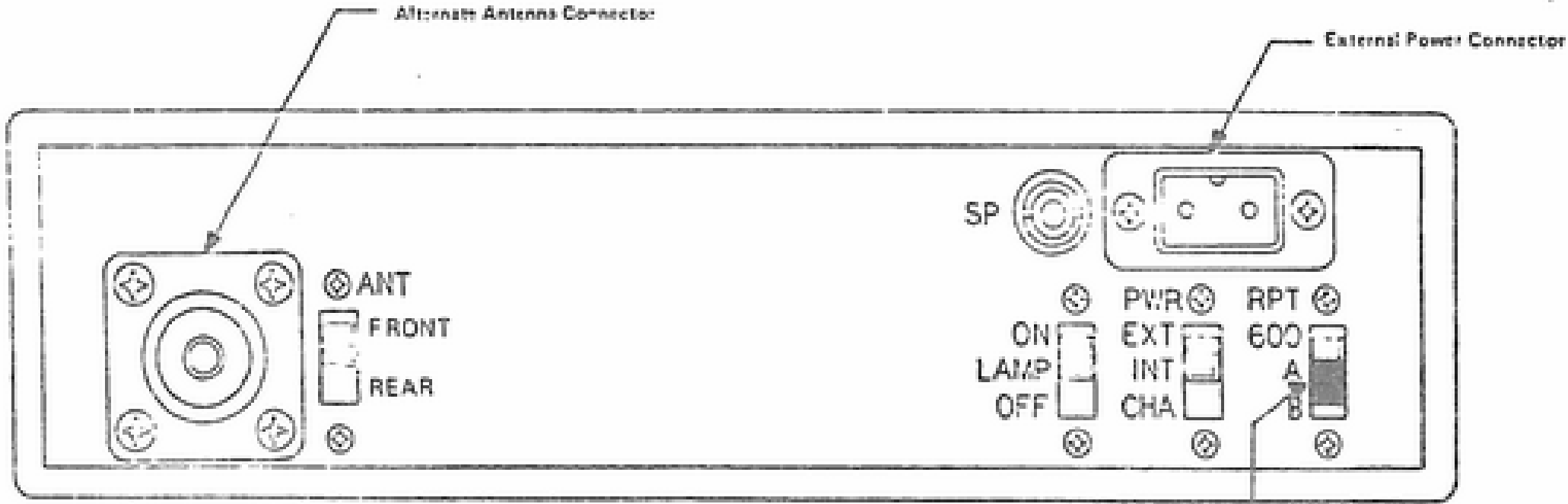
091279



STEP 2: DOWN OFFSET

STEP 1: RECEIVE FREQUENCY

FRONT PANEL



STEP 3: CHOOSE OFFSET

092479 JIM BUSWELL

REAR PANEL

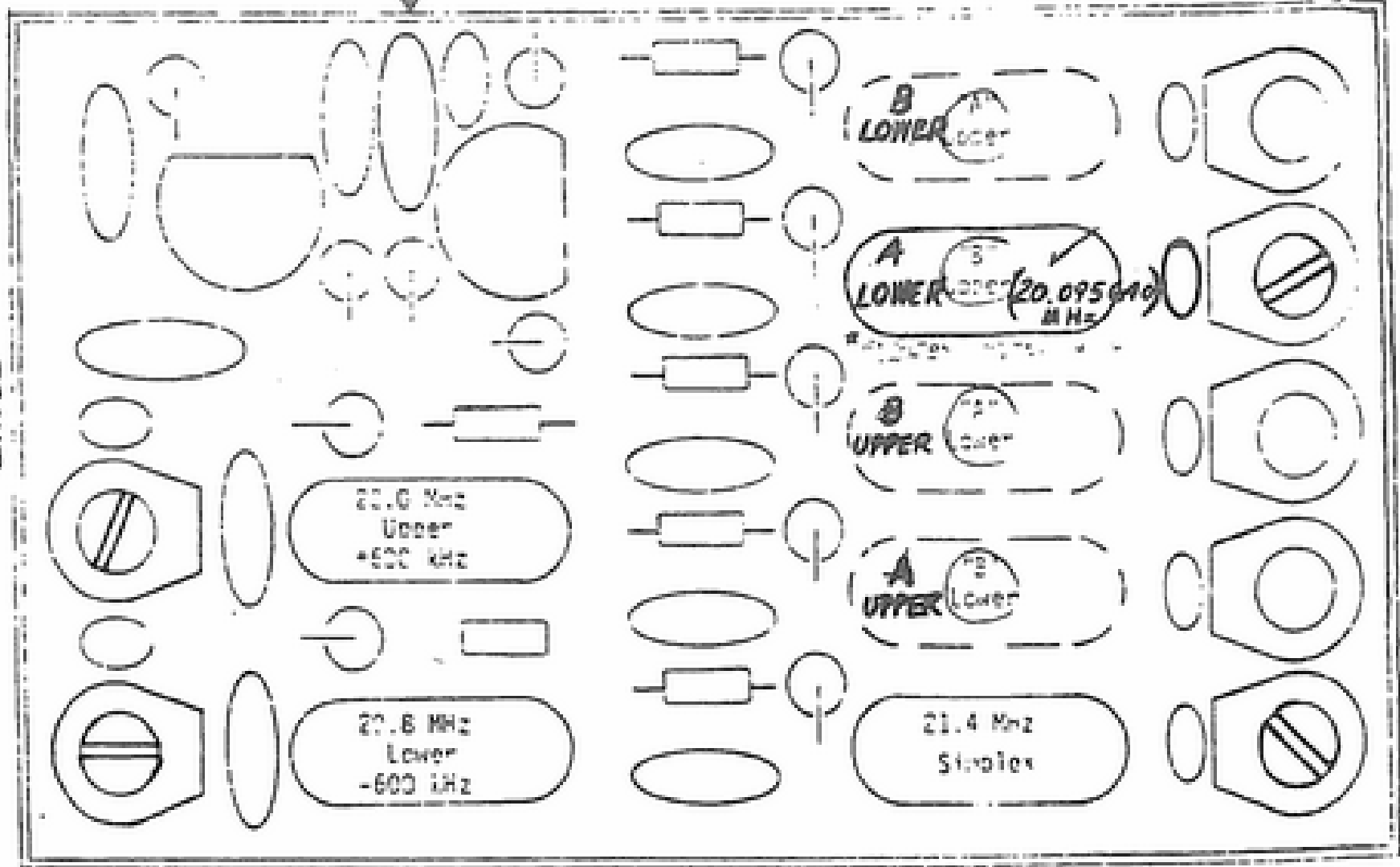
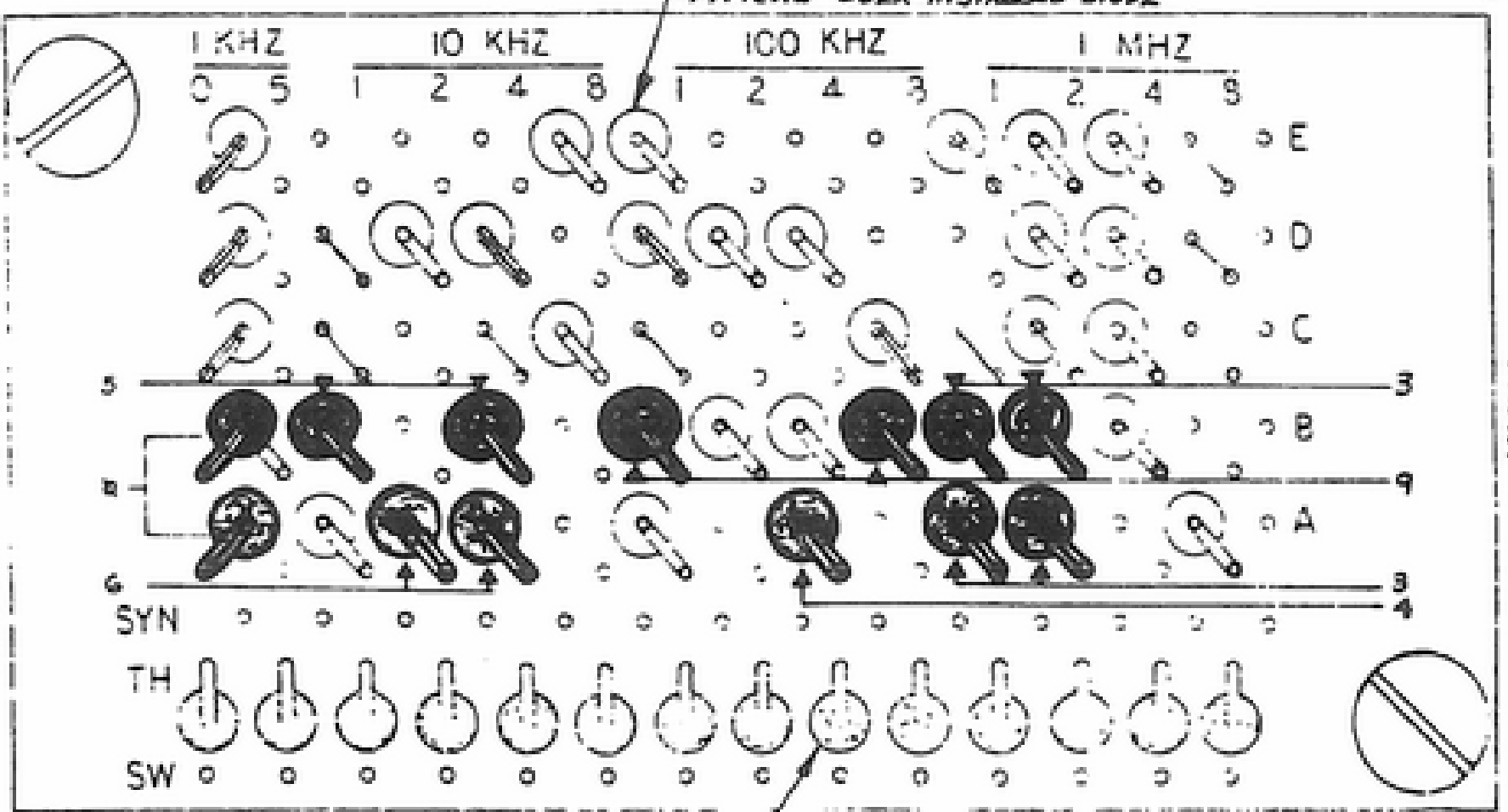


Figure 2

MIC

Right side of WE-800 looking from front (SERIAL # 03532272)



Factory installed diodes

- EX: A = 148.100 MHz / 148.460 MHz
- B = 145.645 MHz / 148.980 MHz
- C = 148.840 MHz
- D = 149.100 MHz
- E = 149.170 MHz

JIM BUSWELL 091279

AMATEUR
2 METER
"SAMARITANS"

WE WILL MONITOR THE 34-94 REPEATER EACH WEEK DURING THE HOUR
WHERE OUR CALL SIGNS APPEAR BELOW, SO THAT ANY CALL FOR HELP ON
THAT FREQUENCY WILL NOT GO UNNOTICED.
FOR ADDITIONS, DELETIONS, OR CHANGES: CONTACT C.Y. WB5TKG 232-9005

		12	1	2	3	4	5	6	7	8	9	10	11	12
MON	AM	WB5 TKG						KA5 DCM	WB5 NXO					
	PM				WA5 HTL	N5 BEQ								
TUE	AM							KA5 DCM	WB5 NXO					
	PM				WA5 HTL	N5 BEQ								
WED	AM	WB5 TKG						KA5 DCM	WB5 NXO					
	PM				WA5 HTL	N5 BEQ					KA5 CXW			
THUR	AM							KA5 DCM	WB5 NXO					
	PM				WA5 HTL	N5 BEQ						N5 BEV		
FRI	AM	WB5 TKG						KA5 DCM	WB5 NXO					
	PM				WA5 HTL	N5 BEQ								
SAT	AM										WB5 NMK			
	PM	N5 BEQ										N5 BEV	N5 GE	
SUN	AM	N5 GE												
	PM	N5 BEV					N5 BEQ					N5 BEV		

"SAMARITAN": ONE READY AND GENEROUS IN HELPING THOSE IN DISTRESS.

TO WHOM IT MAY CONCERN: I WANT YOU TO KNOW THAT THE ACTION I WAS
MADE AWARE OF TUESDAY EVENING NOVEMBFR 20 IS APPRECIATED MORE THAN
MERE WORDS CAN EVER INDICATE. VERY SINCEPELY, C. Y. CHANDLER WB5TKG

CHOCTAW ARC

CLUB EDITOR R. G. Edwards

MEETS: 7:30 PM 2nd Monday. Woods Community Baptist Church, SE 29 & Choctaw.
PRES Frank Carter AB5H 391-3394
V-P Gary Chambers WB5WHF390-8250
Sec/TR R. G. Edwards KA5ALO390-8297

CHOCTAW AMATUER RADIO CLUB

NEWS FLASH: CARTER RE-ELECTED TO PRESIDENT'S OFFICE -- Monday, November 12, 1979; Member of the Choctaw Amatuer Radio Club over-whelmingly elected President Frank Carter (AB5H) to his second term in office! In his acceptance speech, he made a minor mention of rail-roading! HI! HI!

Our last meeting was held at the Woods Community Baptist Church at 7:00 p.m. As of 1 Jan., 1980 our slate of officers will look like this:

President	Frank Carter	AB5H
Vice President	Bob Allen	WD5EVP
Sec/Club Editor	June Allen	N5ARP
Trasurer	Rick Edwards	K5ALO

Please note, there are some changes both to the offices and the officers, and we will need all the help we can get.

Bob and June presented a CORA report also, especially in the area of a proposal to increase dues. It was decided that we would support an equitable increase because of increased costs to CORA.

ANOTHER FLASH:::::::::: December 15, 1979 at 7:00 p.m. will mark the occasion of the 2nd Annual Eat-In for Choctaw ARC. The place will be the Front Porch Steak House in Nicoma Park this year, so if you would like to attend, notify Frank Carter or one of the other officers as soon as possible so we'll know how many Hams or Non-Hams to plan for.

I would like to talk this time to thank all of you out there that have read or hollered or me. It has been a wonderful year and one in which I have learned a lot about Ham Radio and Hams. really good people. As of Jan., June will be our new Club Editor, and I hope it is as wonderful a year for her as to me. Please give her all the support as has been given to me. Being a Club Editor is not easy --- just ask any club editor, they'll sure tell you about it --- so even if you don't think its news worthy or even very interesting, tell it to your editor. One thing for sure --- like taxes, inflation, and me getting more CW than I can handle --- if your club editor does not know about it, they sure can't write about it.

Well, what with deer season going and everyone getting ready for Thanksgiving and Christmas (Christ is still in Christmas) there is not to much else to report at this time. So instead of telling about what I heard about our new-or-old President, you know who? Frank of course ---- I'll just pass my 73 and see yoOu (some spelling) next year!

Rick KA5ALO

ROHN 25 Tower, 3 to 4 Sections. Bill Blakely WA5IQH
Call collect 783-4217, Byers, Okla. Rt. 1, Box 109 74831



THE AMERICAN RADIO RELAY LEAGUE, INC.

OFFICE OF THE
SECTION COMMUNICATIONS MANAGER

QST
OFFICIAL ORGAN

LEONARD HOLLAR WA5FSN

I wish to take this opportunity to extend to one and all the best of Season's Greetings and all the best for 1980. It is my wish that amateur radio continue to grow and prosper in Oklahoma, and that each of us will grow with it.

On behalf of the group at Hugo; may I extend our thanks for the very able assistance rendered the evening of Nov. 12th during the crisis at the Hugo schools. although it didn't develop into a large scale operation, it is comforting to know that the people are there, ready and willing to help our fellow man.

In looking over the station activity reports received the past several months, I find that many League appointees are missing a bet; in not reporting their P.S.H.R. points. I know that many of you are handling more than enough traffic, and doing other public service activities to earn the minimum of 60 points needed, Refer to page 76, April '79, QST. There is also the possibility of another piece of "wall paper".

In response to a note from League headquarters I have been going through the list of those holding appointments from the Oklahoma Section, to verify that their list and mine coincided. Also in this process of checking, I find that over the past year or more, I have received reports from about 65% of these people. I will be contacting the other 35% in the very near future.

I see some very interesting information in "Charro", a club paper from the Brownsville TX area. Wish we had space to reprint some of the articles, very informative. One of particular interest, by Joe, K5JB, on How to derive "minus" voltages from power supplies. was reprinted from the Collector & Emitter. Good work, Joe. ARL 58

Leonard Hollar, WA5FSN
* * * * *

FROM THE CORA SECRETARY...

An account of the October meeting of CORA made the deadline for the last issue of C & E, and the November meeting has not yet occurred as of paste up time for this issue, so we'll see you next time!

This writer hopes one and all had a most happy Thanksgiving Day. The holiday season is once again in full swing. We all become so busy throughout the year, each of us wrapped up in personal activities, that we sometimes neglect to reflect upon the many blessings around us--I know I do. There are so many who are not fortunate enough to have the material wealth so many of us enjoy, or they do not have loved ones nearby to share the holidays. Take time out amidst the activities to share a little time or even a smile. The results are rewarding!

Kay, WD5DYJ
CORA Secretary

* ATTENTION: NO CORA MEETING FOR THE MONTH OF DECEMBER. *

Edmond Amateur Radio Society, Inc.

MEETS: 2:00 PM 3rd Sunday Room 205
Science Bldg, Central State Univ.
PRES Howard Wise WD5IDB 341-2510
V-P Ken Stepp WD5HXX
SEC/TR Bill Wright WA5ZLW

CLUB EDITOR Howard Wise, WD5IDB, 341-2510

* * * 147.72 - 147.12 * * *

Well, by now you should have recovered from stuffing yourselves with turkey. I'm not sure I've recovered, but at least I survived. Now I'm just looking forward to doing it all over again at Christmas - Oh my poor belly!!!! Anyway, hope you had a very nice "turkey day" and that you have an even nicer Christmas.

* * * 147.72 - 147.12 * * *

Some of you will have your membership expire in December, so be sure to check your C.&E. label for the expiration date. First, look for a group of six digits at the top of the label. If you're a member of more than one club, you will find a six digit code for each one. The first two digits indicate which club - EARS is 11. The next two is the year of expiration, and the last two is the month. So if your label reads 117912 (as mine does), please see the club Secretary/Treasurer, WA5ZLW and update your membership.

* * * 147.72 - 147.12 * * *

Although we were unable to have our planned program for November, we still had an interesting meeting. One of the main topics of discussion was EARS's participation in Oklahoma County emergency communications. It was felt that we have been somewhat slow in getting together a definite program, but that our 72-12 machine is available - with priority to Edmond emergency situations. We fully intend to continue seeking ideas and working toward getting a good system for the entire area.

* * * 147.72 - 147.12 * * *

WA5ZGN had an enjoyable experience this past week with a group of fifth graders from Edmonds Will Rogers Elementary School. J. D. was asked to exhibit and demonstrate his station as part of a school program that allows students to choose career or hobby interests that they would like to see first hand. J. D. had 10 students (including 2 YL's), and had a good time answering questions and demonstrating SSB, RTTY, and 2M FM. In fact, all of them had the opportunity to be on the air via the 72-12 machine. I enjoyed talking to each of them on the air; and who knows, one of them just might get his (or her) own ticket in the near future. Several of them seemed to be interested enough to do so.

* * * 147.72 - 147.12 * * *

Our December meeting will be the third Sunday (as always), the 16th, at 2:00 PM. Bring a guest and I'll see you at the meeting.

* * * 147.72 - 147.12 * * *

73
WD5HXX
Ken

One of the busiest times of the year for the Amateur National Traffic System is coming up this month. This year will prove to be one of the most rewarding in the area of public service.....especially if you help. This holiday season, take a little time to listen to some of the many traffic nets. Pick up some traffic, pass it, or deliver it. It's never too late to learn traffic procedure, so jump in and help out our National Traffic System. Get in the Holiday spirit!



THE ZANY NEWS FREQUENCY

By JOE, WA5ZNF

SANTA CLAUSE IS COMING TO TOWN - and with him are a lot of Christmas parties, shopping sprees, etc. - so, as usual the January issue of C&E will be put together, pasted up, etc. a week earlier than usual. All editors and contributors are advised to have their "camera ready" copy down at the Red Cross on the evening of Wednesday, December 12th. I realize that some meetings will be held after that date, but, it appears that most of them will be Christmas dinners. NOW, HERE IS THE

INTERESTING PART - no one club will be scheduled to collate, staple, fold and mail the C&E on the next Wednesday, December 19th. I am doing this to see if there are 10 people who give a . God willing I will be there by 6:30 PM ready to start. We need 10 but more will just make it go faster.

IT IS TOO LATE - to subscribe to the Collector & Emitter for the bargain price of \$3.00 a year for non-CORA people. Regardless of what CORA votes to do in the November meeting, which will be held the night before this issue is mailed, I am raising the NON-CORA member subscription price to \$6.00 per year. At the same time the news stand price is now 50¢, up from 25¢. These prices are effective 21 November 1979. Why, you ask - We have been selling at bare cost, and if CORA members are expected to ante up, so should everyone else.

ANOTHER PINK INSERT?, WHAT GIVES? - Well, this time it isn't due to a bad printing job. I have attended five club meetings this month, so far, and in every case the clubs voted to raise the price of C&E to, up to 25¢ per member per month with a provision that 25% of the monies earned by individual club members selling advertising be credited to that clubs account, thus reducing their costs and allowing the C&E to skip a club billing occasionally or expand our size and coverage. SO - if you want to help I have included a rate sheet with specifications as a "pull out". Read it over, and if there are any questions just call me at 737-1044 and then get out and help. The business card deal should be attractive to nearly any business, amateur radio orienter or not. We buy everything. Note that the \$2.50 an issue price applies only if a years contract, paid in advance is agreed to. You may, but don't have to, collect, by check to CORA, in advance but we will invoice after the first insertion, so he will have proof.

HELPFUL HINT: If you are one of the holders of a "KA" prefix call, try not to slur the prefix. Many "KA5's" sound like "K5's". Likewise, "WD's" often are mistaken for "WB's" and vice versa. Be proud of your call. Keep concerned amateurs from having to refer to their callbook to see if they know you!

Keep community activities in mind when you feel a need for a club project. The recent Scout-a-Rama proved to be helpful to the public as well as a test for readiness for the unexpected. It's good PR for amateur radio and a great way to get together besides at club meetings!

FOR SALE: Hustler 5BTV, 5 band HF vertical antenna, 80-10 meters. Yaesu FT 207R Talkie with 2 battery packs and desk charger/12 volt power supply. RCA CB converted to 10 meters, SSB & AM. Shure 404C hand held microphone, high impedance. Transverter for Yaesu FT 901 or FT 101ZD. Has 2 and 6 meter modules. Yaesu FT 225 RD all mode two meter rig, 25 watts. Sencore digital VOM with Nicads and charger. Call 691-1070, WD5FKF, Reuben.



LETTERS TO SANTA - CHUCK WILHITE, K5NK

Dear Santa: I have been a good little boy, but I don't believe in you so I could care less if you stop by my home. I don't need anything. Eddie, WD5FKG

Dear Santa: With all the money I have, I really shouldn't be asking you for anything, but would you please bring me some guy anchors that I can screw in the ground to guy my tower to. Please come see Donna too. Bobby, WA5CZN

Dear Santa: I don't really need anything, but when you fly over Cement, be sure and watch out for all my antennas. I wouldn't want you to hit them. Winnie, WD5ETB

Dear Santa: I have been wanting to improve my antenna farm. I have about the best there is by golly, but would you please bring me an 8 element boomless quad which will cover 160 through 2 meters, is wind resistant, and a 600 foot tower that is rotatable. Johnnie, WD5FXP

Dear Santa: I have a good wife, a good radio, a fair antenna, but there is a favor I would like to ask of you. When you fly over my house, would you look at all the O.G. & E. lines and see if you can find my noise problem. I'll leave you cookies and milk for your trouble. Ronnie, WD5FRQ

Dear Santa: I know what Ronnie is asking you for, so I won't ask for the same. I just want a 40 foot tower. Little Buddy, KA5AQY

Dear Santa: I have been such a good little girl this year. I sure hope you can fill my stocking with a new power supply without knobs and an antenna that lightening won't bother. Also, I need a new microphone since I seem to have worn this one out. I love you Santa. Clarabelle, WD5KFT

Dear Santa: Please bring me a computer football game. Jimmy, WB5SJX

Dear Santa: Would you please bring me some new underwear, for I'm tired of having to wear these old things mommy made for me out of flour sacks. Joey, WB5TDW

Dear Santa: As you know, I like to get on ATV. I was working Bobby the other nite and he made such an ugly face at me, he broke my monitor. While you're at it, how about a color one? Paul, WB5EVO

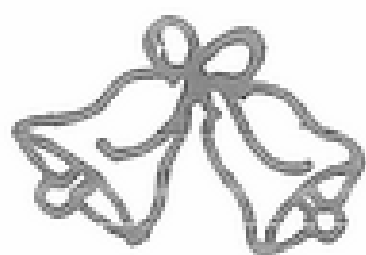
Dear Santa: Since I am secretary of so many clubs now, I need a new typewriter to write the minutes. Hug Mrs. Santa's neck for me. Jimmy, N5BEQ

Dear Santa: Hehe, I want hehe a new hehe twheheo meheheter radheheio. Not hehe any hehe kind hehe of rahehediheheo though, i want hehe one hehe with a hehe builtin tape hehe rehehecordheheer, so that hehe when I want hehe to play my anhehenounce-hehelements, I can just hehe push hehe a butheheton and it hehe will hehe start hehe playheheing them. C.Y., WB5TKG

Dear Santa: I have had several radios, but there is still one I want. Please bring me one that covers 160 meters through 70 cm that will work am, ssb, cw, fm, rtty, fsk, fast and slow scan atv, with built in ac, dc, and rc power supplies. It must work cross band, have 73 memories, 12 different filters, passband tuning, IF shift, variable power from 1 to 1000 watts, two vfos each with their own band selection, a built in all band antenna, power meter, swr meter, "S" meter, 1 khz calibrator, LED display, 3 different rit's, built in keyboard, 3 stages of noise blanking, 10000 db selectivity, 20 watts audio output, and other goodies on it. Rube, WD5FKF

Dear Santa: Please bring me a transparent all-band vertical that I can mount upon my roof and the management or neighbors can't see it. Markie, WD5DYI

Dear Santa: Pleae bring me a new teddie bear. Kenny, K5VVZ



LETTERS CONTINUED

Dear Santa: I hear tell that it is going to be another rough winter around these parts so would you please bring me some studded snow tires for my wheelchair just in case I need them.
Fitzy, WB5ZKY

Dear Santa: I have been wanting a new radio for so long, but Macky feels I can get along with the old Drake. I sure wish you would bring me a new TS-120 and if Macky is good to me, I will let him use it.
Judith, KA5BJS

Dear Santa: I want some hard rock candy and everything like that. Tommy, W5OZE

Dear Santa: Would you please bring me some pills that will get rid of this awful headache.
Bobby, WB5PWZ

Dear Santa: I don't know if they make them or not, but would you bring me a key click filter to get rid of all my key clicks.
Howie, W5AS

Dear Santa Claus: I want you to bring me a box of big thick juicy steaks so that when I hear that Wilhite on I can tell him what I'm eating.
Tommy, W5PZW

Dear Santa: You old \$*##*" when you fly over my house I wish you would leave some new orange boots and some red boots and some green boots and some purple boots and some "##\$%*" for my \$&%*\$c& neighbors.
Little Henry, N5IH

Dear Santa: There's an old boy here in town that is wanting to have a party and I would like to give it to him. I would like to have a big pillow filled with turkey feathers and a 5 gallon can of tar. Also, after the party is over, I would like a big old cake all to myself.
Allie, WB5OHK

Dear Santa: I would like a new coffee pot that will only take dimes and no pennys. You might bring me some paying customers too.
Chuckie, N5SW

Dear Santa: I need some new quackers.
Donnie, AE5N

GET ON TEN METERS THE EASY WAY - converted 40 channel SSB, digital channel readout, built-in ac-dc supply, Sears Roadtalker 40, covers 28.510 to 28.950 MHz. New. \$140.00.

Antenna rotor, AR-22XL, with approx. 80 feet of four-conductor cable, good for two meter beam or other small antenna. Used one year. \$70.00.

Antenna rotor, HAM-II, with approx. 80 ft. of 8-cond. cable. Used about 1½ years. Good condition. \$85.00.

Have two new twin Trucker CB antennas, half price, \$15.00 each.

Call Bob, WB5OBV, evenings or weekends at 495-0030.

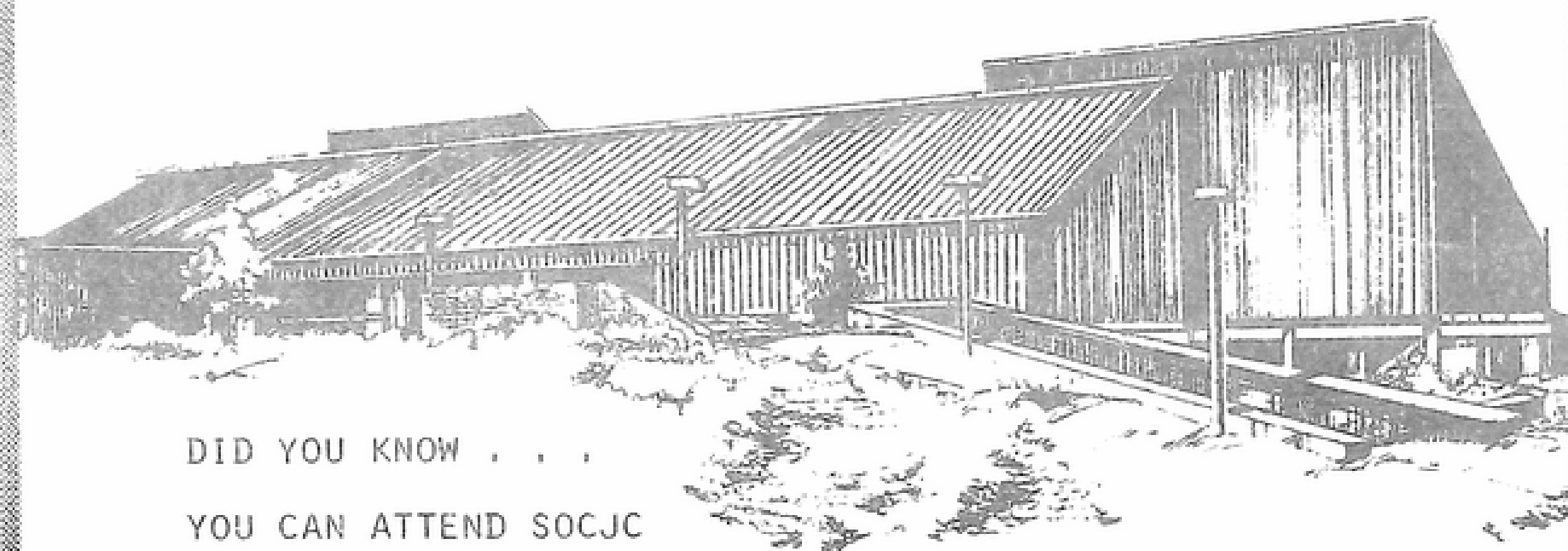


AE5N
DONALD H. DUCK
Special Instruments Representative

Beltone Hearing Aid Service
2828 N.W. 50th
Oklahoma City, Oklahoma 73112
Telephone (405) 947-4442

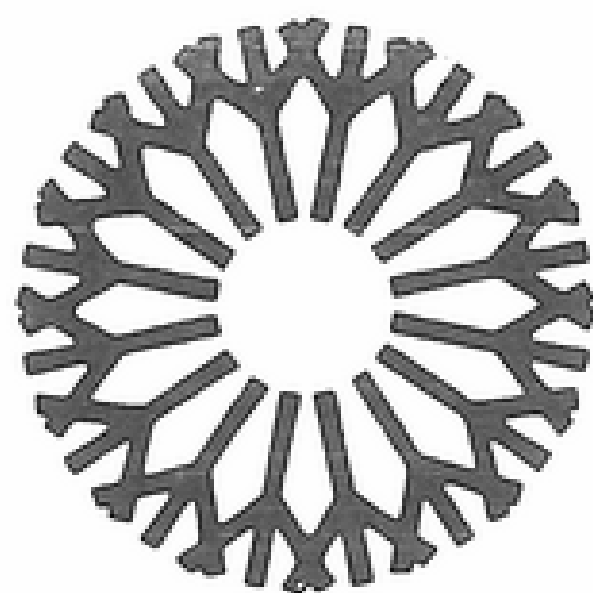
See individual club sections for times, places & details.

DECEMBER HAM HAPPENINGS '79						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						1
WHEATSTRAW DINNER 2	EDMOND CLUB 3	MORI DINNER 4	5	6	7	ACARG DINNER 8
SET 2 PM 9 34/94	AF MARS CHOCTAW 10	SCARS DINNER OU SHAWNEE 76ers 11 DINNER	EDIT C+E 12	KAY COUNTY ALTUS 13 ATV DESSERT	14	SCARS (11-60 DINNER) ON 117 H. 15
EARS 16	CORA EMERGENCY COMMITTEE 17	AUTOPATCH DINNER 18	EVERY ONE TO MAIL C+E 19	20	VHF DESSERT 21	22
23	24 CHRISTMAS EVE NEW YEARS EVE 31	CHRISTMAS DAY 25	26	27	28	29
30						



DID YOU KNOW . . .
YOU CAN ATTEND SOCJC

WITHOUT A HIGH SCHOOL DIPLOMA?

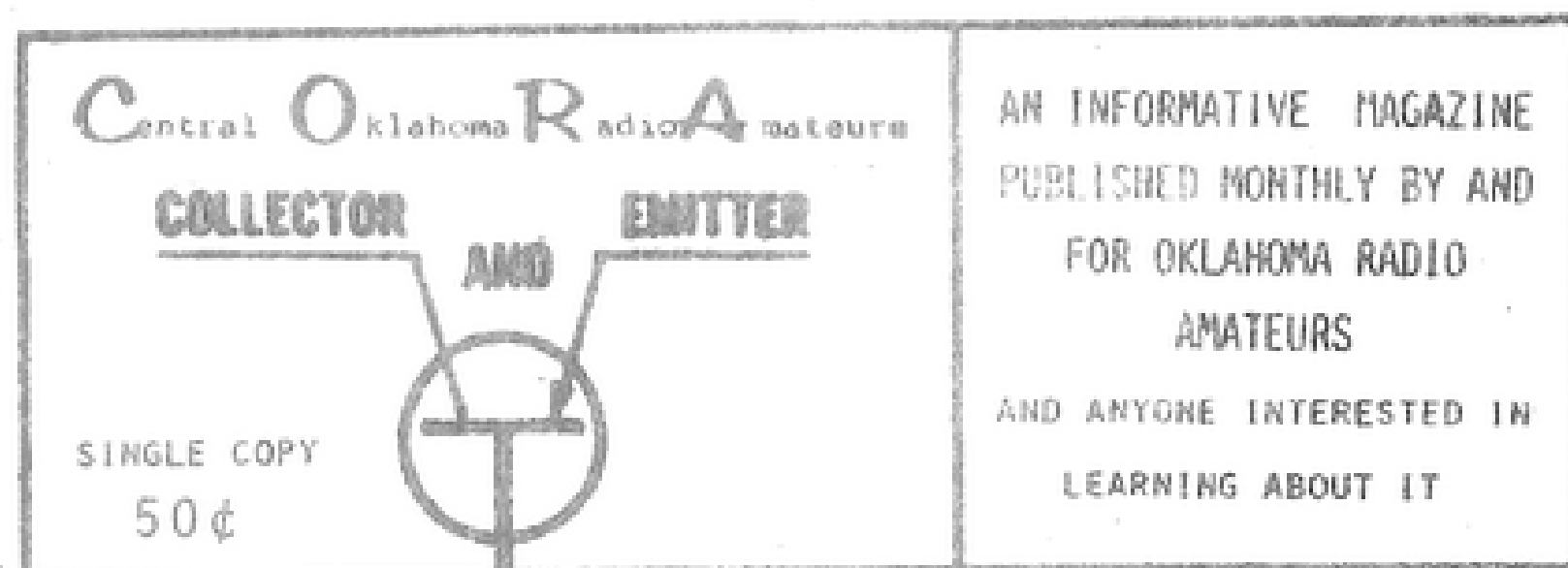


YES. MOST PERSONS OVER 18, REGARDLESS
OF PREVIOUS EDUCATION, CAN ENROLL IN
COLLEGE CREDIT COURSES EVEN IF THEY
DIDN'T FINISH HIGH SCHOOL. HIGH
SCHOOL SENIORS WHO NEED LESS THAN A
FULL LOAD TO GRADUATE MAY BE ADMITTED
AND THERE ARE NO ADMISSION REQUIREMENTS
FOR NON-CREDIT COURSES.

South Oklahoma City Junior College

7777 S. May

682-1611



ADVERTISING RATES AND SPECIFICATIONS JANUARY 1980

Rates are for
"CAMERA READY" copy.

If we prepare AVERAGE ad from
advertisers copy add 33%.

Halftones: \$7.50 extra charge

Image size: 4 1/2 x 7 1/2 in.

Page size: 5 1/2 x 7 1/2 in.

Full Page (34 sq") \$25.00 - Half Page (17 sq") \$12.75 - 1/4 Page \$6.50

WE PREFER: Copy image size 7 x 11 1/4". (It will be reduced by 36% to the final image size of 4 1/2 x 7 1/2"), however, same size, 4 1/2 x 7 1/2" is welcome. Intermediate (odd) sizes, or if the advertiser has a prepared ad that will fit - the charge is 80¢ per square inch.

ALL DISPLAY ADS CARRY A \$6.50 MINIMUM CHARGE

"WANT ADS" : 10¢ per word. \$1.00 minimum. In advance.

Your business card or other camera ready copy (printed in black, red or DARK blue ink) not larger than 2 x 3 1/4" will be placed in "run of the paper" space - for only \$30.00 a year, when paid in advance. (That's only \$2.50 per month). You may change your copy at any time. Single issue \$5.00.

DISPLAY: 6 months paid in advance, deduct 10% - 12 months deduct 15%

BILLING. Advertiser will be invoiced after first insertion for total amount due.

PREFERRED POSITIONS, including pages 2 & 3, center-fold two page spread and the two back pages are available on a 12 month contract at a 25% premium.

COPY must be in the hands of CORA Collector & Emitter by the 15th of the month to insure appearance in following months issue. Every effort will be expended to get it in if received prior to press time.

INSERTS: Pre-printed inserts furnished by advertiser are acceptable in multiples of four pages only, or 8 1/2 x 11" sheet size. A sample showing copy, layout and fold must be submitted for approval. Rate: \$37.50 / issue.

The publisher reserves the right to decline or discontinue any advertising for reasons satisfactory to themselves.

The advertiser agrees to indemnify the publisher against all claims, actions or expenses of any nature based upon unauthorized use of names or photographs of any person or persons or any sketch, map, words, labels, trade marks or other copyright material or libelous statements in connection with the advertising ordered.

The CORA Collector & Emitter is published by: Central Oklahoma Radio Amateurs, Inc., a non-profit organization to further the interests of Amateur Radio (Ham) in Oklahoma.

MAIL ADDRESS: CORA Collector & Emitter
P.O. Box 15013
Oklahoma City OK 73155

Supplement to:
CORA C & E, Dec. 1979