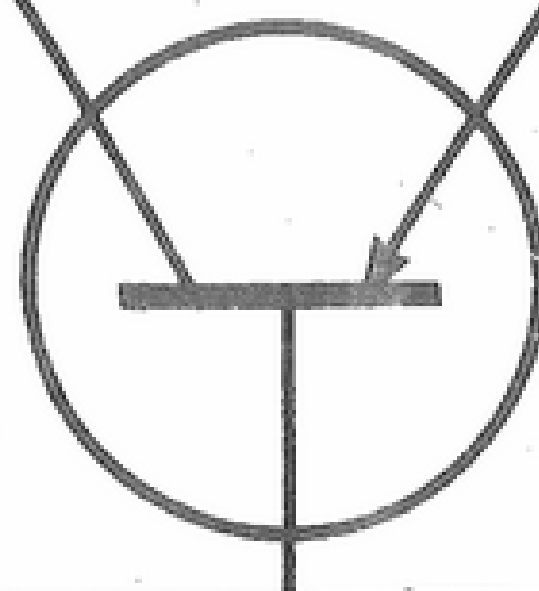


CENTRAL OKLAHOMA RADIO AMATEURS COLLECTOR AND EMITTER®



50¢

Volume 10

JUNE 1984

Number 113

CORA INVITES YOU TO HH

Y'uall come!, That's what I heard when I was in Atlanta, recently. They were talking about a Hamfest to be held in a couple of weeks. Y'uall come!, Was heard just the other day. They were talking about the Dallas Hamfest. Now I shall pass along the greeting, Y'uall come-to Ham

the Grand Award, an ICOM IC-751, microphone and power supply. And if you pre register (See page 00) you might just walk away with an ICOM IC-730, microphone and power supply. There is plenty of free parking, space for self contained RVs, and plenty of places to eat at the

LAST CHANCE

Holiday and West Gulf State Convention which will be held at the Lincoln Plaza Convention Center in Oklahoma City on July 20, 21, & 22. If you have "made" the other ten Ham Holidays you can rest assured that this one has been planned to eclipse them all. To start the list off look at

center and near-by.

A nearly completed program is listed on page 00 for your convenience.

There will be a charge for the flea market this year, just to help us break even and leave more money for the awards that will be presented Sunday afternoon. You don't have to be there, just let someone have your ticket.

There will be a full compliment of commercial vendors, each in a separate location from the flea market.

DID'YA KNOW!!

"I HEARD" that it could be fun "GETTING TO KNOW YOUR FELLOW AMATEUR". With this in mind, I wonder, did K5NK REALLY receive the following letter in the mail last week??

"Dear Sir:

We wish to thank you for your letter and pictures which we recently received. However, we will not be able to use your body in our centerfold.

On a scale from 0 to 10, your body was rated -7. The rating is done by a panel of women ranging in age from 65 to 75 years. We tried to have our panel of women in the 25 to 35 year old age bracket rate you, but we could not get them to stop laughing long enough.

Should the taste of the American woman ever change so drastically that they would want you in the centerfold, you will be notified by this office. In the meantime, however, don't call us, we'll call you.

Sympathetically,
Amanda Smith, Editor
Playgirl "

REALLY CHUCK ! DID'YA ??

Respectfully,
from the
Presidential Suite.

WELCOME TO OKC AND HAM-HOLIDAY

The Oklahoma City Auto-Patch Club would like to welcome all who plan to come to Oklahoma City to attend Ham Holiday. We invite you to make use of our excellent repeaters at any time. We feel we have some of the best repeaters in the Oklahoma City area. Our primary two meter repeater is 146.820. This is an open repeater and you are welcome to use it at any time. We also have a repeater on 147.210. This repeater does have an auto-patch, which is available only to club members, however, should you need to make a call, any club member will be happy to assist you in making the call. For those having UHF equipment, we also have an excellent repeater on 444.300, with a 5 meg offset up. This is a very good repeater with excellent coverage in all directions. For those using six meters, we also have a repeater with an input of 52.680 and an output of 52.525. Once again, welcome to Oklahoma City and Ham Holiday. We hope you enjoy your stay.

Kathy Whited, WB5NDO
President, O.C.A.P.A.

FOR SALE: 5KW ALL-MODE, HF AMP (4CX3000A) BY WESTREX-ADLER. 2 TO 30 MHZ FREQ. RANGE. 50 TO 100 WATT INPUT. POWER SUPPLY, MANUAL AND DIAGRAMS INCLUDED. RACK MOUNTED, LIKE NEW. CONTACT JUAN, NM5X, STILLWATER, 405/624-1635.

64K Upgrades

Peripherals

R & G Electronic Specialties

3317 S.E. 24th
Del City, Oklahoma, 73115

405-677-8685

TRS-80 Color Computer--Service & Repair
TRS-80 is a trademark of Tandy-Radio Shack



Mike's Cycle Salvage



2212 SW 29th OKC 631-7223

New & Used Parts

We Buy Salvage

Mike Kramer KA5NUP

146.025 / 146.625 REPEATER
FEEL FREE TO USE IT

THESE CORA MEMBER CLUBS PROMOTE AMATEUR RADIO

1 AERONAUTICAL CENTER ARC
MEETS: 7:30pm First Thursday Flight
Standards Bldg., FAA, S. Macarthur
PR WB5SVN Jack Iman 677-8537
VP N5ABL Holly Holcomb 799-2539
Sec WD5JPW Gloria Seignious 722-1740
Tr WA5CJG Bob Pace 376-3569
EDITOR: Gloria Seignious, WD5JPW 722-1740

2 OKLAHOMA CENTRAL VHF CLUB
MEETS: 10:00am Third Saturday. Red Cross.
10th & Hudson (Back door) Okla City.
PR KD5IS Jerry Wetmore 524-5080
VP KA5MYX Chris Sartorious 728-0058
SE K5JB Joe Buswell 732-0676
TR W5KE Ellard Foster 789-6702
EDITOR: Joe Buswell, K5JB 732-0676

3 MID-OKLAHOMA REPEATER, Inc.
MEETS: 8:00pm First Tuesday. Okla City
EOC. 4600 N Eastern
PR N5EPV Bob Allen Unlisted
VP WD5ISS Don Saunders 751-0404
SE N5BEQ Jim Buswell 236-0368
TR W5KOZ Sid Gerber 737-1050
EDITOR: Susie Atkinson, KA5FED 842-8014

4 OKLAHOMA CITY AUTOPATCH ASSOCIATION
MEETS: 7:30pm Third Tuesday. Okla City
Fire Training Center. 800 N Portland
PR WB5NDO Kathey Whited 799-1457
VP WD5CSM Dennis Patterson 495-0769
SE N5DLM Vicki Adkins 722-6195
TR KE5M Ron Recer 341-7030
EDITOR: Kathy Whited WB5NDO 799-1457

5 OKLAHOMA UNIVERSITY AMATEUR RADIO CLUB
MEETS: 7:30pm Second Tuesday (Sep-May)
119 Wilson Center. 1334 S Jenkins
PR KA5BAY Luke Noah 325-1775
VP KE5N John Wustenberg 325-2382
SE KA5COI Peter Richeson 329-3217
TR KA5LZN Greg Smith 366-1641
EDITOR: Greg Smith, KA5LZN 366-1641

6 ALTUS AREA AMATEUR RADIO ASSOCIATION
MEETS: 7:30pm Second Thursday
North Main Fire Station (CD) Altus
PR W5CCV Joe McDonald 782-3454
VP
S/T WA5CBF Loren Simms 477-0921
EDITOR: Loren Simms, WA5CBF 477-0921

7 BICENTENNIAL (76ers) ARC
MEETS: 7:00pm Second Tuesday. OG&E Bldg.
SE 3rd & E. K. Gaylord Blvd.
PR AE5N Donald Duck 681-0133
VP WD5JNT Ted Vanlaningham 262-1675
SE N5AUH Jerry Sproul 354-2061
TR WA9AFM Tom Webb 737-6716
EDITOR: Jim Seals, KB5XN 381-2005

9 WHEATSTRAW AMATEUR RADIO CLUB
MEETS: 2:30pm Second Sunday. Location
varies. See club section.
PR KA5DUO Leo Peil 886-2998
VP WA5FLT
S/T K5GG George Maschino 263-7614
EDITOR: Marvin Stokes, WA5JHB 893-2221

13 KAY COUNTY AMATEUR RADIO CLUB
MEETS: 7:00pm Third Thursday
Ponca City EOC
PR WB5YRN Delbert Foiles 762-4479
VP WA5UBO Marsh Pronneke 363-2526
S/T KA5PUB Glenn Bishop, Jr.
EDITOR: Rick Long, WD4CEP 767-1871

14 CIMMARON AMATEUR RADIO ASSOCIATION
MEETS: 7:00pm Second and Fourth Mondays.
Place varies. See club section.
PR WB5ECM Dennis Painton 764-3599
VP N5FUP Steve Schoonmaker 886-3274
SE N5FMH Nadine Painton 764-3599
TR N5FUR Ruth Simpson 227-2791
EDITOR: Major Bailey, K15P 227-2061

15 SOUTH CANADIAN AMATEUR RADIO SOCIETY
MEETS: 9:30am Second Saturday. Red Cross
Bldg., North OU Campus. Norman
PR KA5MIZ Bob Rabin 360-6996
VP KA5EPJ Ken Neptune 321-7789
SE WD5GTC Gene Johnson 321-6759
TR N5BEW Ken Esadoah 329-4667
EDITOR: Sam Barrett, WA5RPP 321-2601

16 EDMOND AMATEUR RADIO CLUB
MEETS: 7:00pm First Thursday. See club
section for location and type.
PR WB5UIY Stan Van Nort Unlisted
V WB5MLX Glen Cochran 942-7148
S/T WD5DYJ Kay Northcutt 755-4672
EDITOR: Mark Northcutt, WD5DYI 755-4672

18 GREAT PLAINS AMATEUR RADIO CLUB
MEETS: 7:30pm First Tuesday
Civil Defense room, Woodward courthouse.
PR WA5PLW Windle Hatchett 766-3561
VP W5KEK Lewis Patterson
SE K5YZK Jim Phares 254-2319
TR KA5SDE James Rockhold
EDITOR: Jim Phares, K5YZK

10 EDMOND AMATEUR RADIO SOCIETY
MEETS: Varies. See club section
PR KB0OU Cal Callison 751-3620
VP WA5ZGM John Keeling 340-1253
S/T KC5GN Bill Wright 341-6076
EDITOR: John Keeling, WA5ZGM 340-1253

20 ARDMORE AMATEUR RADIO CLUB
MEETS: 8:00pm First Wed. Red Cross Bldg.
Informal, 8:00pm other Weds. 221 9th NW
PR WB5VBK Fred Innis 223-1709
VP WD5FZD John W Merlyn 223-9543
SE W5JCX Jim Chilcoat 226-6816
TR W5BLW Charles Dibrell 226-0589
EDITOR: Glen Hamilton KE5ES 226-4379

CENTRAL OKLAHOMA RADIO AMATEURS, Inc.
MEETS: 7:30pm Fourth Tuesday. OKC Fire
Training Center. 800 N Portland
PR WN5NWX Reggy Whited 799-1457
VP K2GKK D. C. Macdnald 672-4947
SE N5BEQ Jim Buswell 236-0368
TR WDOFTM Linda Callison 751-3620

CORA Collector & Emitter (USPS 116-150) is
published monthly by CORA Inc., 1020
Arthur Dr, Midwest City OK 73110. SECOND
CLASS postage paid at Oklahoma City OK
SUBSCRIPTION: CORA members \$3 others \$6 yr.

POSTMASTER: Send Form 3579 to:
CORA C&E, P.O. Box 15013, Del City OK 73155

MANAGING EDITOR:
Joe Harding, WA5ZNF, 737-1044

CIRCULATION MANAGER:
Bob Graham, WB5NSV, 677-8685

kay

COUNTY AMATEUR RADIO CLUB
 COUNTY AMATEUR RADIO CLUB
 COUNTY AMATEUR RADIO CLUB



It must be the weekend because it has started raining. I've heard that it has rained for 11 weekends straight and we've been delayed in putting up the 10 meter repeater for 5 weekends...now, 6. Oh, well, when things dry out, we'll put it on the air.

We had a real good meeting in April at our new meeting site, the Ponca City Park Building on West Hartford. Everyone who was there seemed to like the new place, so I guess we'll be meeting there for a while. There were 13 members present and one visitor, Tom--K5CI, from Texas City, Texas.

We will be sorry to lose one member, Tom Jakubec--N5ZR but he is moving to Houston at the end of the month on a permanent basis. He has managed to sell his antennas and won't have to haul them down there.

Field Day is only two months away and it looks like we will have ours at Lake Ponca again. This is a good place and close by for convenience and practicality. Dr. Paul may use his "floating marine antenna" installation again.

Club officer elections are going to be held in May, so plan to be there. It's time to get some new blood in the offices.

The club is also getting started in handling messages for the Ponca City Nursing Home. Social workers will take down the messages and then call one of the club members. They will in turn send these messages via Ham Radio and also may be asked to receive messages. This service seems to be needed and well received by the patients.

The Winfield, Kansas ARC will hold a covered dish supper on May 3 at the Quaker Haven Camp, south of Ark City, Kansas. If you can attend, they would be glad to have you.

We're glad that Jay Williams--W5TXF is up and running around again. He was in the hospital for a few days, but is feeling a lot better now.

The cable system here in Ponca is getting closer to being finished with their upgrading, but there are still some problems. I've noticed some interference on 2 meters for a couple of days, but it has seemed to have cleared up. If you notice any interference, please contact the cable company and let them know.

That does it for this month...except if anyone has room on their Ark, let me know....

Well, it's hard to believe, but it seems like the rain has quit for a while. Now we can get out on the weekends and get important things done like fixing that broken antenna, putting up a tower, or maybe even go fishing! A few of us here in Kay County are using the break in the weather to finish putting up a 10 meter repeater. We should have it on the air by the first weekend in June.

New officers were elected at the May meeting and they are: President--Dr. Paul Davis KA5PYG
 Vice-president--Marsh Ponneke WA5UBO
 Secretary--Marvin Cullison WB0VHC
 Editor (C&E)--Dave Land KD5FX

Congratulations to all!!

Field Day will be here shortly (June 23-24) and plans are being made to have the site at Lake Ponca again, but at a different pavillion. This year, the site will be the Ambucs pavillion, near the ranger station. There will also be a covered dish supper at 6:00p.m. that Saturday (June 23) at the pavillion and everyone that would like to attend is welcome to come.

We would like to welcome John Reed (KA5QEP) of Ponca City, who visited us at the last meeting. We hope he will become a member in the club.

This will be my last article for the C & E and it's been fun and a challenge (to try and beat the edit date!). The new editor, Dave Land (KD5FX), should do a real good job and besides, he has got a computer to write the articles on! Good luck Dave-- it's in your hands!

73's

Rick WD4CEP

The Wheatstraw Radio Club Meeting was held at the Gold Room in El Reno on April 8th, 1984. There were 35 present. Pres. Leo Peil opened the meeting with a welcome speech and had self introductions. George, K5GGL read the minutes which were approved as read. There being no old business we moved to new business and had a report on Ham Holiday for 1984. Some volunteered to bring cookies for the hospitality room and some said they would take their turn at the ARRL booth.

The Mooreland Hamfest was talked about and we were informed that we had an invitation to attend. All present voted to go out there on May 20th and not have our regular meeting on the 13th, so a caravan will form at Watonga and head that way. (Be sure and go to bed early.)

The meeting was turned over to Joe, K5JB and Joe, WA5FLT, who gave us a real good "Demonstration of Packet Radio". Everyone sure seemed to enjoy that portion of the program. The two Joe's answered questions on packet radio and we all had a better understanding as to what it is, Thanks guys!

Motion was made and seconded that we adjourn for refreshments. Motion carried. The goodies were GOOD as usual. (Just picked up a few calories. Hi)

By the time you read this, the Mooreland Eyeball QSO will have come and gone. Will report on it next month.

73 Marvin, WA5JHB

NORTH AMERICAN TELECONFERENCE RADIO NET

"Multiband, Broadband, and Frequency Independent Antennas, an Overview" presented by Dr. John S. Belrose will be the subject of the North American Teleconference Radio Net (T.R.N.) Thursday, June 21, 1984. Access to T.R.N. is provided by over 180 gateway stations, mostly VHF repeaters, linked together to cover virtually every metropolitan area in the U. S. and much of Canada.

The antenna is, arguably, the single most important element in radio station effectiveness, contributing as it does to both transmit and receive performance. This alone makes a talk on antennas immensely popular in the radio community. However, radio amateurs will be particularly interested in Dr. Belrose's talk because they will need new approaches to antenna design to accomodate the additional bands recently allocated to them.

Dr. Belrose is a world-wide respected authority on antenna design. He is professionally involved with antennas as Director of Radio Communications at the Canadian Department of Communications, Communications Research Center, Ottawa, Ontario. Many amateurs will recognize him as "Jack" VE2CV, an ARRL Technical Advisor on antennas and author of many articles in QST and other journals. A more extensive biography on Jack's accomplishments and interests may be found in QST, March 1982, p.39.

The national program begins at 7:30 pm Central Daylight Time June 21 (that's 0030Z next day). Local nbets may begin earlier.

The following stations will air the program:

CHEROKEE	WD5DJN/R	147.900
OKLAHOMA CITY	WB5ISN	3.900
OKLAHOMA CITY	WD5AII/R	147.030
TULSA	W5DRZ/R	146.910

AMSAT News

Dick Ruhl WD5GLD Area Coordinator



The Amsat presentation at the Dayton convention was a great success with a large attendance during the Amsat programs featuring many topics hosted by the experts regarding the construction and use of various equipment for working with the Amateur Radio satellites. The big event this year seemed to be packet radio and its many uses in amateur radio. The amateur radio satellites are ideal for packet type communications from country to country and many stations are on AO-10 using packet radio today with a large number of satellite users getting equipment ready for the new mode of communication. The PACSAT project is the forerunner to a family of digital, store-and-forward, type satellites and is a joint venture by Amsat and VITA, (the Volunteers In Technical Assistance) group which is now seeking a Get Away Special launch on a 1985 or 86 shuttle mission. A new packet radio DX record belongs to W3IWI and VK2AQG (near Sidney). The record distance of 15,700km was set on May 6th using AO-10 as it approached apogee. The old record of 300km was set on 10 meters by ZL1AOX and WA2LQQ.

The present status of Oscar 10 is very good with all systems performing nominal. The Amsat Stoner Challenge Cup competition is in full gear with some stations heard on the satellite that have worked over 400 different grid squares already. This is some feat considering the challenge has only been on for little over a month now. Good luck to those wanting to win!!

The satellite transponder is operational from a Mean Anomaly count of 40 to 220 with Monday being QRP day and Wednesdays and Saturdays as mode L days. As of this writing the satellite is visible in Oklahoma about 9 hours a day. We have had excellent results using the IC-451 barefoot with around 120 watts ERP. The polarization switching on the antennas from RHCP to LHCP make all the difference in the world. Caution must be used regarding the amount of uplink power needed to hear your own downlink noise-free. As was first reported by Amsat, the 1000watt ERP needed on the uplink can be excessive at times and can really modulate the transponder to the point of AGC cutback resulting in the whole passband dropping in signal level. A station running QRP can be totally lost in the noise if the AGC circuits are trying to limit the powerful stations that are using way too much uplink power. The emphasis is being placed on upgrading your downlink capabilities and using the satellite power levels to their maximum efficiency. Monitor your downlink signals and compare them with S meter readings from the general beacons to determine how strong you are reaching the satellite. A 10 to 20 db gain over the noise is quite readable for two-way contacts.

The Oklahoma Ham Holiday is not very far off and plans are being made to have Amsat represented here this year. We have been in contact with Jim, K5PER and Larry, W5HPU in planning for the event. If you have any suggestions give Jim or myself a call or drop a letter in the mail. We welcome any ideas you may have. We will have lots of material on hand from Amsat HQ for you to purchase and look through. This is our state convention and we want to make the best of it so be sure and send in your preregistration today and we are looking forward to seeing everybody there.

According to W9KDR from ARRL the use of Amsat Oscar 10 for field day will be available this year. The club stations will receive an additional 100 points for making at least one satellite QSO during field day period. The Oscar station does not count as an additional transmitter, it will be regarded as a different band in the logs. This is a great time to use A-10 to gain extra points for your

ALTUS AREA



AMATEUR RADIO
ASSOCIATION

The Altus Area Amateur Radio Association held its monthly meeting at the North Main Fire Station on April 12, 1984 at 1930 hrs. Eight members and two friends attended this meeting. They were: Herb, N5FQR; Joe, W5CCV; Shorty, K7BSY; Oliver, WA5OGC; Ida Ruth Meeks, XYL of Oliver; Mike, W5VXU; Bill, N5GUK; Keith, WA5ZFI; Dwight, WB5KRH; and Bill Searcy from Tipton.

The Secretary-Treasurer, Loren, WA5CBF, missed this meeting because of a bad cold. I'll try to write up a better report next month concerning this meeting.

Dwight, WB5KRH, reported on the troubles with the high winds the repeater site has been having. The WB5KRH RPT has been off the air for two or three days until repairs can be made.

Dwight also showed slides of the Wichita Falls tornado of 1979 and an short narrative thereof.

LCS WA5CBF

FOR SALE ICOM IC22S \$125.00

Charles Woodworth N5DKZ
131 Lakeside Drive, Altus, OK. 73521
405-482-4298

The Altus Area Amateur Radio Association held its monthly meeting on 10 May 84 at 1930 hrs. at the North Main Fire Station.

Nine members showed up for the meeting. They were: WB5KRH, Dwight; W5CCV, Joe; KA5KVU, Dennis; WA5ZAR, Bud; W5VXU, Mike; W5ZDI, Clyde; N5AIP, Bob; N5FQR, Herb; WA5CBF, Loren.

The financial report was given by Loren, WA5CBF. We have \$392.09 in the bank as of this meeting.

Dennis, KA5KVU, gave a report of the trip up the mountain to repair the WB5KRH/5 RPT. Because of the high winds lately, the entire building had to be moved back into place.

Joe, W5CCV, made several comments concerning to construction of two houses after fire had destroyed both. Had some interesting ideas.

Dwight had several comments on the fact that we have had No Bad Weather this Spring. Concerning the repeater, WB5KRH, said that when the wind blew the building from its foundation- it separated a PL-259 from the Duplexers- thus the machine went off of the air. Dwight on speaking about the fact of No Bad Weather said that the Jet Stream was to blame. He said the Jet Stream was in a summer pattern.

Bud, WA5ZAR, has been involved with his insurance company concerning what the high winds did to his Tri-Bander. He has been having 'Fun and Games'.

Herb, N5FQR, has been travelling down to that foreign land of TEXAS. Herb visited in the Texas hill country called San Saba.

Bob, N5AIP, looked tired at the club meeting. Thought he had been giving out too much money. Said the prime lending rate was 13 3/4 percent.

Dwight, WB5KRH, asked a general question concerning the Viking Invader 2000. I wonder what he is planning to do! He wanted to know- 'How clean' it was- some one said as clean as a BC-610. Hi.

Mike, W5VXU, is the 'tube bank' for the Air Force MARS program for 5 states. He said "Don't throw away any of those old tubes?"

Bud, WA5ZAR, told some high tales of the QRP days. Reaching New Mexico on 200 Ma. 80 M.

The meeting broke up at 21:30 hrs. Next meeting is scheduled for 14 June 84.

LCS

field day activities and learn the use of satellite communications at its full potential. That is all we have at this time so we look forward to seeing everybody at Ham Holiday.

Good Luck, Good DX

Q. R. Zedd

MOMMA COMES TO VISIT; RIOT SQUAD ON STANDBY

It was on the fifth of May that Mrs. Constance Wilhemina (CW) Zedd, of Mena, Ark., blasted into Norman on her Kawasaki 1000, trailing a longwire antenna, a cloud of smoke, and a long line of dazed traffic cops.

Momma, mother of the great Q. R. Zedd, A5A, Oklahoma's living national monument who is the world's greatest DXer, made it over from Arkansas in about two hours. She said she had to take it easy because the cool plugs she was running in the newly installed modified Buick engine in her bike tended to create a little QRN at speed, and she was trying to work all states on 30 CW during the drive.

After freshening up at Honor Roll Ranch, Zedd's modest antenna farm just a hoot and a holler south of Norman, Momma agreed to meet your reporter for an interview at one of her favorite area watering holes, Red's Tavern.

The riot squad went on standby when Momma strolled into Red's, wearing an afternoon dress of turquoise taffeta, four-inch heels, and a rhinestone ankle bracelet. Since it was early in the day, she wore her lustrous hair loose on her back, and had no sparkly things in her dark hose.

Wrapping crimson-tipped fingers around a strawberry maguerita, Momma launched into a brief recap of her activities since her return months ago from the ill-fated Zedd DXpedition to Vietnam.

"It's been a quiet time, honey," she began. "The Vietnam thing was a rough gig, especially when we got caught in the artillery fight and had to break off our QSOs with the European 4s. By the time I got back home, I was down to 91 pounds and I had the fever real bad. So I had to take it easy to get back on my feet and not even do much radioing, and there were a lot of days there late last summer when I didn't even fill up a logbook in a whole week.

"Since the first of the year I've felt a lot better and I've worked a few hundred thousand on CW, plus of course my talk with W5LFL and those other darling boys on the space shuttle, but I really do feel it's time I got over here to Norman to see Q. R. and that darling Tondelayo, and brush up on my break dancing.

"Also, since my nephew is graduating from OU, it's a perfect time to visit. I haven't seen the darling boy since he opened Clipperton a few years back. My, my! I bet he's really grown! Of course he always was a handsome, intelligent devil. That comes from my side of the family."

Momma was interrupted by a cowboy who was just learning break dancing. Momma wheeled around the floor with him a little and then did a few steps on her knees and back before thanking him kindly and wobbling back to the table, where she finished her drink faster than you can work China with your automatic keyer cranked all the way up.

"This new dancing really makes you thirsty," Momma allowed. "It reminds me of the time my late husband, Zepp, took me to the Sahara with him. That was back in the days after the war -- the big one, you know, with the Kaiser.

"Zepp was such a darling man. You know, the Marconi name would not be known today if it hadn't been for the efforts of Zepp Zedd. And goodness knows we all appreciate his efforts to perfect the yellow-handle screwdriver.

"Zepp hated hot weather and he wouldn't have gone to the Sahara except that no one else was capable of mounting a DXpedition there, and even if they had known how to do it, Zepp was the only one with a great enough

INVISIBLE ANTENNAS AND DISAPPEARING RECEIVERS

"Amateur Radio," that excellent magazine from Australia, always has something of real interest. The February and March issues (both arrived in the same mail delivery) have a pair you'll not want to miss.

The February issue shows a wide variety of "invisible" antennas. That is, ones that you can put up without having the neighbors blaming you for all stray electrical noise.

But it's the March issue that'll hold your interest even though you may have a wholly satisfactory antenna. It has the story of a chap who, while a POW in Germany, built a radio receiver from salvaged and scrounged parts and kept it hidden from the guards. The tale (a true one) is well written and makes fascinating reading.

Don't miss these two issues. You'll find them in the ACARC clubroom.

W5JJ

international reputation to be approved. He helped Hiram Percy Maxim's father perfect gunpowder, too, don't you know, or was it poison gas?

"Anyhow, honey, we got into the Sahara on the hottest day in over a century. It was so hot the camels lost their humps. It was so hot, we slept on hot water bottles to cool down. It was so hot, when we first turned our rigs on, we had to wait twenty minutes for them to cool down to operating temperature.

"During the first day and night we worked about 21K, dear Zepp and I did, but it was even hotter the next day and the water boiled out of our oasis and we knew we were in a lot of trouble. We had to hike out of there in the dead of night, just us and the dead camels -- work a station, drag the camel a few yards, work another station -- you can imagine, but the camels were rented and we had to return them.

"In actuality we might not have made it if it hadn't been for Zepp's pet toad, Jess. Zepp had brought Jess along in a Thermos bottle against a water emergency. As we staggered across the desert, really needing water badly, Zepp repeatedly released Jess, knowing how toads love water, and sure enough, on every occasion little green Jess would hop off over the horizon somewhere and locate a buried spring or discarded Coke cup with some leavings in it, or something.

"That toad saved our lives, thanks to Zepp's foresight.

"Nevertheless, by the time we got back to Cairo we were worn to a nub, I mean pooped! But Zepp insisted on working a few more of the faithful from the hotel. The heat wave was no better there, though, and finally we had to catch the last boat out, just before that end of the Mediterranean dried up."

Momma Zedd paused to dry a tear in her eye. "The fact that we have no national holiday to honor the memory of my late husband is a disgrace," she said finally. "You were too young to know him. More's the pity, and the greater your loss. But you do know my darling Q. R., and that's next best. And you'll soon get to meet my nephew, and that also is bound to be a thrill for you."

Momma brightened. "At least," she opined, "you will have known three of the four greatest in the amateur radio world. Counting me, of course." She winked and hailed the bartender with her empty glass. "Garcon! Let's have one more here for my baby, and one more for the toad."

-- KU5B

WOODWORKING WITHOUT SPLINTERS

MAKE A SPEAKER BOX

The following assembly technique was evolved out of desperation. Boards kept splitting and creeping out of place as I hammered in the nails. These two problems are solved in the procedure below. The results are worth the extra steps involved. Assembly of a speaker box using one inch pine (which is $\frac{3}{4}$ inches thick) or $\frac{3}{4}$ " plywood (which is $\frac{3}{4}$ " thick) and $\frac{1}{8}$ " Masonite or $\frac{1}{4}$ " plywood is given.

THE GENERAL IDEA. A hole is drilled to make a path for each nail. The drill size is just a little smaller than the nail diameter. The nails serve as holding pins and are left in place in the final assembly, while glue provides most of the strength.

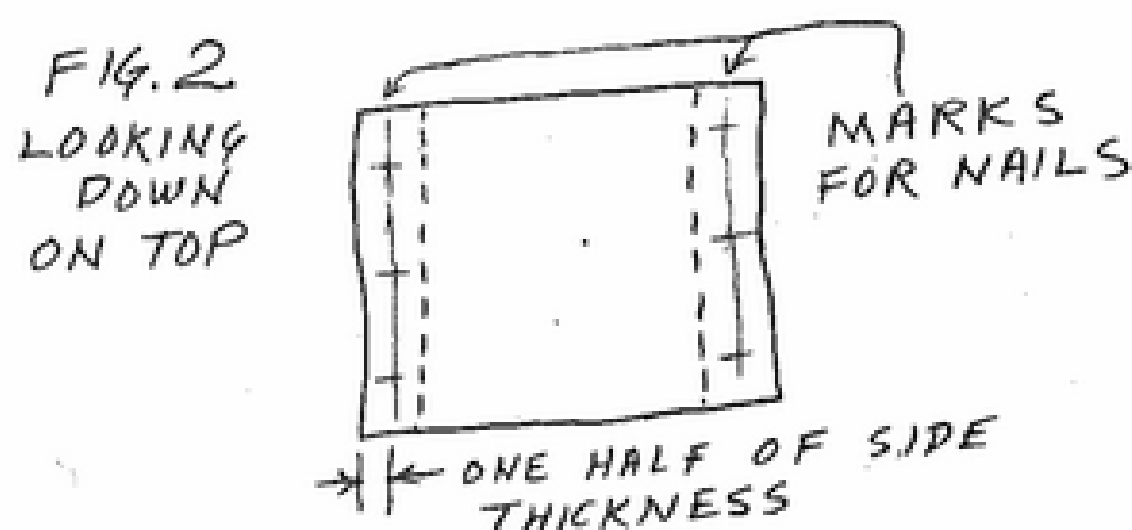
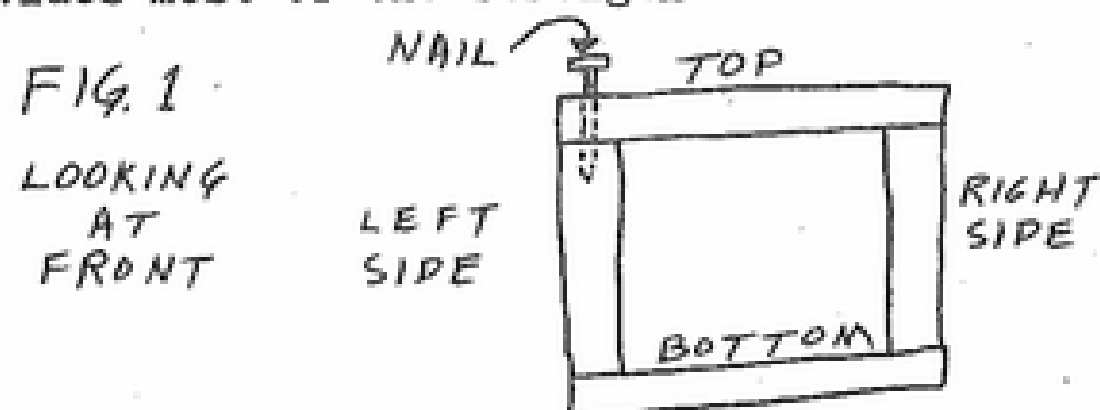


Fig. 1 represents the speaker box without the front panel. Imagine your four boards in this configuration and arrange them to show the best surfaces. Mark the inside corners so you can reassemble in the same way.

Fig. 2 is the top of the top piece or the bottom of the bottom piece. Drill the nail holes all the way through the top and bottom pieces but not into the sides yet. AVOID KNOTS. Hold the drill square with the board surface. The top and bottom pieces will now serve as drill guides in the next steps.

Set one joint together as it will be in final assembly. Place the two pieces at the edge of the bench or table so that a drill may enter one of the holes already drilled. Just as you are ready to start drilling, the boards must be carefully aligned and firmly held in place. I have done this without a helper by bracing and clamping. Start with the hole at one end of the line of drilled holes and drill into the appropriate side board. Tap a nail into the two boards in the subject hole far enough to hold the boards together, but leave some nail sticking out so it can be pulled out later. Drill into the side at the other end of the line of holes. Tap a nail in temporarily. Do the same with the other holes in the line we are working on.

Disassemble this joint by pulling and twisting the nails straight out with a pair of pliers. Spread on glue and re-assemble, but this time drive the nails all the way in. As you do this brace the two boards at a right angle if necessary and keep braced until the glue dries. Sometimes I must force boards into a 90° angle because my saw cuts are seldom square. And then there are times when I just slap the boards together so they look like they fit.

Fasten the other side using the drill and pin method. This time try to work so that the two boards already assembled will aid the process. Assembly should be getting easier. With three boards in place fasten the fourth. Masonite ($\frac{1}{8}$ ") or $\frac{1}{4}$ " plywood may be used for the front panel. Use the front edge of the

box as a template. Cut out the panel, then cut out the speaker holes. You might use glue only to fasten the front panel on. Nails only or both are OK too. The small nails necessary for this job shouldn't require the drilling used above.

Two or three coats of "one coat covers" latex enamel should make your box a work of art! Metal primer should be used on nail heads, but I usually let 'em rust a bit. (caused by the water-based paint.)

APPENDIX

I. Picking the Right Drill Size. Eyeballing and feeling would probably do it. A micrometer will work. I use a drill gage. File the enlargement off the nail where the point starts to taper. Insert nail into gage holes until the tightest fit is found. Use the next smallest drill size.

II. Aid to Drilling Accuracy. Punch a scribe into the wood at the mark. Drill at least halfway into the wood at the punch hole using a small drill - about number 50 to 55. Then drill with the one selected above.

III. Drill Deeper. The drilling depth equals the full length of the nail. If more depth is needed, remove the top (or bottom) and drill some more into the side.

A TRIP TO THE LUMBER YARD

Everything I have built over the past 40 years has used soft woods like pine, fir and redwood. The following applies to these woods.

You can save a lot of cutting if you will design your woodworking projects so that the width and thickness of boards in your project is the same as those dimensions of boards found in the lumber yard. Be sure to measure the actual widths in the lumber yard since they are less than the designated widths.


One important thing to look for is the quality of the various stacks of boards. I never know what the actual grade designations are. Instead, I have my lengths handy on a list. I also take my steel tape along. A check of needed lengths to fit them between defects will tell me how much lumber to buy. Knots must be avoided at joints. They are usually OK elsewhere.

Note that knots may slant, so check both sides of the boards you are planning to buy.

Plywood defects are often hidden. One designation is "good one side". That often puts a lot of defects on the bad side. The hidden defects are actual spaces or bad knots in the inner layers. Some plywood is junk on all but the good side. Look around the edge as far as you can. This will help judge the quality. You may have to buy a higher grade. Some stores will furnish pieces smaller than the standard 4 x 8 feet size.

Bill, WASRAQ

HOLISTIC CHIROPRACTIC CLINIC



- NUTRITION/WEIGHT LOSS • DIGESTIVE DISTURBANCES
- BLOOD-SUGAR DISORDERS • HEADACHES/BACKACHE
- WORK/SCHOOL/GENERAL PHYSICALS
- WORKMAN'S COMP. • AUTO OR JOB INJURIES
- FULL LAB AND X-RAY SERVICES
- PHYSIOTHERAPY • IRIDIOLOGY
- FULL SPINE ADJUSTING • GENERAL FAMILY PRACTICE

DR. DON BOWERS, M.P.H. D.C.

4180 NW 23RD

942-7738

The flea market was down this year as a result of a requirement that all fleamarketeers register in advance. This meant that the market never got off the pavement. But this is still quite a few acres of radio goodies to examine, paw over and buy. One innovation this year was assigned flea market space that was numbered. That way, every booth had a number and if you saw something that you wanted to buy at booth 215, you could go right back there and find it and not wander all over looking for whatever it was. When I walked in the door, I saw Gilly W5NUT in a choice piece of flea market real estate, so I asked him if I could put some things down to sell and he agreed. I did try to spend some time helping him watch the booth, but unfortunately, not enough. Unfortunately, didn't sell very much.

Friday night is a tradition at Chuck's house. They have a big party and it is really great to see every body there. Chuck also lets us use his station N8ADN for a QSO back to Oklahoma. It took a little coordination this year, but eventually on frequency on 40 Meters was WD5DYI, WB5HST, WA5JXX, WB5YWO, W5UXR and a couple of others. Somebody ask me what station I was using and I told them that I was running 100 milliwatts to a straight pin and all of a sudden, this big voice came on in disbelief "You using a straight pin?" Suddenly, knowing he had been had, the voice disappeared. Chucks signal should not have been shabby. I suppose that I will have some special Dayton DXpedition QSL's printed up, but I am too lazy.

Back to the hotbox motel that evening. I woke up about 4 in the morning when all the traffic on the road went away for about two minutes. Just seemed too quiet. Stan, Rich and I decided that it would be an appropriate time to string the wire for the half wave antenna for the TS-130. I didn't really want to test the baggage capability of the plane with the portable station, so I talked Ron WA5EAI into again bringing the radio to Dayton for us. This time Ron got to use the radio on his way up and left his Swan at home. After some fiddling around, we finally were able to get the screen off and a wire strung out to the disco sign nearby. A quick check with the antenna tuner and things seemed to be working OK. We were able to work back into Oklahoma that night with pretty good success although the noise was a problem. Our rooms were on the second floor and when Rich and I went outside to tie up the antenna, we found a steel post sign about 75 feet away that looked about perfect for an antenna support. Rich shinnied up the pole while I boosted from below. We must have gotten it up about 15 feet or so. I wanted plenty of clearance since the antenna crossed the main road entrance to the motel. Unfortunately, it wasn't high enough for the busses that came through the next morning to take people to the hamvention. needless to say, the antenna disappeared across the front of a Dayton Public Transportation Bus. Having anticipated the contingency, we were using phosphor bronze wire and very weak string to tie it off. The wire inside the room broke with very little difficulty. The next night, I suggested that they tie the antenna parallel to the building and climb on top of the hotel disco. to get to a roof. I wasn't there to watch the festivities, but Joe and Rich went out this time to take care of the antenna caper. Joe had just finished boosting Rich on top of the building when he looked up and saw a deputy sheriff in the parking lot. The sheriff drove down toward where Joe was standing in front of the disco. Rich was meanwhile up on the roof busily arranging the antenna support until he peeked over the edge and saw Joe talking to the local. Strangely, enough, after asking Joe whether there had been any trouble in the disco, he put his gloves on, walked into the disco and that was that. Joe and Rich finished the project and beat a hasty retreat.

Sunday was kind of uneventful except that I kept my eye on the weather. It had been looking pretty grim for the possibility of getting back that evening and after some discussion and checking I suggested to Joe and Stan that we really need to be gone by about noon or so. We drove out to the airport with Greg, a friend of Stan's who had driven up for the Hamvention and he dumped us off before taking off for Oklahoma himself. It was Greg's first time and he seemed to be really enjoying himself, especially over the pitcher of margaritas on Thursday Night.

I walked into the flight service station located on the field for a stand up briefing. The man behind the counter was nice enough, but there was something strange in the way he kept telling me that I wouldn't get past Terre Haute. I finally understood when he asked me if we had any alternate transportation back to Oklahoma. He said that when the weather moved in, we probably would not get out until Thursday. He then said that if we wanted, he could bring the plane down on his days off on Thursday or Friday, but would need a way back. I gathered my weather, thanked him and told him that I would see what it was like in Terre Haute.

Conditions weren't the best, but were Ok in Dayton and through Indianapolis. The only thing bad about the weather from that point were the low ceilings and we were skittering along about 1000 feet above the ground. The ceilings lowered even more and we diverted to Olney, Illinois and landed at a small nice airport. After checking the weather further, and deciding that we would see how far we could get (there was a thunderstorm dry line in Oklahoma moving our way and needed watching) we pressed out of Olney toward Centralia. When we got to the Mississippi River, there were some pretty good breaks in the clouds, but that was probably due to heating of the water. I checked with flight service and they indicated that the storm was outside of Springfield and would probably beat us there. I had thought that we might be able to make Springfield, but no dice. I decided to land at Farmington and we tied the plane down. The weather got unbelievably worse and we watched the television that night to see that several tornadoes had skipped through central Oklahoma and parts of Missouri. Farmington is just about 70 miles south of St. Louis and I figured that the storm would clear through by morning. It did and the next day was blue bird clear after we got about 20 miles out of Farmington. The only thing to contend with was a 30 knot head wind. We had gotten up about 5:30 a.m. to make it out to the airport by 7 and we were in the air by 7:15 a.m. and back in Oklahoma by 10:30 or so. The entire flight was about 13 hours round trip.

How was the Hamvention this year? Great. It seems that technology is providing more and more fascinating products for amateurs to play with. Advanced Computer Controls had the new Shackmaster which will allow you to interface your HF radio to your Vhf radio and operate it remotely. It has a bunch of things going for it. Lots of new radios and satellite receivers are truly going for a dime a dozen. Everybody who has a new product usually brings it out at Dayton. I got a ton of literature and haven't really had the time to go through it all.

Next on the hamfest calendar is Dallas Hamcom the first week in June and, of course, Ham Holiday in OKC in July. Both are growing by leaps and bounds, and although I never win anything, it seems like the prizes available are growing. Hamcom is looking pretty good with several packet radio programs and the boys from TAPR planning on being there. Onward to Big D!

Micheal Salem N5MS

DEBBIE DOES DAYTON!!

Actually, I didn't see a single person named Debbie at Dayton this year. She might have been there, I just didn't notice. Everybody else was there, though. And although the flea market was smaller this year because of a new format, Dayton still offers the penultimate flea market and commercial exhibit program in the country. And the fact that the population attendance from Oklahoma keeps increasing shows that more and more people recognize that fact.

The fact that this was my ninth trip (or is that tenth?) to Dayton just really seems to make it all that interesting. I did spend some time perusing the flea market, in fact, I spent a lot of time perusing the flea market, but the urge to buy was down this year. I finally wound up buying some small parts and an amplifier to jump the power of my packet station from a lowly 10 watts to 50 watts. That purchase was made the last day of the flea market.

As usual, our plans for Dayton begin well in advance. We start looking for rooms in December or January. Somebody orders up tickets also and the hunt for transportation also starts. Transportation is really one of the more difficult items. Commercial plane arrangements get more expensive each year. Used to be that a supersaver plane ride was less than \$175, but that has gone the way of the dodo bird. The cheapest plane ride is now \$350.00 and the snooty plane carrier wants their money in advance, way in advance like a month or two. I figured that there has to be some way to beat the system. I had already ordered up the plane tickets for everybody which included JB K5JB, Stan WB5UIY, Joe WA5FLT, Jim WB5YWO and Roger WA5JXX. Ron WA5EAI was planning on driving as was Dennis WB5ISN and his wife Sandy. Glenn K5LDL was also planning on driving, but since he is professional about this, he was planning on leaving on Monday. And he did, he called me about 6:00 a.m. as he was driving through OKC. Now Glenn, I know that you were leaving early, but isn't 4 days early enough without having to get up at five?

As usual, making a plane reservation for WB5YWO and WA5JXX was really a futile gesture. Both of them backed out. So the crowd was now down to 4 on the plane reservations. When JB said that he had some business to attend to that would keep him out of the plane schedule and he would meet us in Dayton, the crowd was now down to three. It looked like to me that the way to solve the airline "blues" was to consider rolling out the airplane and see what it would take to take the old "blue and white." I could put four people in the plane, but not all of us and we could carry virtually no baggage. With a crowd that large, there is no need to ask the question, "Where's the beef." With our combined weight, there is plenty of it. I called Stan and Joe and told them that by my calculations, worse case would cost a little under half of the commercial reservations. Thinking that this would be an additional \$175 to spend in the flea market, they readily agreed.

The weather was speculative. To be safe, everybody kept their commercial reservations. All that week, the weather was pretty good, I kept my eye on the weather channel and things were looking OK. I woke up on Thursday morning and heard thunder. Fortunately, it was a small cell and moved quickly out of the area. I finally got Stan and Joe down to Norman and we were off and running about 9:00 or so. I had gotten a call from my mother before I left who gave me her own analysis of the weather and suggested that I not take the small plane. I told her

that it really looked OK. That happened to be the weekend that Norman had high winds and numerous storms and my hometown had a tornado go by just a couple of miles away. I called my mother back and told her that apparently I was safer in Dayton in my plane than I was back in Norman. The wind bent the mount for the brand new DB-224 that I bought for the Kahuna. Now, that is strong.

The favored route was to Tulsa, Springfield, and a stop at Farmington, Mizzou. That is just a little more than half way. From there, we went to Centralia, Terre Haute, Indianapolis and straight into Dayton. The first half of the trip was really uneventful except for the heavy clouds that began to build up outside of Springfield. The tail wind was terrific and we were making great time. After Springfield, I had to dip down under the clouds and we lost the tail wind, but still managed to make Farmington in about 2 1/2 hours. There was a short delay at Farmington when I drained some water from the fuel (Come to think of it, I drained water from the tank both times I stopped there). I started to drain some more fuel to make sure that I got it all when drain jammed and would not stop. I stood there like the little Dutch boy with my finger over the stop while Stan scurried around and found a mechanic who helped us replace the plug. We were back in the air in about 30 minutes.

The weather outside of Farmington was just about the same, but the cloud cover went to solid and stayed that way until Indianapolis. Flight Service kept reporting Dayton as clear, but I decided to duck under the deck and stay at about 2500 feet. The total trip took about 6 hours. JB was already there and came out to the airport to pick us up. He had been partying with Keith and Chuck for several days, it seemed.

It was great to see Chuck and Keith and the others. We were suppose to meet them at the Casa Lupita after checking into the hotel. The reservations this year were made by Ed K3KA and were at a local Ramada. I have stayed at this particular hotel before and it wasn't bad, but after our experience last year in the downtown Ramada, I wasn't sure I was going to trust them. Sure enough, things were true to form. There was a slight mixup in the reservations, that might have been partially my fault, but I didn't screw up the air conditioner (which was not on the entire time we were there and they refused to turn it on). We had to sleep with the window open and we were along I-75. The only redeeming grace about the place was that we could get the window open and loop a halfwave antenna out for communications. More on this later. In any case, I thought that something was wrong when I walked into the hotel room, turned around and saw the Ohio Arson Statutes printed on the door as a little warning. By the time we left, I might have considered burning down the place myself.

Our group at the Mexican restaurant was somewhere over 10 -13 or so. And I ate a bunch. I was too tired to join everybody out at Chuck's house or some other bar they were hopping too, so I went back to the room.

We planned on getting up the next morning and sauntering over to the Hamvention site to be there when the rope dropped. This year, the flea market was to open on Friday at noon. I got there and saw that Glenn K5LDL had made it and several others. Right before noon, the crowd surged toward the gate and everyone charged into the flea market. What a rush!!

The Program

SCHEDULE OF PROGRAMS

FRIDAY - JULY 20, 1984

4:00	Cherokee, Congress and Senate Rooms	Dealers allowed to set up displays and equipment.
4:00	Gold Crown Room	Arrangement of Flea Market Tables (No dealers).
5:00	Gallery	Hospitality Room Opens.
6:00	Lobby	Registration Tables Open.
7:00	Blue Room	QLF Contest - K5NK
8:00	Blue Room	Krazy Antenna Contest - K5NK
8:00		Hospitality Room Closes.

SATURDAY

SATURDAY - JULY 21, 1984

7:00	Gold Crown Room	Open Flea Market Tables for set-up of merchandise.
8:00	Gallery	Hospitality Room Opens.
9:00	Cherokee, Congress and Senate Rooms	Commercial Exhibits open.
9:00	Gold Crown Room	Flea Market opens.
9:00	Dealer Area	Home Brew Contest - WA5JGU.
9:30	Conference Room	Sandra Morris (FCC) Volunteer Examining.
9:30	Forum	Bingo
10:00	Rotunda Room	Safety in the Home.
10:30	Seminole Room	Air Force Mars.
10:45	Conference Room	A.R.R.L. Forum
1:00	Blue Room	Ray Wangler, W5EDZ
1:00	Conference Room	Packet Radio - K5JB
1:00	Rotunda Room	Joe Buswell
1:00	Seminole Room	Trends in Modern Transceivers - Al Markworth, W5PXH.
1:30	Forum	Severe Weather Program, Rick Tasetano, KTOK Radio.
2:00	Conference Room	Baptist Radio Operators.
2:30	Rotunda Room	Ladies Style Show
3:00	Blue Room	EPA - Power Restrictions for Amateur Radio in the Future.
3:00	Conference Room	Ray Wangler, W5EDZ.
3:00	Seminole Room	Computers for the Family.
3:30	Rotunda Room	Computers for Amateur Radio.
4:30	Rotunda Room	N5GOH.
5:00		Satellite Communications.
5:00		K5PER - Jim Jones.
5:30		Oklahoma Repeater Society.
7:00	Forum	Magic With Candy.
9:00	Blue Room	Self-Defense For the Family.
		Commercial Exhibits Close.
		Flea Market Closes.
		Hospitality Room Closes.
		Banquet.
		Night Owl Net Meeting.

SUNDAY

SUNDAY - JULY 22, 1984

8:00	Forum	QCWA Breakfast.
8:00	Gallery	Hospitality Room Opens.
9:00	Cherokee, Congress and Senate Rooms.	Commercial Exhibits Open.
9:00	Conference Room	Bingo
9:00	Rotunda Room	Church Services
9:30	Blue Room	Tom Owens, KB5SS
10:00	Seminole Room	Jarvis Island DXpedition.
10:30	Blue Room	George Adkins, AD1S.
11:00	Rotunda Room	A.R.E.S./R.A.C.E.S.
12:00		Don't Callen Antenna Tuners, Callem Line Flatteners.
12:00	Forum	Al Markworth, W5PXH.
3:00		Cake Decorating.
		Hospitality Room Closes.
		AWARD DRAWING.
		Commercial Dealers Close.

Perry, N5GOH and some of his associates are planning an interesting program on the use of computers in Amateur Radio, dealing with RTTY and other H.F. uses.

We feel we have some very interesting programs this year which should be of interest to all. To kick off Ham Holiday, we will once again have the QLF contest for those cw buffs who have been practicing with their left foot ever since Ham Holiday 1983. This will be held on Friday evening in the Blue Room, beginning at 7:00 p.m. One restriction this year from in the past, and that is that past winners are ineligible to participate this year. We welcome you to show how it is done but we feel it is good to pass the grand prize around.

One new feature this year to also be held on Friday evening is a Krazy Antenna Contest. This will be held immediately following the QLF contest. This is open to everyone who desires to enter. The object is to come up with the craziest two-meter antenna you can dream of that will actually work. The judges will be looking for originality in design and the lowest swr reading. Transmissions will be made on 146.550 simplex.

The Saturday programs should be of interest to everyone and we have allowed you 30 minutes to make the best buy in the flea market area before the first programs get underway. We are pleased to announce that Sandra Morris with the FCC office in Dallas, will once again be with us. She will bring us up to date concerning the Volunteer Examination program. Immediately following Sandra will be Ray Wanger, W5EDZ, Director of the South Gulf Division for the A.R.R.L. Forum.

Packet Radio appears to be the hot item for Amateurs in the future, and Joe Buswell, K5JB will be presenting an interesting program on this subject.

Everyone is always interested in the latest of equipment on the market, so before you buy one of those new transceivers on the market, you would do well to attend Al Markworth's program on Trends on Modern Transceivers which will be presented Saturday afternoon. Al, W5PXH, is from Richardson, Texas. He will also be presenting a most interesting program on Sunday morning, entitled, Don't Callen Antenna Tuners, Callem Line Flatteners.

Rick Tasetano, chief meteorologist for KTOK radio in Oklahoma City will be presenting a program on severe weather. Rick is in great demand by schools, civic organizations, and others for this program. It is very informative and gives everyone a better knowledge of what to look for during severe weather season.

Ray Wangler, W5EDZ, will also be giving another informative program Saturday afternoon concerning EPA - Power Restrictions for Amateur Radio in the Future.

Jim Jones, K5PER is very active in Satellite Communications and has a most informative program planned for us on this subject. Jim should have a good display.

The QCWA breakfast will once again be held on Sunday, in the Forum. The guest speaker this year will be Mr. Leland W. Smith, W5KL, the Vice-President of QCWA, from Jasper, Arkansas. You do not have to be a member of QCWA to attend this breakfast.

An added feature this year will be church services, to be held on Sunday morning by Tom Owens, KB5SS, in the Rotunda Room, beginning at 9:00 a.m. This is a non-denominational service and everyone is welcome.

George Adkins, AD1S, one of the most active DX-ers, will be showing slides of his last trip to Jarvis Island on Sunday morning. George has shown these slides to various clubs not only in the Oklahoma City area, but in several other states at ham conventions.

Another new feature this year is a Home Brew Contest. This will be held on Saturday morning in the Commercial Exhibit area. Charlie Greene, WA5JGU will be in charge and will have judges for two different categories. Be sure to bring your favorite project. The two categories will be home brew from scratch, and those built from store bought kits. Nice prizes will be awarded to the winners of each category.

Various meetings will be held throughout the convention. Air Force Mars and the Oklahoma Repeater Society will be meeting on Saturday. The Baptist Radio Operators will be meeting on Saturday also. The A.R.E.S. and R.A.C.E.S. groups will be meeting on Sunday morning. The annual C.O.R.A. meeting will also be held on Sunday morning for those not acquainted with the full meaning and operation of C.O.R.A.

GOOD FOOD - GOOD COMPANY - GOOD TIME
HAM HOLIDAY '84 BANQUET

We would like to extend an invitation to all attending HH '84 to join us Saturday night at 7:00 pm for dinner.

We know there will be "GOOD FOOD" with an extensive menu which includes: Ham, B-B-Q Brisket, Chicken Cacciatore, Tossed Garden Salad, Assorted Condiments, Relish Tray, Melon Basket with Fruit Salad, Marinated Mushrooms, Waldorf Salad, Shrimp & Rice Salad, Potato Salad, Broccoli w/cheese sauce, Glazed Carrots, Buttered New Potatoes, Assorted Desserts, Tea or Coffee

Along with our guest speakers, Ray Wrangler (ARRL) and Sandra Morris (FCC), and with your presence at the Banquet that will make for "GOOD COMPANY".

With entertainment from our MC, singing from the "Good News Quartet", super door awards and much more a "GOOD TIME" should be had by all.

Won't you join your fellow amateurs for a interesting and fun eveing.

Price for the banquet is \$ 14.00 per person, be sure to fill in the necessary information on the registration form and send along with your check.

HAPPY EATING!
Kathy Whited, WB5NDO

P.S. PRE-REGISTRATION REQUIRED IF YOU PLAN ON ATTENDING THE BANQUET.

Pre-Registration Award to be drawn at the banquet.

HOSPITALITY ROOM OPENS AT HAM HOLIDAY-84

To greet your friends at Ham Holiday this year, CORA Directors and Mori will provide a Hospitality room with coffee and cookies, for a place to meet your Amateur Radio friends and their wives in comfort. This room will be located just inside the front door (to the left). Hours will be as follows: Friday 4:30 to 8:00, Saturday; 8:00 to 5:30; and Sunday 8:00 AM to 12:00 Noon. Eyeball QSO's and gabfests will be the style, in the comfort of this room.

Bobbi and Fred Taylor N5GTP, with Bobbi in the lead are contacting the clubs in CORA and others to make sure the donated cookies and other sweets will be enough for the three days. We are urging that XYL's and YL's come loaded with thier favorite cookie recipe, or other sweets for the snacks in the Hospitality Room. Since the room is open to all this year we will need dozens and dozens. Call Bobbi at 677-3910 and let he know what you can donate and how many, please. We wish to make the room a success!

HAM HOLIDAY SUNDAY WORSHIP

A time of worship for all amateur radio operators is being planned as a part of the Sunday morning Ham Holiday activities. The meeting, which will be held in the Rotunda of the Lincoln Plaza will begin at 9:00 am and will be over at 10:00 am, and will be hosted by the Oklahoma Baptist Phone Emergency Net.

Although the services will be led by members of the net, it is planned as a worship opportunity for all amateurs and their families who will be participating in Sunday morning Ham Holiday events.

The devotion for the morning will be presented by KB5SS, Dr. Tom Owens. Dr. Owens has held an amateur license since 1976 and presently is pastor of the First Baptist Church of Fairland OK.

BINGO BINGO BINGO BINGO BINGO BINGO

That exciting pastime that is so profitable and fun is back again! We all look forward to th HAM HOLIDAY BINGO every year with MORI coming up with those wonderful prizes, \$\$\$\$\$\$ for the winners... The facility on SATURDAY will be great! IN THE THEATRE FORUM, and SUNDAY we will be in THE CONFERENCE ROOM. Join us this HAM HOLIDAY for BINGO...9:30 on Saturday and 9:00 on Sunday!

HAM HOLIDAY STYLE SHOW

PRESENTED BY: ROTHSCHILDS OF CROSSROADS MALL
STYLE CONSULTANT: PAT SHOCKEY (NARRATOR)

PRESENTS

THE LATEST SUMMER AND FALL FASHIONS MODELED BY THE BEAUTIFUL LADIES OF CENTRAL OKLAHOMA RADIO AMATEURS, YL'S AND XYL'S ALL! THESE GRACEFUL LADIES OR HI-TEENS WILL HIGHLIGHT THE WOMENS AND FAMILY CENTERED PART OF HAM HOLIDAY-84. DON'T FAIL TO BE THERE TO SEE YOUR FAVORITE YL OR XYL IN THE SHOW! REFRESHMENTS WILL BE ON HAND FOR THOSE REGISTERED AND ATTENDING.

SPONSORING CLUB: MID OKLAHOMA REPEATOR INC
CLUB COORDINATOR: BOBBI TAYLOR (XYL OF N5GTP)
CO-CORDINATORS FROM OCAPA, OCACARC, & MORI

We hope that ladies or HI-Teens interested in participating that wear 5-7? (with or without modelling experience, but preferably with) size will contact Bobbi at 405-677-3910 or 521-1537, to schedule the free appointment at Rothchilds to style thier hair, and fit the gowns or outfit on Wednesday prior to the show. Let us know as soon as possible for publication and program.

SAFETY IN THE HOME

Ralph Hanley of the Okla. City Fire Dept. Public Relations Department will present a "In Depth" short program for all the family, in Home Safety. The rapidly changing technology of electrical appliances, heating devices, fire alarms and new chemicals that eanter our homes challenge us will new dangers if improperly used. Attend this program to hear and see methods to make your home safe for you and your children!

SATURDAY in the ROTUNDA ROOM AT 10:00AM

EVERY THING YOU WANTED TO KNOW ABOUT COMPUTERS (BUT WERE AFRAID TO ASK)

This program is presented by Monte Maker to acquaint the family with the magical new world of computers in language everyone can understand. The helpful guidelines provided by the lecturer will expose some myths, and fascinate one and all with the potential uses of computers in the home and away. You too could be a computer buff!

ROTUNDA ROOM 3:30 SATURDAY

MAGIC WITH CANDY

We will be introduced to the wonderful world of candy making by Billie Tutor! She will display new techniques that will provide simple and easy candy for holidays and those special occasions for your family.

SATURDAY at the CONFERENCE ROOM at 4:30PM

COMMON SENSE

COMMON SENSE SELF DEFENSE

Officers Rick Jarman, Charles Owens and thier OCPD Community Relations Team members will demonstrate basic devices to show us how to defend ourselves and our children from potential harm. We read everyday about attacks on citizens, and abductions committed by lawless persons or groups. Dont miss this great program for the family and you!

SATURDAY in the ROTUNDA ROOM AT 4:30 PM

CAKE DECORATING

Marie Chase will show us all about this new art for the homemaker. Cake decorating as a hobby is a useful and functional art form that our instructor will charm us with. The numerous techniques and sources for the tools of the craft will be covered. Don't miss this one, ladies!

SUNDAY in the CONFERENCE ROOM at 11:00 AM

CONTINUED →



Quarter Century Wireless Association Inc
The CENTRAL OKLAHOMA Chapter

The QCWA Breakfast at HAM HOLIDAY '84 will build a theme around Major Edwin Armstrong (1890-1954). This idea, that evolved from a 1983 Commemorative Stamp will feature his early Radio Inventions and Lifelong Accomplishments. Our feature speaker will be Leland W. Smith (W5KL); Jasper, Arkansas; National/International QCWA Vice President. His Topic-to-cover QCWA "Where we are & where we are going. The time is 08:00 on Sunday July 22nd with Breakfast served at 08:30. YL's/XYL's, we consider very special, are encouraged to attend. Everyone welcome whether licensed or not. A very substantial breakfast is on tap.

CORA and HAM HOLIDAY wants you to know what QCWA is all about?. Quarter Century Wireless Association was founded in 1947 with just a handful of Amateurs who were licensed for twenty-five (25) years or more & who at that time held a valid Amateur Radio License. The same requirement is true today, except now there are over 10,000 members (Worldwide) and at last count 149 Chapters-also worldwide. Some particulars are briefly described:

(a) The Chapters are numbered in order of Charter date. In most instances each local Chapter arranges breakfasts, luncheons, dinner meetings & other activities, hopefully on some regular basis, in recognition of local membership desires. Some meetings, such as this one, are held in connection with "Hamfests", Conventions" & the like. Many Chapters conduct "On The Air Meetings" (HF & VHF Frequencies) at a regular schedule. These sessions are basically "Rag-Chews"; all licensed Amateurs are most welcome to join in-not just QCWA members. However, part of each session is a "Roll-Call" using a repeat Check-in list.

(b) An annual QSO Party is held each year during which many members join to determine who will win the coveted Plaque, awarded to the high scorer for contacts. A second Party is held in the fall, during which QCWA members invite all Amateurs to participate so they may become familiar with QCWA & what it stands for. Most Amateurs seem to enjoy Certificates. QCWA-ers are no exception. Certificates for 50, 55, 60 & so-on years are available (Free) & provide more Memorabilia. Recently, QCWA has established a scholarship fund as a memorial to its SILENT KEY Members.

(c) The QCWA NEWS is published quarterly. It contains Headquarters news/events & Chapter Reports as space permits. A "HOT-LINE" report (Monthly) is sent to each Chapter Secretary & to members for a fee. Contains the latest news from Headquarters in advance of the NEWS. A comprehensive, extremely accurate, Directory is published every third year. Updating is handled in the NEWS.

(d) Many CORA readers are well acquainted with Ted Heithecker (W5EJ). Ted is General Manager of QCWA. A postcard or letter to QCWA Inc.; 1409 Cooper Drive; Irving, Tx. 75061 will provide assistance or additional information you may desire. The appropriate local QCWA Chapter also extends a special invitation to attend periodic meetings-including "On The Air Meetings" where appropriate

Within a three state area; Arkansas, Oklahoma and Texas are many active Chapters and very often with overlapping membership. Some of these Chapters are: Razorback, Dallas, Ft. Worth, Tyler, Wichita Falls, Houston, San Antonio, Etc. Oklahoma has three (3) very active Chapters, briefly described as follows:

(a) TULSA CHAPTER No. 15-One of the real early ones-was chartered Oct. 15, 1962. The current Chairman is John F. Sober (Frank), K5PHR. Secretary is Elbert (Bert) Gunn, W5FU;

5333 S. Newport; Tulsa, Oklahoma, 74105. Bert will be most helpful to provide membership or other information desired. To indicate how steady QCWA-ers can be-Bert has been the "Whip" for two (2) "Meetings on the Air" for the past twenty (20) years. The first is on 3830 KHz every Sunday at 06:45 to about 07:30. The second, also on Sunday, is on 7157 KHz at 09:30. Bert will gladly acknowledge your Call-In, at appropriate time, on a regular or even sporadic basis.

(b) WICHITA MOUNTAIN CHAPTER No. 56 in and around the environs of Lawton, Oklahoma, was Chartered Oct. 15, 1971. Current officers are: President, Dick Hawkins (W5FW); Vice President, Cecil Cash (W5PML); Secretary Treasurer, Emma Hawkins (W5PWN). Their present membership is on the Roster at a count of (18) -All tried & True Amateurs & QCWA boosters. W5FW is currently a member in four Chapters-down from 5 Chapters. They hold periodic Dinner meetings but do not, at this time, have an "On The Air Meeting". Contact Emma; 1408 Bell Ave; Lawton, Ok. 73501 for membership or additional information.

(c) CENTRAL OKLAHOMA CHAPTER No. 63 was Chartered March 19, 1973 with an initial membership of fifty (50)-that being the number (minimum) for a free QCWA banner. The present membership is about eighty-a number from out of state as boosters & well-wishers. Current officers are: Chairman, Fred Boardman (W5NL); Vice Chairman, Ray Long (W5TY); Secretary-Treasurer, Howard Baker (W5AS); Four Directors: George Bunce (W5DKC); Don Rooker (N05M); Bob Runyon (AA00); Sam Stephens (W5HZD). This Chapter usually holds Sunday (Noontime) Quarterly meetings where wives are often as numerous as the OM's. Guests & well wishers are most welcome & need not be licensed Amateurs. A weekly "On The Air Meeting" is held Sunday at 08:30 Hours (Local) on 3850 KHz. Soon to move to 3855 KHz in anticipation that the General portion will soon move to 3850 KHz. For Membership or other information contact Howard Baker (W5AS); 5928 N. Redmond; Oklahoma City, Ok. 73122.

MANY EYEBALL QSO's AT HAM HOLIDAY '84

W5HXL, Bob Ashby Co-Authored Fred Boardman (W5NL)

**LAST CHANCE
To Pre-register**

EXTRA CLASS
AMATEUR RADIO
W5KE

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

4/1

SONY SUPRASCOPES
SPRAGUE
Amperex 3M
HAMAMATSU
SUPRASCOPES
ATLAS SOUND SONY
KITE LITE AKTRON
TUBES 50% OFF
Free Testing
Most Electronic
Engineers and
Technicians buy
from us
Kelly's
DISCOUNT
ELECTRONICS
4321 N. MacArthur
PH: 787-0822
Oklahoma City



ACARC Minutes
May 1984

Jack Iman, WB5SVN, President called the May 3rd meeting to order at 7:48 p.m. with 22 members and guests present.

Bob Pace, W5CJG, reported the treasury and repeater are in fine shape.

Old business - None

Jack began a discussion on home brew wire antennas for 160 meters. A lively discussion ensued on the promise of 30 meters and construction of antennas from electric fence wire!

New business - Steve Bense, WA4OLE, volunteered to head a committee to launch WSPAA into Field Day 1984. A motion was made and carried to support Steve's effort (see Steve's note elsewhere in this C & E).

Jack turned the floor over at 8:28 p.m. to Jim Buswell, N5BEQ, who brought the excellent ARRL video on the space shuttle's last mission in which W5LFL carried a 2 meter talkie onboard. The video was entitled "Amateur Radio's Newest Frontier".

The next ACARC meeting is scheduled for Thursday June 7, 1984 at 7:30 p.m.... plan to attend!!!

Gloria Seignious
Secretary ACARC

Field Day '84

Once again, it is that time of year when the ARRL annual Field Day competition occurs. This year it will be held on the 23rd and 24th of June (231800Z-242100Z). The Aeronautical Center Amateur Radio Club will be participating in this event. At the May 3rd meeting, Steve Bense (WA4OLE) and Ted Anderson (KA5QQQ) were selected to lead the activities. In fact, they had already done most of the work involved in coordinating the event. They are looking for people to help out, now. If you are not in a club, or if your club is not participating in Field Day, please come by our "site" to lend something even moral support will be appreciated. We are not in it to try to outscore other clubs (although a good standing will feel nice), but more for the fun of getting out of the house at least one day out of the year. From the looks of it, we will be setting up at Stanley Draper Lake, but this could change. Keep your ear on the 25/85 machine for updates. If you would like to volunteer, let Steve or Ted know either on the air or by phone.....they're both in the book and roster. Hope to see you there!

Steve Bense, WA4OLE

1 (405) 376-3569

BOB W5CJG



PACETRONICS RESEARCH CO.
COMPUTER SALES AND SERVICE
*TRS-80 COLOR COMPUTERS

*TRS-80 IS A TRADE MARK
OF TANDY CORP.

1726 W. ROSEDALE DR.
MUSTANG, OK 73064

EARS

EDMOND AMATEUR RADIO SOCIETY
147.135/147.735

Fellow Amateur Radio Operators,

The Edmond Amateur Radio Society is a Metropolitan association of radio operators in the Edmond, Guthrie, and Oklahoma City metropolitan area. The club sponsors a two meter repeater on 147.735 MHz. for the use of the club members and licensed Amateurs in the area. The repeater is located on the KCSC tower at Central State University in Edmond, Ok. The repeater is computer controlled and has autoPatch capability. The open autoPatch is accessed by the "P" (Pound) sign on the touch tone Pad, the closed Patch (members only) can be PreProgrammed for two Phone numbers of the member's choice and can be accessed with only five tones from the tone Pad.

The club is very active with Civil Defense mainly through the Edmond Emergency Operations Center (EOC) and has been very much involved with the Special Olympics in Edmond. The club is also active in tornado spotting when the need arises.

The club has regular meetings every odd month on the third Sunday at 2:00 PM and on even months we have a dinner meeting on the third Friday at 7:00 PM at various places in the metropolitan area. Annual dues for club membership are \$25.00.

Please feel welcome to use our repeater and come to our meetings and visit with the club members.

GREAT PLAINS A.R.C.

W5NKH Repeater 146.13/73

Our meeting was called to order on May 1st at the Woodward Maintenance Building. The secretary's minutes were read and approved. The Treasurer's report was made and approved.

The Gage Marathon on May 26th was discussed. Gerald Bowman made the motion that we provide communications for the races. Lewis Patterson seconded. It passed. It begins at 7 A.M.

The Eye-Ball QSO was discussed. It is to be May 20th. at Mooreland, Ok.

A special thanks was given to those amateurs that helped with the Woodward Special Olympics on April 14th. The following amateurs provided communications: Lois and Rod Ford, Joy and Gordon Richmond, Gerald Bowman, Jim Phares and Carla Tice, (Some of her students were taking part). It was a very windy day, so the communications made a great deal of difference to those taking part!

One guest: W5NZS was introduced, visiting from Oklahoma City.

Field Day was discussed on June 23-24th. The secretary was asked to order the packet for field day.

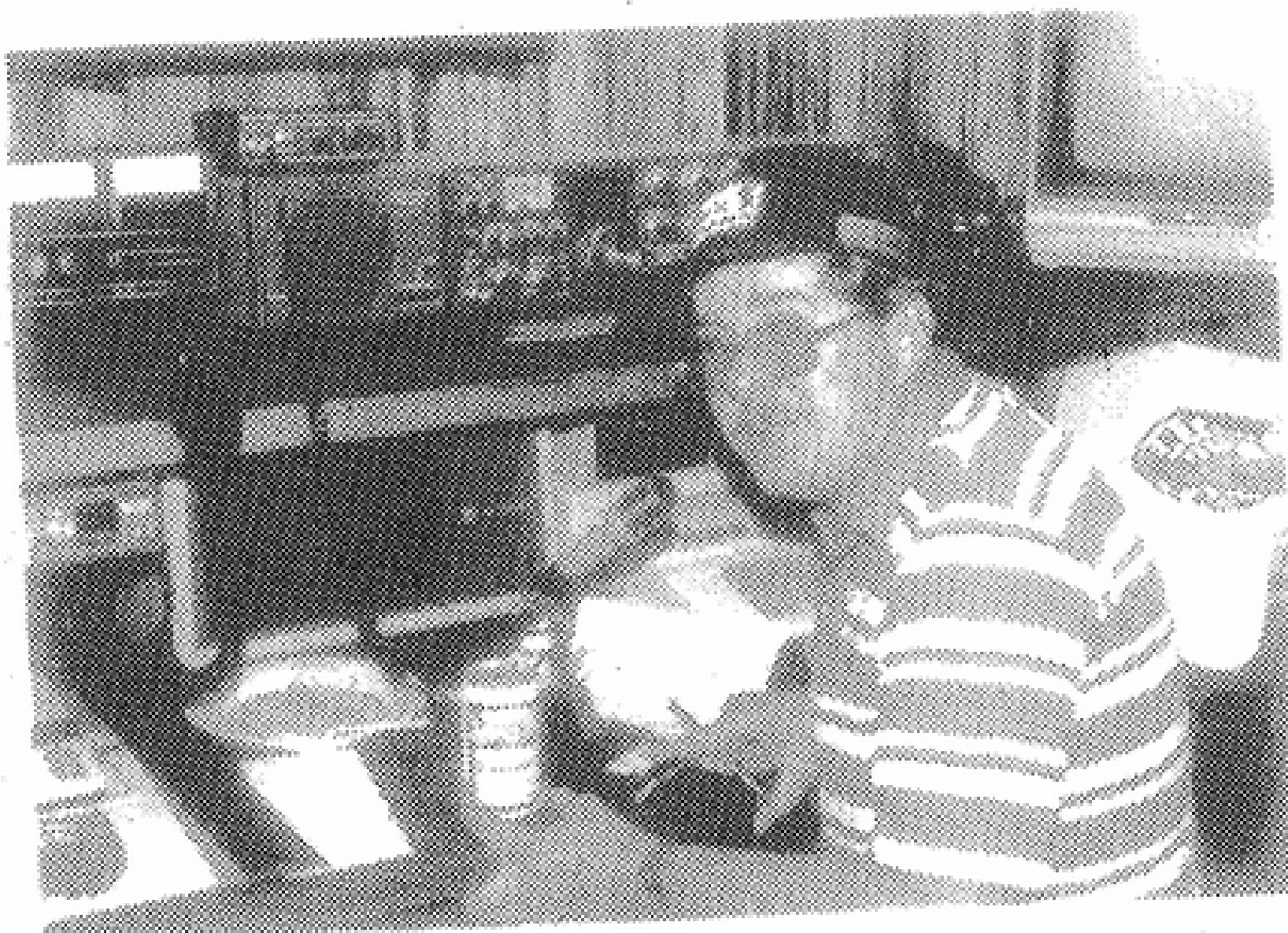
Bill Wyatt reported on radar, weather, etc. using Vidio recordings made by WB5EDD of some storm clouds.

Adjourned 9:24P.M.
K5YZK



SMILING FACES at Dayton, especially after the big Shindig at Chuck's N8ADN on Friday Night. Whatatreat! There is a good chance that there were some people who left the party that night with slurred speech, staggered gait, and odor of alcohol about their breath and person. Fortunately, they didn't drive. Greg, a newcomer to the group had his van for special transportation purposes. From Left to right is Joe WA5FLT, Rich , Phil WØEDD, the ever lovely JB K5JB and Stan WB5UIY.

IT'S STAN ON THE BAND from the station of N8ADN. Stan is studying propagation effects of beverage aluminium radiators (preferably Budweiser). Chuck's station features a 100 milliwatt transmitter running to a straight pin in the famed QRZedd tradition (Come to think of it, not sure if I saw Zedd there, Hey KU5B, you got something to say about that? Where was Zedd?) There was a crowd outside the Hara arena chanting "We want Zedd." I also managed to buy a "Zedd for President" bumper sticker in the flea market.



Our ever lovely and gracious host. And Diana aint bad either. For the friday night festivities, at the home of N8ADN, Chuck managed to bring along his favorite (and she's a favorite of a lot of us) friend. I really look forward to the friday evening gettogether with Chuck N8ADN, Keith WA8ZWJ and his wife Marian, Bob NØBIX, Hoss WA5ZAI and the group. We always have a good time and Chuck is nice enough to let us use his station for the conversation QSO back home. This year, special commemerorative QSL cards may be made available. If you worked N5MS/8 from his DXpedition in Dayton, Ohio during the hamfest, just send and SASE and a \$10,000.00 money order made payable to cash to receive your card. The money will be used to defray the mailing costs. The address is c/o Honor Roll Ranch, Norman, Oklahoma 73069. I use the same QSL manager as Q. R. Zedd.

Dayton reservations have already been made for next year. Might even plan on the airplane again. The best part of taking the airplane is that it will be paid for.

Micheal Salem N5MS





Club
NEWS

W5LOW
The Blue Eagle Ham Radio Station

May Meeting Minutes

Meeting was called to order by President Jerry, KD5IS, at 10:08 A.M. with eleven members and guests present.

Minutes were published as published in C&E and Treasurer Ellard, W5KE, made his report and Bob, W5HXL gave the CORA report.

Tim, KA6NNT, expressed desire that the Red Cross have a display at Ham Holiday. The CORA representatives will take it up with the Facilities Committee.

Jerry related results of the antenna party with special thanks to C.Y., N5EDT, who came down during the previous week to assemble the eleven element 2-M beam, build a matching harness and combine it with the antenna donated by Don, ????? to have things ready for the erection crew. Those present for the party were: KD5IS, W5HXL, K5VRL, N5PS and N5EDT. The week following the party, K5PIA and K5VRL came down to do some corrective maintenance. Thanks to the helpers. More antenna work is planned for the next few weeks.

Tim, KA5NNT, advised that the Red Cross has a couple of General Electric radio cabinets it would like to get rid of. One is an outdoor and one is an indoor model. They are both empty except for the meter panel on the indoor cabinet. See him to make a deal. (The Red Cross is always happy to accept cash donations, no matter how small.)

Meeting adjourned at 10:53 A.M.

Joe, K5JB, Sec'y

Welcome From VHF Club!

Since this issue of Collector and Emitter is receiving wider circulation than normal, the clubs were asked to insert a little blurb about themselves.

The Oklahoma Central VHF Amateur Radio Club, usually known as the VHF club, was formed 27 years ago at the same time as the Technician license was gathering momentum. Originally known as the Oklahoma Central 6 Meter Net, the club was formed when there were only two other clubs in the Oklahoma City area. One was the Aeronautical Center Amateur Radio Club, still flourishing, and the Oklahoma City Amateur Radio Club, which is extinct.

At its peak, there were over 100 members of the Six Meter Net. Most of them lived within driving distance of the club house. In total, there were as many as 288 names in the six meter net directory which listed operators who were within direct wave range of Oklahoma City.

Some of the highlights of the club's past include frequent caravans and other social activities, and the bang-up sunspot peaks like the one in 1958 that really livened up six meters. The Club has always performed public service as one of its prime chartered purposes.

At one time the Oklahoma City Emergency Operating Center was adopted by the VHF Club which arranged for equipping and staffing the communication center with multi-band amateur radio equipment and operators. Some of the County Civil Defense equipment was installed by the Club. Prior to the arrival of 2-M FM, the U.S. Weather Service Office at Will Rogers field was equipped and staffed by the Club during periods of bad weather. The frequencies of 50.525 and 50.5 MHz (the change occurred with incentive licensing) were the places to be to find out what was going on.

Most recent involvement, of course, is support of the Red Cross by providing disaster communications. The initial installation of radio equipment, including tower and antennas, was performed by members who donated the funds and sought the good deals, including loan of surplus equipment by members of the Aeronautical Center Club. Some of the current equipment was purchased recently by the Red Cross, which is a signal of confidence in the Club and Amateur radio commitment to them. The Club call, W5LOW, is widely recognized as the "Red Cross Station" in Oklahoma City.

My own initiation in Net operation began with the old Nite Owl Net which met every night on 50.25 (or 50.50) MHz. Net control was selected by toss of the coin, or by whomever wanted to do it. The net control station would spend the evening twisting the beam around to catch the Sixers (Heathkit, that is), 50 miles out. I didn't have the luxury of a beam for quite a while; a turnstile served my purpose. W5HXL liked 'em and talked me in to building one. He claimed they worked equally poor in all directions! In fact, he had two of the things stacked.

Single sideband broke up that old gang of mine. The new fangled rigs just weren't compatible with the unstable AM (6A3) rigs that were common. Separate net frequencies were established for the new A3J rigs but as the numbers became divided, they also dwindled, much of the gang drifting off into HF land. Then came the 2-meter repeater. First there was a division of opinion about the legality of the things. The conservatives felt that since they were not mentioned in the regulations, they must not be legal. The liberals felt that since they were not prohibited, they must be legal.

The VHF Club never did seriously consider putting a repeater on the air, except maybe a portable one that could be activated at a remote site in case of an emergency. Repeaters sprouted like dandelions and there wasn't much pressure to put another one on the air.

One thing characterizes the VHF Club now, and as far as I know, always has, and that is a hassle-free association of folks having common interest in Amateur Radio; ready of course, to pitch in if emergency happens. The Saturday morning coffee sessions at the Red Cross started when Bob's Amateur Electronics closed and left the Amateurs no place to congregate on Saturday mornings to swap yarns. The policy was (and still is) to make everyone welcome, club member or not.

The club currently meets at the Red Cross Headquarters building at 10:00 A.M. on the third Saturday of each month, except when replaced by social events such as the annual watermelon party in August. It is ARRL affiliated and guests are welcome at the meetings.

Well, that is about it for the thumb nail sketch of the club. If I don't have all the facts straight you "old timers" can fire me...Have a good Ham Holiday! Joe, K5JB.

Want Ads

For Sale: Swan 500CX, 80 to 10 meter SSB & C transceiver, 550 watts PEP input. Top notch shape, owned by top notch radio craftsman, \$200.00, or make offer. Ron, WA5EAI, 681-089

DAYTON - PACKET UPDATE

During the visit to Dayton, I got an opportunity to attend the Packet Radio presentation and meet some of the movers and shakers. Two people whom I especially admire, Lyle Johnson WA7GXD, President of Tucson Amateur Packet Radio Corp. and Gil Boelke, W2EUP, of GLB Electronics took turns on the platform along with representatives from St Louis (SLAPR),

Dayton (Miami Valley FM Association), AMRAD, and the ARRL (Paul Rinaldo, W4RI). After the presentation I got to meet Gil and ask him if he minded my modifying the code in the PK-1. He said heck no and to call the company later to get specific answers to my questions. (...which I subsequently did, and to which they responded in writing with specific answers to my questions. This is without any knowledge of my reputation as an agitator/-instigator. I chose my questions carefully though because firmware ownership is a really touchy subject. I have a real warm feeling about the GLB folks. I think their aim is to please. The next morning I got to visit briefly with Lyle Johnson, WA7GXD, who is certainly one of the most energetic and creative persons I have encountered. I can understand how he has been such a sparkplug for the TAPR activity...)

These speakers took turns during the 2 hour, 15 minute conference and covered most aspects of Packet Radio including fundamentals of Packet formation, different TNC design concepts, networking, frequency selection, high frequency operation, satellites, and possible message traffic content.

There are currently six sources of TNC's or alternate methods of getting into Packet Radio; AEA's, Ashby and Son's (K2TKN & KA2OEG), GLB's, Bob Richardson's (W4UCH), TAPR's, and VADCG's. Someone in AMRAD is working on a TNC called a PAD (Packet Assembler - Disassembler) which is apparently slanted toward S-100 Bus Computer systems. AEA (Advanced Electronic Applications) announced its TNC at the Hamvention but had no representative on the program. AEA has a handsome design that looks like a development from the TAPR TNC, for a price of about \$500. I saw no evidence of the Ashby and Son TNC at the show but I could have missed it. Likewise, I saw no evidence of Bob Richardson's (W4UCH) Radio Shack model 1 and 3 program, though it was respectfully mentioned by Gil Boehm from GLB. It seems that since Bob and Gil are neighbors, they regularly communicate on program design questions but developed their programs independently.

Gil defended the GLB's Sparten design by stating that he Value Engineered the problem to strike an economical compromise in hardware v.s. software trade-offs and decide whether to add audio shaping and filtering to the PK-1. He was challenged by a later AMRAD speaker who felt that the five bucks the filter would have cost would be a cheap 1.5 dB improvement if one were working satellites. Later when Gil answered a question about whether the TP-1 would run 300 Baud for HF operation, he answered both points when he stated that its design goal just didn't include those applications.

There still is no absolute answer to the question, "Which is better, the GLB or the TAPR?" It depends for which use the TNC is intended. For the benefit of you who have not been following this discussion since last January, the following salient differences exist between the two.

The TAPR TNC costs approximately \$250.00 in kit form, has an optional cabinet for about \$70.00, runs Vancouver and AX.25 protocol and runs on 120 Vac.

The GLB costs approximately \$150.00 assembled, has an optional cabinet for about \$25.00, runs both protocols and runs on 12 Vdc.

The TAPR TNC uses hardware (Western Digital 1933 SDLC) to make and read packets, the GLB TNC does all in software (firmware). The hardware v.s. software is the major difference between the two and accounts for most of the cost difference. The only performance disadvantage I have found in the GLB approach is the packet reception disruption that occurs if a key is touched on the terminal during the reception process. The keyboard has interrupt

priority and the Processor must service the keyboard at the expense of its packet activities. Gil (and the accompanying TP-1 literature) advises that the computer, which is most often the case used to act as a terminal, be programmed to accept the input off-line from the TNC and send it, when ready, to the TNC at a high data rate, reducing the probability of a clash with packet operation. The TAPR TNC, with its packet handling hardware, is not placing any strain on the processor to make the data input and output process appear transparent to the operator.

Mark, WD5DYI, is now using his TP-1 regularly and this disadvantage is much more apparent as he creates his epistle sized packets. I had not noticed the problem so much because I usually send rather terse packets, or type in short, five character, bursts of about a thousand words per minute, spending the rest of the time looking for the next five keys! Packets easily slip in while I am looking. Mark is not a programmer but he will eventually want to do the line editing on his computer. I toyed with the line editor idea on the Model-100 one evening but got bogged down in the creeping elegance of interrupt handling from the RS-232 port. I now feel this is almost essential if a computer is being used as a terminal on the PK-1. If one is using an unintelligent terminal he just has to keep an ear cocked to the audio because if he doesn't he will miss the second packet as well as the first. ("dumb terminal" is a registered trademark. Did you know that?)

The TAPR documentation is awesome and contributes to a portion of the price difference. Since this is a kit, construction and adjustment instructions cause some of the book's volume but, in fact, the TNC is one of the most thoroughly documented pieces of hardware I have ever seen.

The GLB documentation has come a long way since I bought mine. It is now 35 typewritten pages bound looseleaf between a couple of nice, blue covers, with a command cross reference chart printed on the back for easy reference. Also, it now has a schematic! The manual is certainly adequate to support the PK-1 and its many features.

The TAPR hardware was designed for flexibility in order to enable as many conceivable modifications as possible so that it could be used for other applications. It has a socket for an external modem in case one is impatient with 1200 Baud, or just wants to try external hardware. Its audio filtering can be easily modified for HF use by installing suitable resistors on DIP headers. As already mentioned, with the GLB you roll your own if you want audio filtering or shaping. If you run out of Packet things to do with the TAPR TNC, you can get the EPROM programmer from TAPR, plug it into the socket provided on the TNC and do your own thing. These functions were simply not part of the requirements in the GLB design concept. (Like a friend of mine says, "If you wanted the Penguin to fly you should have included it in the specs!")

The TAPR TNC can be made to operate the radio side from 50 to 4800 Baud half or full duplex while the GLB PK-1 is restricted to 600 and 1200 Baud, half duplex. N5MS and I experimented with 600 Baud over a noisy path and it didn't seem to be any better than the 1200 Baud speed. To gain full benefit we should have modified the filters to reduce the band-pass.

There are now three GLB PK-1 and five TAPR TNC's on the air in the Oklahoma City area and a fourth TAPR TNC being built. We are coming closer to a group size that will add some substance to the Ford v.s. Chevrolet debate. The real test of the GLB's merits will be how the owners (Mark, WD5DYI, Joe, WA5FLT, and I) rate them in day-to-day use. So far, I have enjoyed my particular application, using it port-

able with the Model-100 computer as a terminal. Joe, WA5FLT, also has a TAPR TNC and can provide his opinions as soon as he gains experience. He intends to put his into remote operation. This is a special feature incorporated in the GLB that requires adding only a transceiver, watchdog timer and transmitter timeout timer. The TNC receives its commands via the packet channel.

Of course, there are other differences between the two designs; only the highlights are covered here. For example, if the TAPR TNC is left connected when someone loses the signal path, it stays connected and is unavailable without extraordinary steps. The GLB PK-1 disconnects itself after six minutes without activity.

The decision on which TNC to buy is a personal one. One has to first determine the function he wishes to perform. Lyle, WA7GXD, put it most succinctly when he commented that the TAPR TNC was intended for the bearded experimenter down in the basement (He sports a handsome bush). On the other hand, Gil claims the GLB PK-1 was not intended to be all things to all people.

The following addresses may be useful for more information:

Advanced Electronic Applications
P.O. Box C2160
Bldg O & P - 2006 - 196th SW
Lynnwood WA 98036-0918

Bill Ashby & Son
P.O. Box 332
Plukemin NJ 07978

AMRAD
1819 Anderson Rd
Falls Church VA 22043

GLB Electronics
1952 Clinton St
Buffalo NY 14206

Richcraft Engineering Ltd
#1 Wahmeda Industrial Park
Chitauqua NY 14722.

Tucson Amateur Packet Radio, Corp.
P.O. Box 22888
Tucson AZ 85734

VADCG
818 Rondeau St
Coquitlam, BC, Canada

Since there is much more to this than just TAPR v.s. GLB, it would be worthwhile to check into some of the sources listed above. AMRAD and TAPR are two groups that provide most of the news that I have seen and it might be worthwhile to join both to see what is going on with developments in packet protocol. The linking level, level 2 is all that is currently defined in AX.25, the protocol standard being written by amateur radio packeteros. Level 3, the next level describing the network configuration, is being currently discussed.

Those of you who are into computers and modems might want to check into Compuserve's HamNet. I discovered a packet article we published in the January 84 C&E listed in the messages. The system operator had typed it in from a version published in the TAPR newsletter, Packet Status Register. In order to make it easier for those guys who are retyping these things I provided them the draft versions in electronic form so they could pick and choose with their little computers and not have to retype the stuff. There are other authors and users sharing their experiences via Compuserve and it appears to be a good watering hole (not only for packet radio but other general interest amateur radio items. For example, the W5YI report is available on HamNet.)

There will be a packet radio demonstration at

Ham Holiday with equipment set up for anyone interested in sending some of the "brrraaapps" around town and seeing how it works. Be looking for ya. Joe, K5JB

OLD RTTY TAPE DEPARTMENT

Here is one straight out of the RTTY files. I didn't have room for a picture, so this will have to do...

ELECTRICAL ENGINEER'S COMMANDMENTS

1. Beware the lightning that lurketh in an undischarged capacitor lest it cause thee to bounce upon thy buttocks in a most ungentlemanly like manner.
2. Cause thou the switch that supplieth large quantities of juice to be opened and thusly tagged that thy days may be long in this earthly vale of tears.
3. Prove to thyself that all circuits that radiateth and upon which thou work are grounded and thusly tagged lest they lift thee to radio frequency potential and cause thee to make like a glow lamp.
4. Tarry thou not amongst those fools whomsoever shall engage in intentional shocks for they are surely non-believers and are not long for this world.
5. Take care thou useth the proper method when thou taketh the measure of a high voltage circuit so that thou dost not incinerate both thee and thy Simpson; for verily, thou hast no plant account number and can easily be replaced. The Simpson doth have one and as a consequence bringth much woe unto thee.
6. Be sure thou tampereth not with interlock safety devices for this incurreth the wrath of thy fellow workers and bringeth forth the mighty fury of thou supervisor upon thy head and shoulders.
7. Work thee not on energized equipment for if thou doest thy fellow workers will surely be buying beers for thy widow and consoling her in certain ways not generally accepted by thee.
8. Verily, verily, I say unto thee never service equipment alone for electrical cooking is often times a slothful process and thou might sizzle in thy own fat upon a hot circuit for hours on end before thy Maker sees fit to end thy misery and take thee into His fold.
9. Trifle not with radioactive tubes and substances lest thou commence to glow in the dark like a lightning bug and thy wife be frustrated and have no further use for thee except for thy wages.
10. Commith thou to memory all the words of the prophets which are here written down on this tablet and which giveth out with the straight dope and consoleth thee when thou has suffered a ream job by thy ever watchful supervisor.

Author unknown. Obtained from W5BLX.
Reworked and converted to ASCII by Joe, K5JB.)

The K7UAE "Coax" Antenna

Last month I published a plea for help in analyzing the HF dipole that uses coaxial cable as radiating elements and matching devices. One guy I can always count on came through; C.Y., N5EDT. He put me on an article published by Maxwell in August 67 ham radio that got me off dead center. Unfortunately, I ran out of time to put the article together but it will be available next month if a better idea doesn't come along. I had resorted to using a Visicalc program on a computer to try and resolve all the issues and was unsuccessful. Maxwell's article explains why and I will pass it along with the numbers. Joe, K5JB



Edmond Amateur Radio Club
P.O. Box 76262 / Okla. City, Ok. 73147

Editor: STAN VAN NORT WB5UIY

DAYTON HAMVENTION 1984

The 33rd annual Dayton Hamvention completed another successful run with over 21,000 amateurs in attendance. Thirteen were from our own club, making it one of the largest groups to go from EARC. In other words 28% of the club made the annual trek and came back with smiling faces and empty billfolds.

Our party of three; Mike Salem N5MS, Joe Garland WA5FLT, and of course me WB5UIY, all flew up in the private plane of Mike Salem. That was an interesting flight, not to mention the bad weather and scud running at 1000 feet. Mike will expound on the flight in his article, so I will skip that portion. Others attending were Bob Shaw & Wendell Cochran: via pick-up, Ron Cron: by a small pick-up, Joe Buswell: via commercial airline, Dennis Orcutt (& family): by Blazer, Mike Moore & Bill Moore: by RYDER truck and Jim Shidler: by proxy. Also present was former member-in-good standing, Howard Thompson, W4IDG. Bill Lingle also made his presence known in the flea market.

The flea market was not as big as former years due to advance registration of spaces. But, it was still impressive in merchandise and sales. The inside exhibitors was much larger because forums were held in a new hall. There were approximately 30 forums. EARC member Mike Salem was a guest speaker in the forum "Amateur Radio and the Law". The packet radio forum had the largest attendance, including about half of the OKC delegates. The W5YI REPORT devoted a full page to packet radio at the Dayton Hamvention.

Usually the big manufacturers announce new products, however, there was little fanfare on new rigs. Only item of importance was announced by A.C.C. (the ones that made our talking controller) which was the SHACKMASTER. It is a neat little device that connects at least 3 of your rigs at home (including an HF rig) together for complete control. Through your handie talkie you can talk to either rig or change frequencies. It also has a built in simplex patch and many more features. It retails around \$700.00.

Unusual exhibitors included the C.I.A. recruiting booth, QCD Marketing: selling the HAMFEST! game (it resembles monopoly), and the always unusual Mendelson Surplus.

Overall the show was again excellent and I am planning on next year. April 26, 27, & 28, 1985 are the dates and if you plan on staying anyplace close room reservations need to be sent in now. Our housing form for 1985 was mailed two weeks ago.

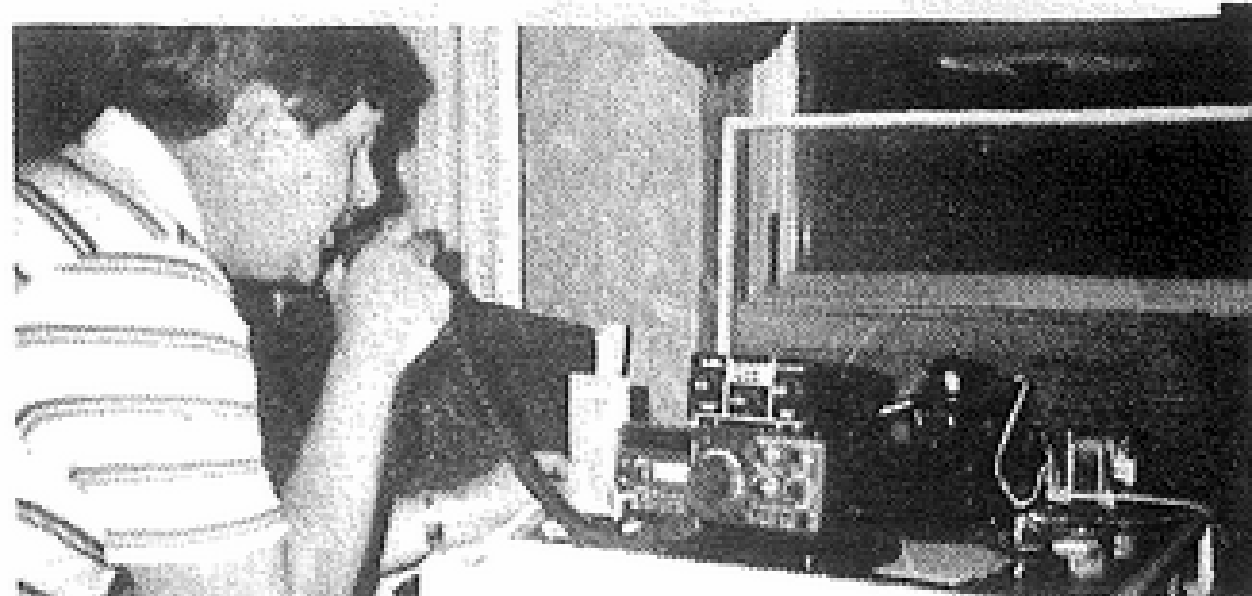
Check the photos below and captions. Thanks to Jim Shidler for film processing and to Rich KD6NC for climbing on the Ramada Inn roof to mount the longwire antenna. Also thanks to Joe Garland for acting as decoy to the local county law officer while Rich was on the roof nearby.



Only one straight person this year, Rich (KD6NC) in the middle. The others are Joe (WA5FLT) & Joe (K5JB). Last year everyone had the Groucho noses.



Mike & Bill's Ryder Special in the flea market.



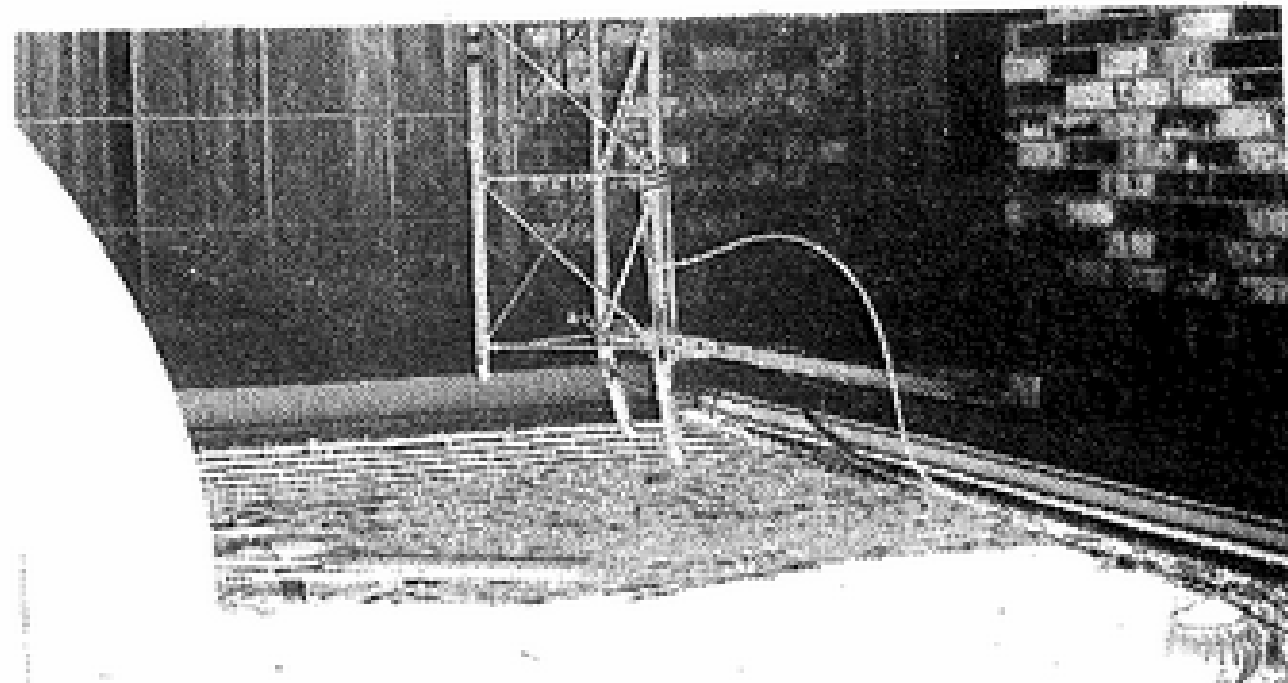
Stan (WB5UIY) at the HF rig of Mike (N5MS). The long wire antenna was strung out the window and tied to the roof of the Ramada Inn. The day before a Hamvention shuttle bus snagged the wire & dragged it to flea market. Luckily the radio stayed behind.

While some members were gleefully wondering around the Dayton Hamvention, Ron Bragg, WB5HST, was putting emergency Plan A for tornados into effect. It seemed like Sunday, April 29 was going to be pleasant day until the dark clouds rolled in the wind picked-up real strong. While the weather service didn't report a funnel, Ron is certain he knows better. (After all he's a G-60)

Around noon the weather was completely out of hand and the family was herded to the storm cellar. Fully realizing that the amateur gear outside in the van was more important than life (& against FAA regs.) Ron headed out for the rescue. The garage door was flung open and the custom van with attached radio gear was safely parked inside. Within several seconds the wind noise level increased and there was a loud crash as the tower and arrays of antennas fell across the house. The upper sections falling onto to the driveway where the van was parked only a minute earlier. The HF antenna that had talked to the Dayton crew just the night before with the best signal, was now a mangled mess of aluminum ready for Reynolds recycling program.

Upon closer evaluation, Ron saw where it missed the wife's new car by only inches. (Why wasn't it put inside first?) And the falling tower did only minor damage to the roof and eaves. Every tower section was bent at least a little, if not twisted. The wind force was so strong that the brace at the house was thrust into the brick wall, cracking the concrete joints. One tower leg was completely sheared off and the other two broke above the joint. The tower fell in a NE direction, just the opposite direction from a new earth station dish.

Excluding the tower loss, Ron was lucky that there was no further damage to his property or his neighbors and he & the family were not hurt. The last pieces have been cleared away now and Ron is awaiting arrival of a new tower-with a motorized crank up & down. Surely you wouldn't expect a G-70 to do it by hand.



Remains of the Surrey Hill's Antenna Farm, known as WB5HST. Note the crack in the brick wall and the adjacent dish that escaped injury.

This is the report following the grand-person of all Ham Fests. I have the pleasure of reporting my views and experiences of the Dayton Hamvention. The trip in itself is worthy of inclusion in any collection of Heroic adventures... Bold Forays... or things of that nature. Allow me to set the stage and weave the very essence of this grand tale. (reader indulgence is desirable at this point) The main characters in our story are Bill KB5BS, Doug W0DXA, and myself KB5XN. We had been dreaming of the possibility of actually going to the Hamvention for quite some time, but didn't really set down to seriously considering the trip until about a month before the date of the event. We had originally planned a quiet, sedate, uneventful drive from Oklahoma City to Dayton. As the time for departure drew near, we began to consider the golden opportunity we were being offered for turning a long, boring drive into a mobile operating expedition. We started making plans for mobile operation on a grand scale. (We overheard one comment as we were stopped for fuel, that if we had one more antenna on the truck we would look like a porcupine.) KB5BS and I fabricated a DC power supply to allow us to operate my Radio Shack Color Computer mobile. We wish to acknowledge the donation of various pieces of equipment by local amateurs for our expedition. K5LDI generously allowed us to use his 12 volt TV as a video monitor for the COCO, WA5VAQ sent his home brew terminal unit for RTTY and CW, WB5NSV sent an inverter for converting 12 VDC to 120 VAC, and A5EM sent his Yaesu HF rig for mobile computer RTTY/CW operation. We were able to copy both RTTY and CW except with very marginal signals. A narrow band CW filter would have helped quite a bit on the Yaesu, but we had a ball anyway. It seemed that we were questioned at every stop as to what we were doing, and of course, we had to promote Amateur Radio whenever possible. We finally arrived at Dayton on Friday morning, at about 11:00 AM, and had made arrangements for Gene, WB5SQC, and Rosie KASODI, to contact us on the 22/82 machine. We contacted them and located the motel where we were to stay, parked the mobile hamshack, and rode to the Hamvention with Gene and Rosie.

I have never seen anything to compare with the flea market area of Dayton. We immediately started through the flea market area upon our arrival, and it took me the first two days to cover it properly. Oklahoma City Hams were well represented; NSAUH Jerry was there on an expense paid trip courtesy of his company and their school; Joe W4SFLT; Joe K5JB, Mike N5MS, Dennis WB5ISN, Wendell WB5ISO, Gary W5GNV. I also ran into my old friend Jack Cobb, now of New Jersey; Jack is a ham now, but I can't seem to remember his call sign. (sorry Jack) After we got settled into the motel, we indulged in that wonderful pastime of holding one and all in thrall with our tales of rare DX, and all that good stuff that normally goes on.

I was of somewhat limited funds, so I didn't make any large purchases, but I did manage to find some of the small parts that I had been looking for. Doug managed to trade some of his treasures for other treasures and Bill bought another H-89 computer system. Joe, Joe, and Mike had an HF station set up in the motel room, and several of us were able to check that the home fires were still burning via HF phone patch. Thanks guys.

I had the good fortune to make the seminar on Packet Radio, and all the prime movers from the various companies and experimental groups were represented there. I must admit that K5JB was carefully consuming every tidbit available on the Packet issue. We learned some new things about the GLB TNC and Joe has probably extended the Packet frontier even more by now.

I guess I'd better tie the ribbon on this now and set it ready for paste up. I would like to thank Bill Holland for writing up the minutes of the last meeting, and I will try to set them in the next issue of the C&E. I will also report on the Hamfest that I attended in Northern Cal. the weekend after Dayton.

One important note, Field Day this year will be at Roman Nose State Park. This is to be a family type outing. come early to get a good spot.



This is the 'post Dayton look'
The picture is definately worth
a thousand words.



"Hamming it up"



"Honest officer, we don't need
an enviornmental impact statement."



Here is the complete computer mobile RTTY/CW
station in operation. Photo by KB5BS

HAM HAPPENINGS REFER TO CLUB SECTION FOR SPECIFICS

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
June 84						COCO
		MORI Great Plains	ARDMORE	Aeronautical Center ARC EDMOND Club	1	2
3	4	5	6	7	8	9
Wheatstraw	OK-DX	76'ers OU		ALTUS AREA	EARS DINNER	VHF Club
10	11	12	13	14	15	16
		AUTOPATCH		KAY County		
17	18	19	20	21	22	23
	CIMARRON EDIT <small>CENTRAL OKLAHOMA RADIO AMATEUR COLLECTOR - EMITTER</small>	CORA				
24	25	26	27	28	29	30



EXTENDED WEAR SOFT CONTACT LENSES

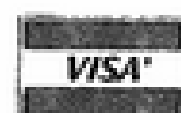
that you can SLEEP in !

Get a FREE Computer Analysis !
Find out if *you* can wear soft contact lenses.

If the signs are right, we'll place soft contact lenses on your eyes and make a further evaluation. Bring your written prescription if you wish. Patient normally gets lenses **IMMEDIATELY!**

Dr. Robert Goodhead
Optometrist, Inc.
2821 N.W. 57th St.

840-1234



Ask Doc WA5CZN, about his fantastic contacts!