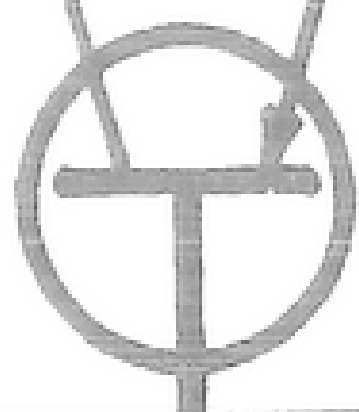


Central Oklahoma Radio Amateurs

COLLECTOR

EMITTER

AND



SINGLE COPY

50¢

AN INFORMATIVE MAGAZINE
PUBLISHED MONTHLY BY AND
FOR OKLAHOMA RADIO
AMATEURS
AND ANYONE INTERESTED IN
LEARNING ABOUT IT

Volume 6

SEPTEMBER 1980

Number 68

Gratefully Dedicated

to

Joe Harding, WA5ZNF

for

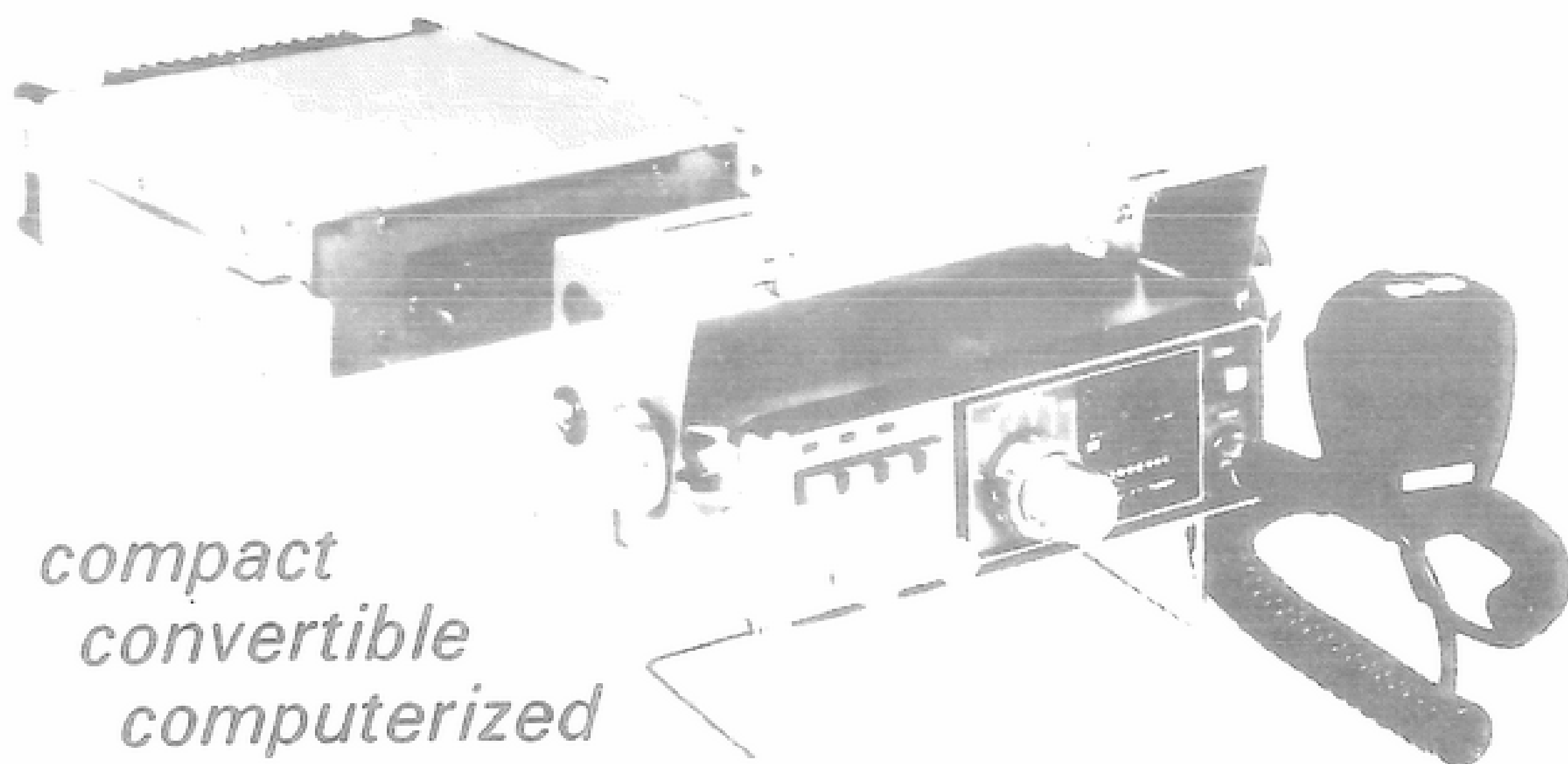
*Unswerving Devotion, Meritorious
Service, and Tireless Support of
Central Oklahoma Radio Amateurs
as Managing Editor of the Collector and
Emitter from August 1975 through
August 1980.*

SECOND CLASS MAIL

Postmaster, see page 3.

YOUR COMPLETE AMATEUR RADIO STORE

KRYDER ELECTRONICS



NEW! FT-720R from YAESU!

FM TRANSCEIVER FOR VHF OR UHF

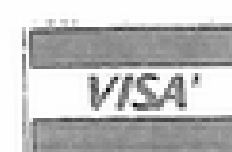
- Choose either 2 meter or 70 cm (440 MHz) RF deck.
- Optional coverage of both bands from single control head.
- Programmable up/down fingertip scanner control on microphone.
- Five memory channels with priority feature and instant return to dial.
- Bright string of LED's indicate signal strength and relative power output.
- Unbelievably small size to fit any compact car - 6"(W) x 2"(H) x 9½"(D).
- Ask Chuck about other features and impressive specs of this unique rig!

KRYDER ELECTRONICS CARRIES ALL MAJOR BRANDS OF HAM RADIO EQUIPMENT

(405) 789-1951
Chuck Guschke, N5 SW

NEW STORE HOURS

Sunday	Closed
Monday	Closed
Tues., Wed., Thurs.	10 - 5
Friday	10 - 9
Saturday	10 - 5



MacArthur Square Shopping Center 5826 N.W. 50th Street Oklahoma City, OK 73122

Central Oklahoma Radio Amateurs

COLLECTOR AND EMITTER



CORA Collector & Emitter (USPS 116-150) is published monthly for \$6 per year by CORA, Inc., 1020 Arthur Dr., Midwest City OK 73110. Second Class postage paid at Oklahoma City OK. POSTMASTER: Send address changes to: CORA C&E, P.O. Box 15073, Oklahoma City OK 73155.

Contents may be reprinted without prior permission by "club type", non-profit publications. Credit: CORA Collector & Emitter

Managing Editor Joe Harding, WA5ZNF 737-1044

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

President
Vice President
Secretary
Treasurer

Chuck Wilhite
Bob Graham
Kay Northcutt
Ron Recer

K5NK 721-4926
WB5NSV 677-8685
WD5DYJ 842-1086
KE5M 751-5378

CLUBS PARTICIPATING IN CORA

1 AERONAUTICAL CENTER ARC MEETS: 8:00 PM First Friday each month Flight Standards Bldg. FAA Aero Center Pr WA5CJG Bob Pace 376-3569 VP K5KDR Bill Oliver 329-6333 Se WA5NSV Bob Graham 677-8685 Tr WB5AAY Larry Bugg 789-4180 Ed WB5NSV Bob Graham 677-8685	2 OKLAHOMA CENTRAL VHF CLUB MEETS: 8:00 PM Third Friday each month American Red Cross, 10th & Hudson OKC Pr K5VRL Jim Williams 789-0769 VP K5YAO Clarence Sittel 947-4015 Se K5JB Joe Buswell 732-0676 Tr WSKE Ellard Foster 789-6702 Ed K5JB Joe Buswell 732-0676	3 MID-OKLAHOMA REPEATER, Inc. MEETS: 8:00 PM First Tuesday of month Okla City EOC, 4600 N Eastern Pr KASCM Fred Taylor 528-1537 VP WB5PMZ Bob White 681-9222 Se WSBEQ Jim Buswell 236-0368 Tr K5PER Jim Jones 634-5235 Ed Dues: Sid Gerber, 829 House MVC 73110
4 OKLA CITY AUTOPATCH ASSOCIATION MEETS: 7:30 PM 3rd Tuesday of month Okla Military Academy, 36th & Grand Pr WA5CZM Doc Goodhead 721-8592 VP W5NK Chuck Wilhite 721-4926 Se WD5HX8 Karen Recer 751-5378 Tr Ed K5NK Chuck Wilhite 721-4926	5 OKLAHOMA UNIVERSITY ARC MEETS: 8:00 PM (Sep-May) 2nd Tuesday Room 499, Carson Engineering Center Pr KASDH James Gardner 321-8779 VP WB5QLF Alan Wormser 325-2194 Se KASCOI Peter Richeson 325-3015 DUES: KB5BF Nathan Kirby 364-7979 Ed KB5BF Nathan Kirby 364-7979	6 ALTUS AREA AMATEUR RADIO ASSOC. MEETS: 7:30 PM 2nd Thursday each month North Main Fire Station (CO) Altus Pr WASCBF Loren Simms 477-0921 VP S/T W5VXU Mike Schenkle 482-1797 Ed W5VXU Mike Schenkle 482-1797
7 BICENTENIAL ARC (THE 76'ERS) MEETS: 7:00 PM 2nd Tuesday each month Air National Guard, Hill Roberts Apt. Pr WD5BMP Joe Couch (Guthrie) 282-4353 VP WD5DYJ Kay Northcutt 842-1086 Se WSBEQ Jim Buswell 236-0368 Tr K5PFE Tom Cassidy 751-1194 Ed KASFD Susie Atkinson	9 WHEATSTRAW AMATEUR RADIO CLUB MEETS: 2:30 PM First Sunday of month Location Varies. See club section Pr WB5JHT Ted Vanlangham 262-1675 VP AB5Z Ray Barnes S/T W5PFK Ralph Hilder 623-5421 Ed WB5MTH Virginia Beneda 825-3302	10 CHOCTAW AMATEUR RADIO CLUB MEETS: 7:00 PM 2nd Monday. Choctaw City Hall. Pr AB5H Frank Carter 391-3394 VP WD5EVP Bob Allen Se WSARV June Allen Tr KASALO R. G. Edwards 390-8297 Ed WSARV June Allen
11 EDMOND AMATEUR RADIO SOCIETY MEETS: 2:00 PM 3rd Sunday, Room 205 Science Bldg. Central State Univ. Pr WD5HXX Ken Stepp VP KB5RR Clarence Dollmeyer S/T WSERY Allen Watson Ad WD5FHR Dee Nize Ed KB5RR Clarence Dollmeyer	12 SHAWNEE AMATEUR RADIO CLUB MEETS: 8:00 PM 2nd & 4th Tuesday Shawnee City Hall - EOC Pr WB5ONL John Owens 273-0848 VP WD5FUG Les Stewart 567-3895 S/T WB5TQZ Bill Warren 275-0119 Ed WD5BUQ Jay Tingler 273-3033	13 KAY COUNTY AMATEUR RADIO CLUB MEETS: 7:30 PM 3rd Thursday of month Security Bank Basement, Ponca City Pr WB5NBK Steve Scott 765-7408 VP WB5SAG Grady Skillern 765-3411 S/T Cosby Clarke 765-3105 Ed Steve Scott
14 AMATEUR TV EXPERIMENTAL SOCIETY MEETS: 7:30 PM 2nd Thursday each month Central State Univ. Edmond Pr W5JGC James Buchanan 495-2777 VP WASHTL Paul Asplin (Bus) 521-2861 S/T WSANG Mike Woods 528-3699 Ed W5JGC James Buchanan 495-2777	15 SOUTH CANADIAN AMATEUR RADIO SOCIETY MEETS: 9:30 AM 3rd Saturday each month Red Cross Bldg. North Campus Norman Pr KB5DK Laverne Hoag 329-7625 VP WSABC John Stehr 364-8761 Se KASFBG Linda Brandt 321-5081 Ed WB5TZZ Jack Bickham 329-1311	16 EDMOND AMATEUR RADIO CLUB MEETS: 7:45 PM First Monday of month General Electric, 3228 N Santa Fe OKC Pr K5GBF Harold Plunk VP W5BQX Bob Shaw S/T WB5UIY Stan Van Nort Ed WB5UIY Stan Van Nort
17 TRI-CITY AMATEUR RADIO CLUB MEETS: 7:30 PM First Monday of month. Location varies, see club section. Pr WB5TFX Ben Gard 379-3112 VP WB5VPM Carl Cash 257-2243 S/T KASFD Nancy Hayden 379-6448 Ed KASFD Nancy Hayden 379-6448	18 GREAT PLAINS AMATEUR RADIO CLUB MEETS: 7:30 PM 1st Tuesday each month Woodward Court House basement. Pr WB5OYT Rod Ford VP WD5DFH Bill Reid Se WD5DFG Donna Reid Tr KASFKV Gerald Bowman Ed W4ZSL Wes Duer	19 SOUTHEAST OKLA AMATEUR RADIO ASSN. Pr WB5TTV Ron Henson 326-5418 VP WB5ULI George Weldon 326-5672 S/T WD5FUE Orville Kaley 326-3640



Red Cross. The Good Neighbor.

The South Canadian Amateur Radio Society

EDITOR: Jack Bickham, WB5TZZ

329-1311

SCARS "ADOPTS" AN AMATEUR IN THE SOLOMONS

A new amateur in the Solomon Islands, Stewart, H44SH, will soon have use of a new set of Callbooks thanks to the South Canadian Amateur Radio Society.

In a QSO with WB5TZZ recently, Stewart was explaining how hard it was for amateurs in that part of the world to lay their hands on Callbooks. On impulse, TZZ offered to send him a pair. The Solomons amateur was excited about the prospect, and readily accepted the offer.

At the July business meeting, SCARS members voted to make the books for H44SH a club project. Funds were allocated to reimburse TZZ and AF5X, who had first paid for the pair of 1980 books.

How soon Stewart may actually have the books is anybody's guess. Air mail for the package to the Solomons came to \$22! Surface mail was elected and the books are well on their way by now...probably in the hold of a ship somewhere.

Incidentally, for anyone interested, Stewart was worked on the low end of 20 phone a little after 0800 Z on a week night. He said that is likely to be his regular area of operation.

THE NEW KANTRONICS FIELD DAY CODE READER AND DUAL FILTER (REVIEW)

Kantronics has two new pieces of equipment on the market now, and both are dandy.

The "Field Day" (R) is now available in updated clothes. With better sensitivity and provision for both Baudot and ASCII, it appears to be an ideal answer for the ham who wants code and teletype reading abilities without the huge investment required for more elaborate machines.

The Kantronics gadget plugs into the audio line of the receiver, and has its own speaker, or can feed your regular outboard speaker if you so desire. In the Morse mode, it will copy between 3 and 80 words per minute. Tuning is simple -- a matter of getting the indicator light on the front panel to pulse regularly. And this tuning is a matter of receiver adjustment; the reader unit has virtually no adjustments required.

Once the receiver has been centered, the reader displays moving characters that slide from right to left. The display will accommodate 10 characters. A special circuit, activated by a panel button, puts the reader in the "edit" mode. In this mode, it will read quite sloppy copy, and also breaks the text into words on the basis of programmed-in probabilities. Of course sometimes it goofs, but it's amazing to watch it properly print out and word-space really execrable CW that, to the ear, has no sign of word spacing.

The "Field Day" when properly tuned will pick out good signals even in a pile of QRM. If you have means to peak the desired signal and get a proper panel light indication, it will do the job for you. Of course it cannot work miracles; a very weak signal just doesn't provide enough "oomph" in the audio line to keep the reader reading. But sometimes it does an amazing job.

By pressing a panel button, the operator can move the reader through the various speeds of Baudot and ASCII. When you've hit the proper mode and speed, voila!, the text appears perfect. The unit includes 5 special RTTY characters.

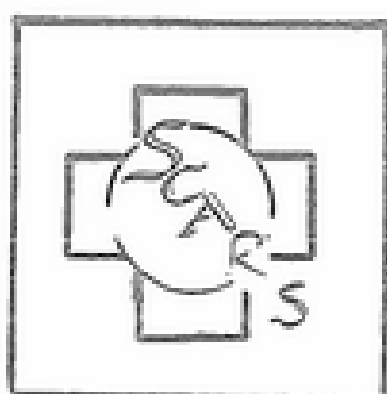
With a built-in 200 Hz filter and provision for displaying time and/or the speed of the code being copied, this unit shows anew how sophisticated a small microprocessor-type unit can be.

Not quite as flashy, but perhaps even more useful to the ordinary ham is another new Kantronics unit, the "Signal Enforcer." This is a self-powered dual audio filter that goes well beyond many existing units in capability.

The filter includes two identical sections, both providing peak or notch. Each is independently variable, and both can either peak or notch regardless of what the other happens to be doing. Frequency range is 150 to 3000 Hz approx.

The resulting unit is a little like having two very good filters in series. As is the case with most such units, it's more effective on CW than on phone, but some weak ones were pulled well out of the crud on SSB, using both peak sections in cascade.

(Continued)



(Continued)

Since we had both the Kantronics code reader and filter in the shack at the same time, we tried operating them in series. The dual filter brought in a number of weak signals, and peaked them enough, that the reader could handle them. The two units match in appearance, and work together very well indeed. The use of peak filters in cascade to feed the "Field Day" is likely to become a popular method of operation.

There have been reports that the new "Field Day" has already undergone some radio amateur meddling around the country. One report on the bands was that plans will soon appear in one of the major magazines for the gadgetry necessary to make the reader feed a hard copier. As to the new filter, a couple of prominent DXers have been heard to comment favorably.

There are some other good filters around, and probably some other good readers. On any tryout or shopping list, however, these should be included for a look. They appear excellent.

Thanks to K3TGY for the loan of both units.

SCARS BIDS 73 TO PRESIDENT, KB5DK

Scars said its farewells to President LaVerne Hoag, KB5DK, at the regular monthly business meeting August 16. Verne is leaving Oklahoma for the East, where private industry has lured him after a decade in Norman and at the University of Oklahoma.

Verne led SCARS since January.

It was he who organized and ramrodded a private fund drive in 1979 to raise funds for the new club station. The drive was hugely successful. Both OU's College of Engineering and the ham community of Norman will miss him sorely.

SCARS regularly elects the coming year's officers at the November meeting. John, N5ABC, will lead the group until the next elections.

AND NOW A COMMERCIAL WORD FROM AF5X

About a year ago one of Norman's finest, a young man named Ken Stutzreim, managed to collect a few .45 magnum hollow points from an itinerant bank robber. While Ken was laid up, WB5TZZ, whose antenna system is highly switched and rather complex, managed to arrange a phone patch between Ken and his father who lived in Chicago. This feat was not remarkable at first blush, but blush Jack did, because the entire operation, almost, was carried on through the dummy load. (Oh, that switch!)

We can do Ken another favor today. His dad, who was a novice operator in those days, died recently. Ken called to tell me about it, and mentioned that he wished to sell his dad's ham gear for his mother's benefit. SCARS members have elected to help him in this, so we place the following:

FOR SALE: Yaesu 401B hf TCVR, Yaesu Landliner phone patch, Autek IC active filter, Dentron Monitor Jr Antenna tuner, and a Ham Key.

We think Ken's mom should realize about 75% of the list prices for this stuff, but haven't calculated exact prices yet. Call and make your offers to: AF5X (Jess), (405) 329 1543, or Ken (himself): (405) 360 2879. SE HABLA INGLES, Y'ALL.

REDUCED PRICE -- 2-meter repeater-duplexer now operating in Norman. This 50-watt Motorola tube-type repeater is currently on the air on an assigned frequency of 146.625-.025 from a private QTH on Norman's west side. The machine is fully shielded and includes a UHF control receiver, solid state programmable IDer, time-out timer and a spare box of tubes. The duplexer is a six-cavity, solid copper device beautifully machined to ARRL handbook specifications, and shows a loss of just 1 db. on the bench. We found to our regret that the machine gets very little use in Norman, already a two-repeater town, and so we are ready to sacrifice both repeater and duplexer for a total of \$600. PLEASE don't ask if we can take less; we can't. Further info from Jack, WB5TZZ, Norman. 329-1311.

AVAILABLE SOON -- Used but mint condition goodies to complete your Kenwood 820 station. VFO-820, \$125; SP-820 speaker with built-in filters, \$50; SM-220 Station Monitor (displays both transmit and receive signals), \$250. These to go when a new rig arrives, probably later this month. Jack, WB5TZZ, Norman No. 329-1311.

kay

C O U N T Y A M A T E U R R A D I O C L U B
C O U N T Y A M A T E U R R A D I O C L U B
C O U N T Y A M A T E U R R A D I O C L U B

HERE WE GO AGAIN!

It seems like I just receive an issue of the C & E and then it is time to get another copy ready to be sent. Due to timing difficulties, this article will have been mailed before our club meeting. So I will try to tell you what has happened and was supposed to happen.

WHERE HAVE WE BEEN?

For starters, we have installed the new antenna at the 37/97 repeater transmitter site and I believe an improvement in performance was greatly achieved. W5ZWM, C. L. Hallmark, K5FLL, Jim Deltorto, WB5SAG, Grady, and myself met for an inspirational breakfast and then went to perform this deed. That same day, C. L. and Jay Williams, W5TXF, also gave our repeater components a tune-up to improve performance.

The day prior to this event Grady, WB5SAG, Eddie, K5RHX, Chuck, WB5DOT, and myself took a trip to Oklahoma City for the Hamfest. We didn't do any good towards our assigned mission there, but did see Bob See, N5PC from here, there, and met up with Marsh, WA5UBO, in time to see him purchase a new Kenwood 2 meter that didn't work right the first time out! (From all of the jokes lately, I thought only American made equipment did that!!) This brought back a little creditability to the saying "made in Japan"!! It was obvious that the manufacturers made the old tube gear to last forever - and a good part of it was there! All in all, I think CORA and the clubs involved did a fantastic job. (By the way, Marsh knows the dealer so I'm sure he has it fixed right!)

AND THEN

There was the "Great River Raft" race sponsored by our local Jay Ceas. Communications coordinator Grady Skillern, WB5SAG, did a fantastic job of organizing Jim Thomas, WA5MDN, Pat Burnam, WB5NQT, Ray Stuckey, WA5DRF, Delbert Foilles, WB5YRN, Jim Deltorto, K5FLL, Tony Congram, WD5EAA, Vern Trieber, N5ANV, and myself into a simple, complicated, efficient, confused net along the 7 mile route through the damp sand of our Arkansas River as it is referred to. Vern and Tony brought a Jon boat that was as close to a floating EOC as a boat can be with beams, verticles and magnetic mount antennas (they promised a rotor for it next year), both a mobile and a hand held rig, and half the comforts of home. Since we thought they would have the most trouble getting down river, we let them go with the front runners, with Delbert and myself bringing up the last raft. Jim Thomas conducted the finish line communications letting the families and friends know how their favorite was doing while Grady started them and ran in between there and the finish line and hauling in beached rafters. Jim and Ray made sure everyone made the first couple of miles. Other than sunburn, a good time was had by all (I think) and Delbert and I got with the guys off the last raft and caught a 40 lb. spoonbill by hand. In what little water we could float in, that fish would tow our canoe, but it was always the wrong direction. We enjoyed about 4 miles of water and a good 3 miles of walking and I think a Jon boat is the only way to go in 3 inches of water. There is always next year!! A big thanks goes to all who helped in these projects.



WHAT TO EXPECT FROM MEETINGS

Our August meeting was supposed to be 3 films from Ma Bell, one on memory devices, one on transistors and how they work, and a film on crystals and how they are made. Hope they were as good as they sounded!

Our September meeting will be by Roy Pitts from El Reno. He was in research and development with Motorola Communications for many years and now operates his own private shop. He is a very knowledgeable person and should be able to field any questions you may have. Come and try -- OK?

TAKE NOTE

Our October meeting is being post-poned a week later than usual because of the program we have lined up - a demonstration by a Ma Bell representative of how they are using laser light through glass tubes to transmit telephone messages. This will be another good meeting.

Our November meeting will be a talk by Leonard Holler, our net supervisor for Oklahoma. He is to show the ARRL's new film on hamming and to give a talk on net communications.

Mark these on your calendar and bring your friends. These are some great meetings and shouldn't be missed!!

WHERE ARE WE NOW ANYWAY?!

In the middle of a heat wave!! But when it breaks it will probably storm so keep checking your emergency equipment - we may need it soon. See you at club meetings.

73's


Steve

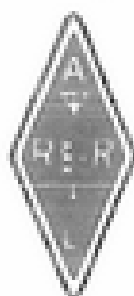
FOR SALE: Sears Roadtalker CB converted to 10 meters, SSB, excellent condition, \$100, Don Sullivan, WB5RAX, 787-0092. OKC

FOR SALE: New Yaesu FT-107M, with FP-107E external speaker/power supply, FV-107 External VFO, FC-107 Antenna tuner and Shure mike, all for \$1099, call Tim N5BTE, 367-2386, Bristow.

FOR SALE: Swan Solid State SS-200A, 610X crystal oscillator full of crystals, AF MARS and amateur. \$500.00. PS-20 Power supply and speaker for above, \$100.00. Harry, WB5DGT, (405) 995-4761, Vici OK 73859

FOR SALE - Kenwood TS.820 -- \$600.00, Tentec Argonaut Model 509 with power supply - \$240.00, Kenwood MC-50 Mike - \$20.00, Astatic D-104 gripstand \$20.00, Swan model WM1500 wattmeter with forward and reverse positions 0-2000 watts - \$30.00, Ameco transceiver Pre-amp - \$30.00, Hustler mobile mount with cable and 10 meter resonator - \$30.00. Gene Molter, WD5IOE, 721-2889. Also, Autek active audio filter, \$30.00.

	<p>TUBES 50% OFF Free Testing Most Electronic Engineers and Technicians buy from us</p> <p>Kelly's DISCOUNT ELECTRONICS 4221 N. Lincoln Ph: 787-0000 Oklahoma City</p>	<p>WORLD WIDE ELECTRONICS J. C. BIDDY</p> <p>(405) 525-9697 1715 N.W. 16TH</p> <p>OKLAHOMA CITY, OKLA. 73106</p>
---	---	---



THE AMERICAN RADIO RELAY LEAGUE, INC.

OFFICE OF THE
SECTION COMMUNICATIONS-MANAGER

LEONARD HOLLAR WA5FSN

QST
OFFICIAL ORGAN

Now that Vacation time is about over and School is back in session, We should be hearing more people on the Nets and overall participation should be up. FB.

It is time to begin thinking about winter Code and Theory Classes. How about contacting your local VO-TECH; Jr College etc. for help in facilities etc. The possibilities are many and varied.

On a State-Wide note: It is time now!! to begin preparations for the annual Simulated Emergency Test, Oct. 18-19. In the interests of coordination, I hope as many E.C.'s as possible can schedule their operations for that week-end, however other dates within a 2 month period is permitted.

Just because our storm season is over is no excuse to let down our guard. 'Operation SkyWarn' is a year round operation and must be kept alive and well.

I am always hesitant about criticizing anyone's operating methods and habits. But do feel that some comments are in order. I am appalled at the amount of 'Lingo' that has crept into our Bands from another service. Some of these may be all right. But I still feel that we can do without a lot of what I have heard lately. Amateurs, I thought, had their own unique Phraseology that was based on many years of Tradition. What has happened? We older Amateurs need to be more firm about setting the example.

Oklahoma Net Report for July 1980

Net.	Sessions	Check-ins	Traffic	Weather.
O.P.E.N.	4	204	14	
O.F.O.N.	21	250	52	
Sooner	27	380	150	
O.T.W.N.	27	340	44	328
O.A.N.	31	178	47	
O.L.Z.	31	206	77	
Night Owl	31	875	80	
Arbuckle	4	59	2	
N.W.O.S.N.	12	136	3	
Q.C.W.A.	4	114	8	

See you at Texoma. Oct 24-27.

Leonard

FOR SALE - Kenwood TS820S, SP820, MC50 and Hustler 80-10 vertical. Also Wilson Handitalkie 1402S, nicad pack, TT pad, rubber ducky, desk charger, leather carrying case, and all local crystals. \$200.00. All these items little used and truly mint. Original cartons, manuals, etc. Chas. WB5UUX, anytime.



DeGe And Associates
(Division of Buttrick of Mich.)

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

Gene A. Nailon
K5DLE

405-341-8289

Authorized Beltone Dealer
Hearing Aid Service
Hearing Aids



AE5N
DONALD H. DUCK
Special Instruments Representative

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



Western Oklahoma-Texas Panhandle Division
323 N.W. 10th Street
Oklahoma City, Oklahoma 73103
(405) 232-7121

HAMS DO IT AGAIN!

Several Amateur Radio operators in the Oklahoma City area once again gave of their time and expertise to provide information to the American Red Cross and their fellow man during the recent Hurricane Allen emergency.

While "Allen" was in the Caribbean, Pat and Arley Garvin, WB5NKD and WB5NKC respectively, monitored the storm providing coordinates and other pertinent weather information. They continued to monitor as the hurricane made landfall.


As the system approached the Brownsville, Texas area, Charlie Greene, WA5JGU, Red Cross Communications Chairman, with the assistance of Bob Ashby, W5HXL, Vice Chairman, opened W5LOW at Red Cross headquarters in Oklahoma City. The following Amateur Radio operators staffed the station providing "around the clock" coverage from 9:00 a.m., August 9 thru 7:30 p.m., August 10, 1980.

Charles Jay	WD5THF	Fred Boardman	W5NL
Ralph Rea	W5AA	Ray Peters	WB5BTT
Ralph Bartow	WD5IRB	Joe Buswell	K5TB
Ken Kendrick	WB5ECJ	Ken Ford	WB5KHU
Jerry Wetmore	KA5DCM	Jim Williams	K5VRL
Brenda Williams	WD5BXT	Fred Taylor	KA5CXW
Randy Williams	WB5CNM		

As a result of the effort of the amateurs, many citizens in Central Oklahoma gained information concerning more than 29 cities and towns in the affected area. These "Hams" helped to relieve the anxiety of many concerned people having loved ones in South Texas.

Once again the American Red Cross says - Thanks for a JOB WELL DONE!

Jack W. Muse, WB5ZKZ
Disaster Director

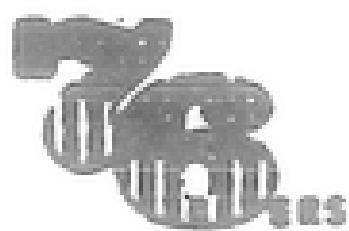


AVIATION CO.
HANGAR 3B, WILL ROGERS WORLD AIRPORT
P. O. BOX 59906, OKLAHOMA CITY, OKLA. 73159

WANTS: AVIONICS TECHNICIANS FOR
REPAIR AND INSTALLATION OF AVI-
ONICS EQUIPMENT (NAV/COM, PULSE
FLIGHT CONTROL) IN IN GENERAL
AVIATION AIRCRAFT.

GENE NAILON - K5DLE
Avionics Manager
OFFICE 405-681-2331
HOME 405-341-8289

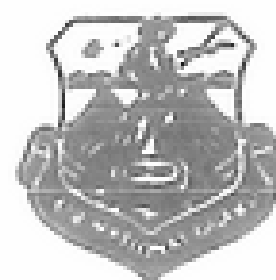
EXPERIENCE IN GENERAL AVIATION
AVIONICS PREFERRED - - BUT NOT
REQUIRED



BICENTENNIAL AMATEUR RADIO CLUB

To Promote Radio Communications

Sponsored by Oklahoma Air National Guard
ARRL affiliated



EDITOR: Susie Atkinson, KA5FED

"AUGUST ACTIVITY" is just about over, but there was so many things to do -- things to see. "Vacations" "Picnics" "Ice Cream Socials" "Watermelon Fests" "Getting ready for school" and some of the usual routine "W-O-R-K". I heard a few Hams saying they were trying to re-cuperate from the excitement, etc. from Ham Holiday...

"ON THE SEEN" (Scene) from KA5FED.....

KA5CXW (Fred) got a new "water" bed-room suit lost it before getting home --- but he found it.
W5DDI (George) still acting coordinator of the Nite Owl Net -- doing a "l"derful job and also trying to fight "Murphy's Law".
N5BEQ (Jim) still feeding his face -- saw him at a recent watermelon feed.
N5BEP (Syrena)'s husband "Tommy" was in a bad car accident -- we wish you a speedy recovery
WD5KFT (Clara) re(ah)rranging her new "used" furniture around in her Bethany portable.
W5NBH (Tiny) and KA5DCM (Jerry) doing grrr8 jobs as net controls for Nite Owl Net.
WB5TFX (Ben) reported he saw something unusual fall from the sky -- the only description I heard was "it was wet!"
KA5FED (Susie) your editor encourages you to write some articles for C & E -- call me or mail them to me so we can get them published (ThX)

The next meeting for the "76ers" will be September 9, 1980 at WILEY POST. --- See ya!

Susie Atkinson (KA5FED) 3113 Wilshire Terrace, OKC 73116
Phone (405) 842-8014

FOR SALE: Swan SS-200A Solid State 5 band transceiver, PS-20, and mike \$475.00. Also VFO-180 \$100.00. 7326498 Ray, WB5BTT

FOR SALE - Cobra 139XLR 40 CH AM/SSB Base/Mobile CB Radio. Like new and ready to convert, \$100.00 or trade. Jerry N5AUP 2755717 Shawnee.

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

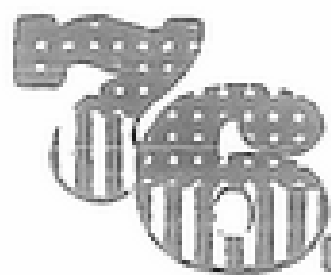
EXCESS
ELECTRONICS

Tektronix
COMMITTED TO EXCELLENCE

MIKE RILEY
Sales Engineer
Measurement Products

Tektronix, Inc.
800 N.E. 63, Suite 201
Oklahoma City, Oklahoma 73105
Phone: 405-648-3361 or 800-522-9190 (OKla. WATS)





MINUTES

The July meeting was called to order on the 12 by Prez Joe WD5BMP at 7 pm with 43 members and guests to transact the business for 120 paid club members.

Minutes of the June meeting were approved as published in the July Collector and Emitter.

The report of the Treasury by Tom KF5E was approved as read.

Announcements: Due to a vehicular upset involving the scheduled guest at too late a time to replace, the expected program for the evening was unfortunately cancelled. Hopefully it may be rescheduled at a later, more comfortable date. Our condolences and best wishes for the speediest of recoveries are extended to Ben Allen K5IRO.

Next month's meeting (September) will consist of an "Ice Cream Social" at 7 pm at the Wiley Post Pavilion, SW 22nd and S. Robinson, 'B.Y.O.Beyond ice cream which will be donated by club members. Remember YOUR bowl and spoon! That's Sep 9th. CORA: Rep Bill WA5RAQ reported that as of the July meeting 97 flea tables had been reserved, 886 had preregistered with 85 on the last possible day to pre-register for Ham Holiday 80 (#7); total attendance was 1,443 which was 325 over 1979's; we are reminded that the term of office of CORA Officers begins in September according to the CORA constitution and representatives from this club are appointed (or volunteered) rather than elected; thence there flurried forth the following avid workers - Bill WA5RAQ, Jim WA5TDW, John KH6JTE, CY WB5TKG and Kay WD5DYI; their first order of business will be to acquire an up-to-date computer print-out of the club's membership roster to assist the follow-on; all heards indicate positive feedback about HH80.

The slate of nominees for next year's officers to be voted on at the October meeting will be presented by the nominating committee of Coy N5OK, Mark WD5DYI, Bill KB5BS and Jim N5BEQ - if you wish to serve, campaign or suggest a nominee to be contacted inform one of these well in advance of the September meeting when the slate will be announced.

EC Bill KB5BS announced that the ARRL presented a number of awards at the State Convention concurrent with HH80 to various amateurs from around the state who had performed meritoriously during the previous year's time; Bill reminded us that we are still closely cooperating with the National Weather Service as well as maintaining other public services such as the Wilshire Nursing Home phone-out last May (see relevant letter elsewhere this issue) unfortunately not successfully finding a lost child Ham Holiday Saturday.

In the manner of new business, a motion for the 76ers to withdraw from CORA was heatedly and emotionally cussed and discussed due to our apparent lack of support as a club to our duty of registration at HH80 and defeated with one dissention.

Additionally, many members seem unaware that their renewal dates for the club's membership dues are restated on every address label of every C&E unless expired: six numerical digits in three pairs, the first pair indicating the club to which you belong, in this case 07 for the Bicentennial Amateur Radio Club, the second pair the year in which your dues expire such as 80 or 81, and the final pair the month in which your dues run out such as 08 for August or a row of six xs, XXXXXX, if all your dues in all your clubs had expired. Therefore, if your dues expire, for example, in September 1981 your 07 entry will read 078109. (Or as mine do, 078010, in October 1980, Jim) Try it and see what your label says!

There being no further business and absenting the program, the group adjourned to donuts and the aftermeeting at 8:09 pm.

Next meeting is 7 pm, Tuesday, 9 September, Wiley Post Pavilion, S.22nd & Robinson, bring your ice cream, bowl, spoon, appetite, energy, frivolity and anything else you would like to enjoy at an old-fashioned ice cream social. CU.

Jim N5BEQ
Secretary



Club
NEWS

VILLOT
The Silver Collector's Magazine

EDITOR: Joe Buswell, K5JB 732-0676

MINUTES OF AUGUST MEETING

...THERE WEREN'T NONE, BUSINESS, THAT IS. THE ANNUAL AUGUST WATER-MELON FEST TOOK PLACE INSTEAD. I MEANT TO TAKE A HEAD COUNT, AND AT LEAST, PUBLISH THAT BUT I FORGOT THE NUMBER BOB, W5HXL, AND I ARRIVED AT. I DON'T KNOW WHO ALL WAS INVOLVED IN GETTING THE EXCELLENT MELONS BUT THE SEEMINGLY UNENDLESS SUPPLY ARRIVED IN HXL'S VAN. MEMBERS OF THE AERO. CENTER CLUB WERE THERE ALSO AND I HAD A GOOD TIME WHOOPING IT UP WITH THOSE GUYS, AND GIRLS, ALSO.

GOOD PUBLICITY

THEY DON'T CALL ME OL' LUCKY JOE FOR NOTHIN'. WHILE EVERYONE ELSE WAS SWALLOWING SIX HOUR CHUNKS OF RADIO WATCH CONCERNING HURRICANE ALAN, SOME OF THEM THROUGH THE NIGHT, I DROPPED IN AT THE RED CROSS AT NOON SUNDAY TO TAKE A THREE HOUR WATCH. TWO HOURS AFTER I GOT THERE, SO DID CHANNEL 5 NEWS. I GOT TO SHOOT OFF MY MOUTH AND MUG THE CAMERA. FORTUNATELY, CHANNEL 5 HAS AN EXCELLENT EDITING STAFF AND THE STORY THAT WAS PUT TOGETHER WAS A GOOD SHOT FOR AMATEUR RADIO. YOUR TRUSTEE, KEN, W5KHU, AND JACK, W5ZKZ, AND I, FOR THAT MATTER, LOOKED PRETTY GOOD IN THE BLUE RED CROSS UNIFORMS. JACK WAS WISE IN GETTING ME COVERED UP IN THAT BLUE SUIT. I DON'T THINK THE GREASY JEANS AND TEE SHIRT I WAS WEARING WHILE WORKING ON THE AIRPLANE THAT MORNING WOULD HAVE GONE OVER QUITE AS WELL. THANKS JACK.

MORE ON THE MOTOROLA GAIN BLOCKS...THE TWO METER VERSION

A COUPLE OF MONTHS AGO I DESCRIBED SOME EXPERIMENTS ON THE MOTOROLA MHW 710 UHF AMPLIFIER MODULE. IN JULY, N5MS DESCRIBED APPLICATION OF THE MHW 252 VHF AMPLIFIER, DESIGNED SPECIFICALLY TO PUT OUT 25 W ON THE TWO METER BAND. MY INTEREST IN IT WAS PRIMARILY HOW CLEAN ITS OUTPUT WOULD BE AND WHETHER IT WOULD BE SUITABLE FOR REPEATER USE. IN ORDER TO GET STARTED ON IT QUICKLY, I ORDERED A KIT OFFERED BY COMMUNICATION CONCEPTS, 2648 NORTH ARAGON AVE, DAYTON OHIO 45420. THE PRICE WAS \$79.95, POSTPAID. THEIR PRICE FOR THE MODULE WAS \$29.67 EACH. FOR MY PURPOSE, THE MODULE ALONE WOULD HAVE BEEN SATISFACTORY BUT THE KIT PROVIDED ALL THE PARTS NECESSARY TO BUILD A 25 W AMPLIFIER WITH PROVISIONS FOR ACCEPTING DRIVE LEVELS FROM 200 MW TO 5 WATTS AND INCLUDING AUTOMATIC TRANSMIT-RECEIVE RELAY CIRCUITRY. IT WAS MORE THAN I NEEDED FOR MY EXPERIMENTS BUT WHEN I WAS FINISHED I WOULD HAVE A HANDY DANDY WALKIE TALKIE AMPLIFIER. FOR THIS REASON I THOUGHT IT MIGHT BE OF SOME INTEREST TO OTHERS.

THE BASIC CONSTRUCTION TIME WAS ABOUT TWO HOURS. IT SHOULDN'T TAKE ANY LONGER THAN ONE EVENING TO THROW TOGETHER. THE ONLY "FINE TUNING" THAT MIGHT BE DONE WOULD BE CHANGING OF VALUES OF THE ATTENUATOR TO GET THE FULL 200 MW OF DRIVE TO THE MODULE AFTER CONSIDERING VARIATIONS IN WALKIE TALKIE OUTPUT POWER LEVELS. SEE MIKE'S ARTICLE FOR DETAILS ON THE TEE ATTENUATOR USED WITH THIS CIRCUIT. THE KIT COMES WITH RESISTORS TO MAKE A 10 DB ATTENUATOR WHICH CAUSES THE COMPLETED AMPLIFIER TO REQUIRE TWO WATTS TO GET FULL RATED DRIVE.

THE ONLY THINGS NOT SUPPLIED WITH THE KIT WERE HEAT SINK COMPOUND AND A SWITCH TO TURN THE UNIT OFF WHEN IT IS NOT NEEDED. EVERYONE WHO DOES ANY SOLID STATE CONSTRUCTION WORK IS GOING TO NEED SOME HEAT SINK COMPOUND SOONER OR LATER. SOME KITS SUPPLY IN IN LITTLE THROW-AWAY TUBES. THERE IS USUALLY SOME SURPLUS AND IT IS A GOOD IDEA TO SAVE IT FOR LATER PROJECTS, LIKE THIS ONE. OTHERWISE, CON SOMEONE, LIKE ME, OUT OF SOME, TO PREVENT THE MODULE FROM OVERHEATING.

AT CERTAIN TIMES, FOR EXAMPLE, WHEN OPERATING ON 34/94 ON THE NORTH SIDE OF TOWN, IT WOULD BE A GOOD IDEA TO TURN THIS LITTLE FELLER OFF.

THERE IS NO BIG DEAL ABOUT LEAVING THE THING ON ALL THE TIME BECAUSE IT ONLY DRAWS 34 MA IDLING, BUT I DON'T LIKE HAVING ANYTHING ELECTRONIC TURNED ON WHEN STARTING THE ENGINE BECAUSE OF TRANSIENTS THAT ARE GENERATED. THE AMPLIFIER DOES HAVE SOME POWER LINE TRANSIENT SUPPRESSION AND RF FILTERING INCORPORATED IN THE DESIGN, BY THE WAY. THIS IS ONE SHORTCUT THE KIT MANUFACTURER DID NOT TAKE.

THE FIRST TEST OF THE AMPLIFIER WAS TO DETERMINE HOW LOSSY THE RELAY AND COAX WERE WHEN BEING OPERATED STRAIGHT THROUGH. THIS WOULD GIVE A MEASURE OF HOW MUCH SIGNAL WOULD BE LOST ON RECEIVE. WITH NO D.C. POWER APPLIED, TWO WATTS WAS MEASURED GOING INTO THE AMPLIFIER, AND AS CLOSE AS I COULD TELL, TWO WATTS WAS COMING OUT. GOOD ENUF... THE RELAY DESIGN APPEARED TO BE PRETTY GOOD. THE COAX SUPPLIED WAS TEFLON, BY THE WAY.

THE SECOND TEST OF THE DEVICE WAS TO DETERMINE HOW SENSITIVE THE T-R RELAY CIRCUIT WAS. TWO HUNDRED MILLIWATTS WAS APPLIED TO THE AMPLIFIER INPUT AND THE RELAY CLICKED IN SOLIDLY. NO RF OUTPUT APPEARED HOWEVER. THERE IS A LOWER THRESHOLD BELOW WHICH NO AMPLIFICATION WILL OCCUR. I HAVE TO AGREE WITH N5MS'S ANALYSIS. IT MUST BE SWAMPED FOR STABILITY REASONS. IF IT WASN'T, A LITTLE BIT OF STRAY FEEDBACK, OF THE CORRECT PHASE ANGLE, WOULD MAKE A BEAST OUT OF THE THING.

THE NEXT TEST, OF COURSE, WAS TO POUR THE COAL TO IT. WITH TWO WATTS OF DRIVE, THE AMPLIFIER SHOULD DEVELOP FULL RATED OUTPUT, BUT IT WAS NOT TO BE. ONLY 18 WATTS DEVELOPED. A QUICK CHECK WITH THE VOLTMETER SHOWED WHY. THE VOLTAGE WAS ONLY 12 VOLTS. CURRENT WAS MEASURED ANYWAY AND IT WAS FOUND TO BE 3.8 AMPS. A QUICK COMPUTATION SHOWED 45 WATTS D.C. INPUT FOR A DISSIPATION OF 27 WATTS AND AN EFFICIENCY OF 39 %. IT WAS LET RUN FOR A WHILE AT THIS LEVEL WHILE A TEST SET-UP WAS BEING ARRANGED TO MEASURE NOISE AND TRASH OUTPUT. NOTHING LIKE A LITTLE COOKING PERIOD TO SEE HOW AN AMPLIFIER WILL STAND UP.

LITTLE DID I REALIZE I WAS GETTING READY TO RUN A REAL "COOK-IN" TEST INADVERTENTLY. WHILE HAYWIRING SOME "LEAKAGE" SO MY RECEIVER WOULD HAVE MORE NOISE TO LISTEN TO, I KNOCKED A CONNECTOR TO THE DUMMY LOAD LOOSE WITHOUT REALIZING IT. FIRST EVIDENCE OF PROBLEMS WAS THE OUTPUT INDICATION ON THE WATTMETER. IT HAD DROPPED TO 8 WATTS.

FIRST, VOLTAGE WAS CHECKED, STILL 12 VOLTS. HEAT SINK WAS TOUCHED... WOW! HOT!, NOT A MELTDOWN, BUT HOT, MAYBE 140 DEGREES. FUNNY, I DIDN'T REMEMBER THERE BEING ANY OVER-TEMP PROTECTION IN THE DEVICE. POWER WAS UNPLUGGED AND THE THING WAS ALLOWED TO COOL SOMEWHAT. THE EXCITER WAS A LITTLE HOT SO I GAVE IT A REST ALSO. I TOOK THE BREAK IN THE TEST AS AN OPPORTUNITY TO HUNT FOR THE SCHEMATIC FOR THE EXCITER AND REVIEW THE SPECIFICATIONS BECAUSE I HAD NOTICED A WEE BIT OF CURRENT INCREASE, LIKE MAYBE 25 %. I FOUND THE SCHEMATIC AND CHECKED OUTPUT. REMEMBER, THE DUMMY LOAD WAS DISCONNECTED, UNKNOWN TO ME. HMM, POWER FROM THE EXCITER WAS DOWN TO LESS THAN A WATT. WELL, MAYBE IT NEEDS RETUNING. NATURALLY, JUST SETTING THERE DOING ITS THING, IT GOT OUT OF TUNE. GOOD THINKING JB. FIND THE DIDDLE STICK, FIND THE TEST POINTS, HOOK UP THE VTVM, RUN THROUGH THE ALIGNMENT PROCEDURE. HMM, STILL LESS THAN TWO WATTS. LIKE WA5LFN WOULD HAVE SAID, "MUST BE GONZOIDED!"

YOU MIGHT HAVE GUESSED THAT THE HERO OF THIS STORY WOULDN'T LET THIS GO ON FOREVER. A TWIST OF THE SLUG IN THE BIRD TOLD THE STORY ON THE DUMMY LOAD. SOME TIME LATER, AFTER UNDOING THE UNTUNING JOB ON THE EXCITER, I BROUGHT THE 18 WATTS BACK ON LINE. I WOULDN'T HAVE DELIBERATELY RUN AN OPEN CIRCUIT TEST LIKE THAT ON THE MHW252 FOR THE WORLD, BUT SINCE I DID, I MIGHT AS WELL ADMIT THAT IT IS CAPABLE OF DISSIPATING 45 WATTS WITHOUT DISTRESS AND THE HEAT SINK APPEARS TO BE SIZED ADEQUATELY FOR PROPER OPERATION WITH SOME MARGIN OF SAFETY.

NOISE TESTS WERE INCONCLUSIVE. NOISE WAS TOO LOW FOR ME TO MEASURE SO IT IS PROBABLY OK. A FINAL TEST WITH 13.6 VOLTS SHOWED 24 WATTS OUT WITH LITTLE OVER 4 AMPS. LOOKS PRETTY GOOD. JOE, K5JB

Central Oklahoma Radio Amateurs

FROM THE C.O.R.A. SECRETARY...Kay, WD5DYJ

The last C.O.R.A. meeting held (Thursday, July 17th) consisted primarily of final preparations for Ham Holiday '80, and by the time each of you receives his/her copy of this C & E, we will have met again. So, for the present time, I am left with little to report.

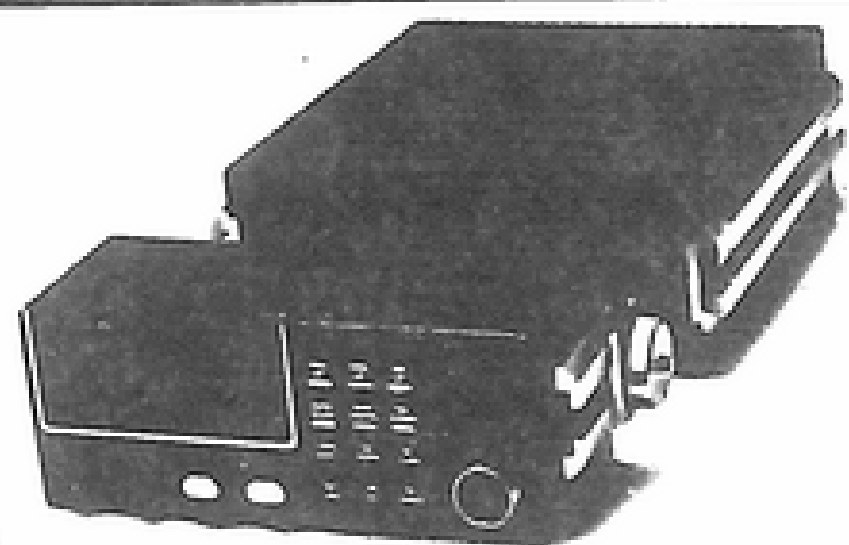
In my opinion, Ham Holiday '80 was a success, and the majority of those in attendance had a very enjoyable time. Preparations for Ham Holiday '81 must begin immediately--any suggestions on how those involved in the planning stages of this big event can make it a better one are certainly welcome. We all need each other's ideas, and most of all, your support. Don't pass up an opportunity to be a part of the action--become involved.

I am proud of C.O.R.A. and the part it has played in bringing Oklahoma Amateur Radio Operators closer together. I look forward to another active year in C.O.R.A. and the planning of Ham Holiday, and hope to see many, many more of my fellow amateurs become involved, too. You'll never know the pleasures that come from being active unless you give it a try. -73-

HAM HOLIDAY '80 PAID ATTENDANCE 1340
THANKS TO ONE AND ALL FROM YOUR CORA'

IN STOCK FOR IMMEDIATE DELIVERY!

AZDEN[®]



REVOLUTIONIZES THE STATE OF THE ART

The AZDEN PCS-2000 is a 2-meter vhf fm transceiver featuring microcomputer frequency control, 6-channel memory with scan in three modes, full-band auto-scan in three modes, standard repeater offsets, and accessory non-standard offsets. A large LED display facilitates easy, quick frequency determination. The PCS-2000 covers the entire 2-meter band 144.000-147.995 MHz in 10-kHz, steps with a +5 kHz switch for a total of 800 channels.

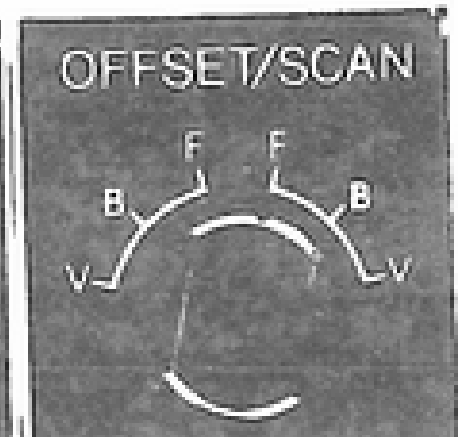
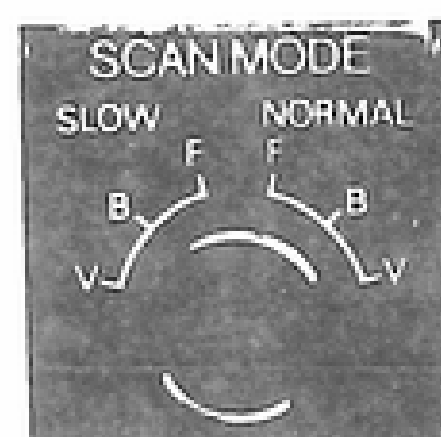
SUPERIOR COMMERCIAL GRADE 2 METER FM TRANSCEIVER

**FALL
SALE**

\$259⁰⁰

ALSO IN STOCK.....
KLM AMPLIFIERS
PA15-80 & PA15-160
FOR TWO METERS

KLM ANTENNAS AVAILABLE



AZDEN

WATTS ELECTRONIC SALES

205 SOUTH MAIN
VICI, OK 73859
405-995-4761



WS PAA

EDITOR: Bob Graham, WB5NSV 677-8685

RANDOM WORDS FROM THE PRESIDENT:

Well here it is ,that time of the month again,you know C&E time. I have heard it said that no news is good news ,well I not sure that is always true. You know it's sure boring to read the same old stuff every month,some times I think a lot of you out there don't even read your C & E. You know there are a few people out there that puts good stuff in the C & E. I would like to see more of you put your two cents worth in writ ing,so come on and send your articles in,so they can be printed.

The regular meeting of the AeroNautical Center Amateur Radio Club for the month of Aug. was held at Will Rogers Park. Each year in Aug. the Central V. H. F. club invites ACARC to join them in a watermelon eating and seed spitting contest,well we didn't spit many seeds but we sure eat a lot of watermelon (burp) ,well anyway I would like to thank Jim Williams, K5VRL for getting all the super melons they are the best I have eaten in many a year. All of you who missed this meeting missed the best one of the year. THANKS JIM. (burp)

The next meeting of ACARC will be the 5th of SEPT. at the Aeronautical center, our program will be presented by DR. Wallace Friedberg from the Aeromedical Institute, he will talk to us about the effects of Electromagnetic Radation on the Human Body, don't miss this one...

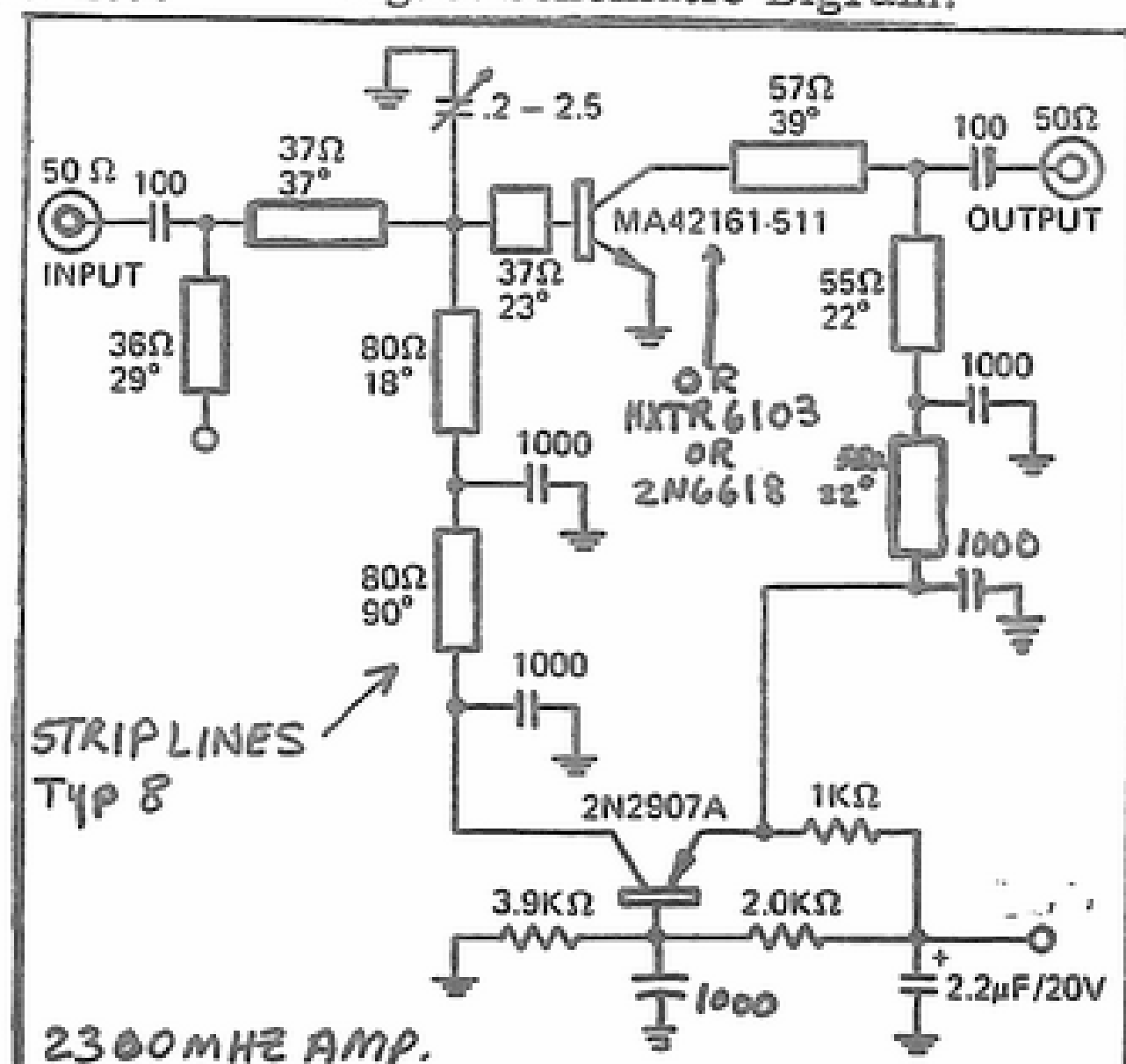
The Oct. meeting of ACARC will feature a 10% Auction ,the doors will open at 6:30 p.m. so you can bring your stuff in and look around at the other goodies . Rules of the auction follows.

1. Each item must be tagged with two tags one will stay with the equipment and one will be pulled off at the time it is aucted off, this will help with the book work.
2. No minium starting price will be set, if the price is two low you can buy back your own item, and it will cost you is 10% or \$1.00 which ever is less, so be sure you listen to the bid.
3. when you enter the room you will be given a number if you bid use that number it makes the bookeeping a lot easier.
4. All goodies brought to the auction must leave the auction. . . . there is no storage room.
5. When you buy an item you don't have to pay for it right then , wait and pay at the end of the auction, we will also pay you for anything you sell in the same way.
6. The tag you put on your equipment must have your name and address and telephone number on it(both tag's).
7. ACARC does not GUARANTEE any item...

Everybody come on out and join us for a good time..

Fig. 3: Schematic Digram.

73, Bob Pace, WA5CJG.



Amplifier for 2300 mhz:

This article deals with an amplifier that can be used on 2300 mhz band and will provide aprox. 15 db gain with a noise figure of less than 2 db. The circuit is designed around a Microwave Associates MA-42161 transistor and the printed circuit board is a Microwave Associates lay out. The circuit is very broad band and I have also tried the H/P HXTR 6103 (2N6618) transistor in this circuit and found it to out perform the M/A device. The circuit board is made of teflon .032" thick double sided 1 oz copper. The circuit is a strip line type and all parts are mounted on the strip line side, there are some 14 feed through wires that tie the two sides of the printed circuit board together, be sure these are put on the board as shown in fig. 2.

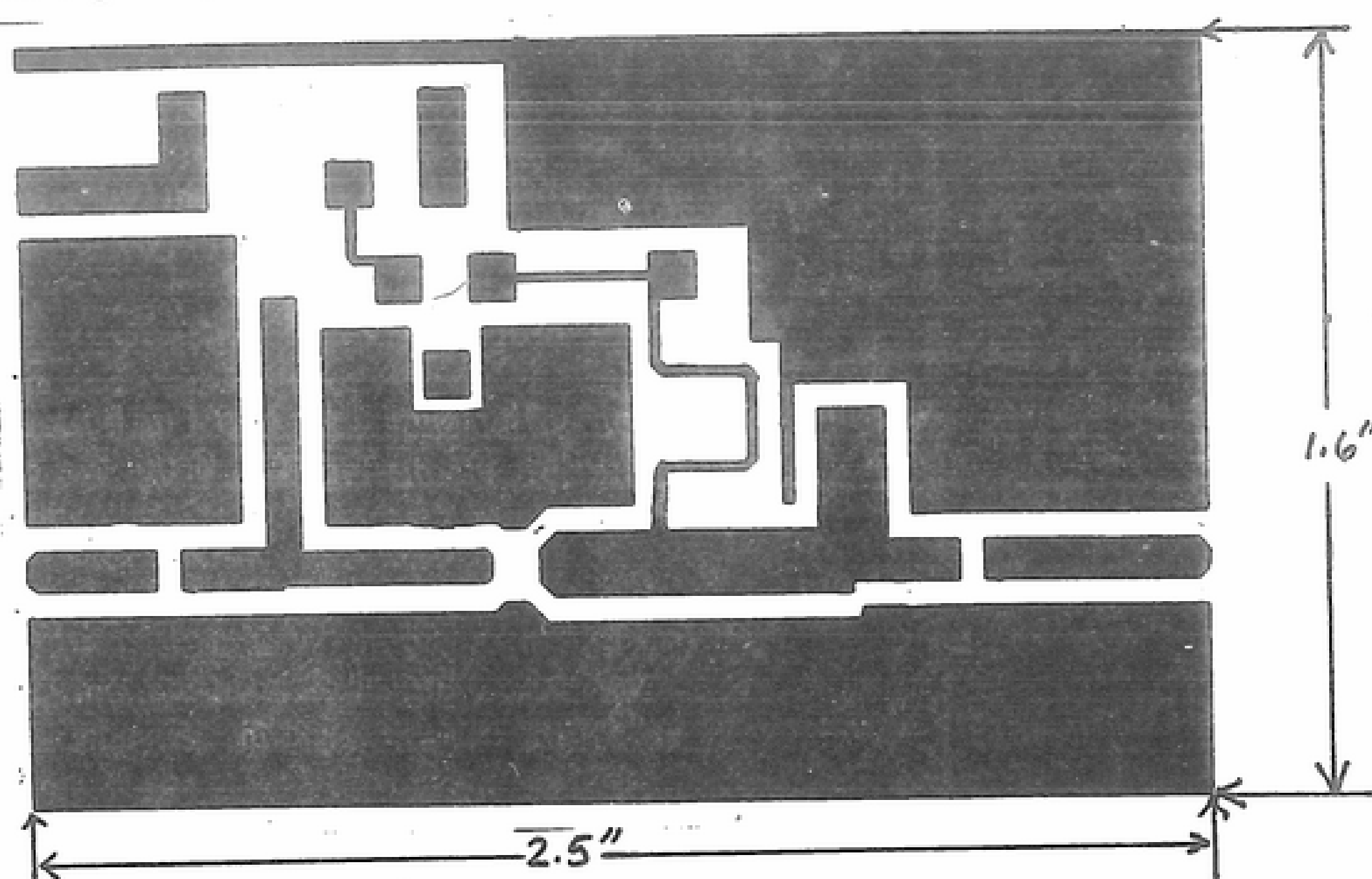


Fig. 1: Board is double sided .032" teflon with 1 oz copper.

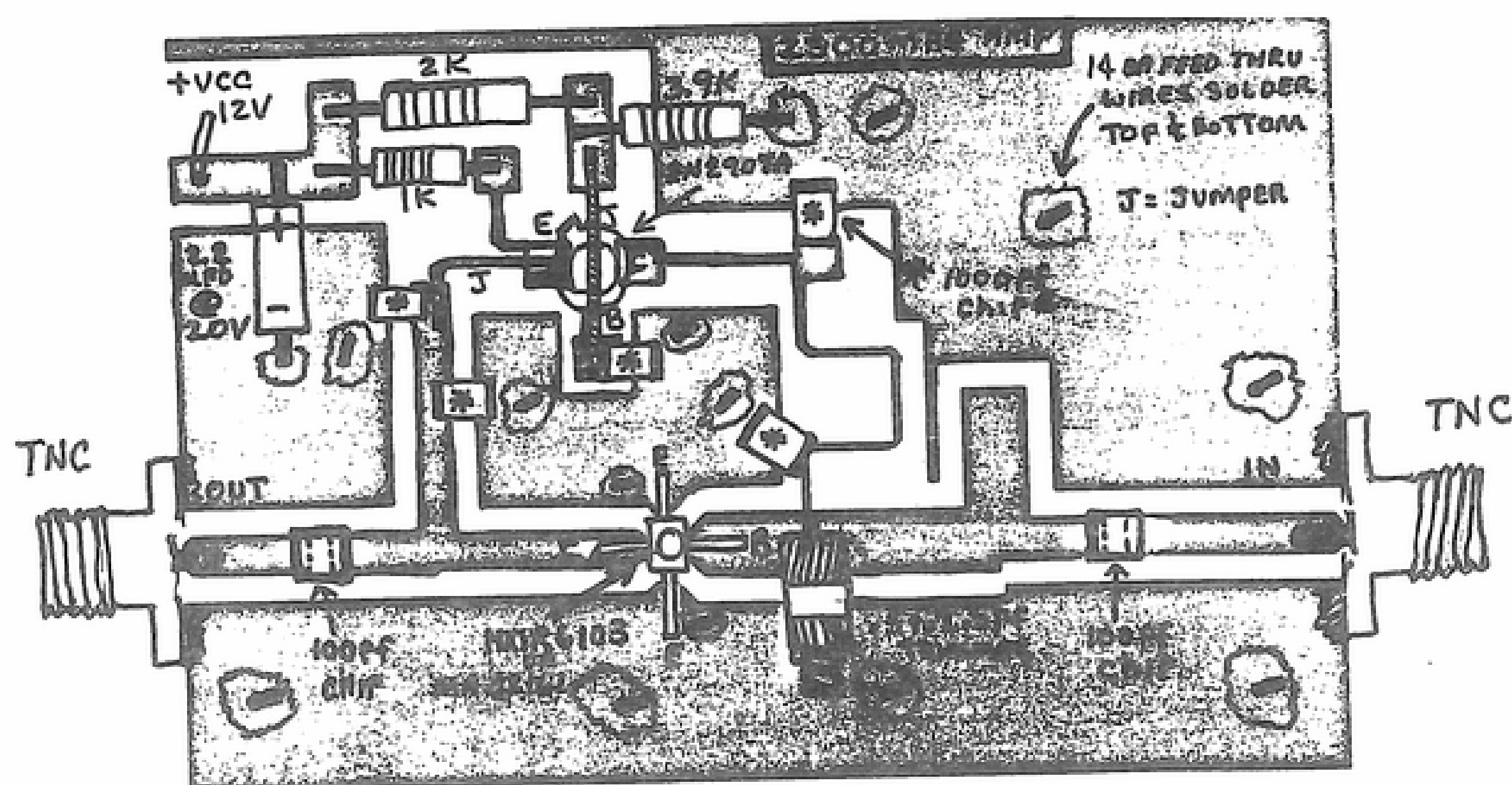


Fig. 2: Parts Lay Out

SEE DIA. ELSE WHERE IN THIS ISSUE.
 73, BOB WASCJG

W5 PAA



HAIR PIN LOOP

100 f

0.001 CHIP

4700

390

270 pf

820

0.001 CHIP

2K/77 pf

MRF 901

470

.5-5pf PISTON

FENWAL ELECTRONICS
PT# PB3201

73, BOB, WA5CJG

You know it's a bad day when your income tax return check bounces.

You know it's a bad day when you put your bra on backwards and it fits better.



GUIDING THE NEWCOMER

In the August issue of the bulletin from the San Antonio Radio Club our West Gulf Division Director, W5EDZ, wrote an editorial on the need of providing a continuing guidance to newcomers in the ranks of Radio Amateurs.

The point is well taken. We do a fair job of assisting prospective Radio Amateurs in their studies with the International Morse Code and with electronic theory and even with that small smattering of practices contained in FCC Rules and Regulations. When the tyro gets a license, though, all coordinated effort at guidance stops, stops with a dull thud!

Then, though, is just the moment the tyro most needs guidance. He has learned to walk; now he needs to learn to walk safely and within designated pathways.

Mankind is so constituted that its group activities are constrained within rules, practices, laws, traditions, etc. Amateur Radio operation is no exception to that universal obligation. In addition to formal laws, rules, and regulations, we have a vast body of informal "standards." Any student of management will tell you that informal canons are far more powerful in determining the behavior of a group than are the formal edicts issued by titular sources. And so it is with Amateur Radio.

But how do we usually let the newcomer become familiar with and indoctrinated with these informal standards, the traditional operational practices of Radio Amateurs? The answer is simple but deplorable: We toss them into a pot with other tyros and let them stew up a mess of practices that bear only a small resemblance to those of seasoned Radio Amateurs. And then we moan about "those damn' lids who carry over CB practices."

Those who start on radiotelephony are lost beyond all redemption. You doubt that? Then listen on the General Class section of the 7-MHz band.....and hear the 27-MHz band echos. Then confirm the opinion by listening to 2-m FM.

Those who start on radiotelegraphy are not totally beyond saving. They have their faulty procedures, of course, but with sufficient contact with seasoned Radio Amateurs there's hope they'll realize the traditional procedures are soundly based upon effective communication by telegraphy.

Almost without exception the radiotelegraph tyro says with his key exactly what he would say with his voice into a CB microphone.....with all the time-consuming misuse of radiotelegraphic abbreviations and prosigns that are dear to the heart of the CBer. By doing so, he consumes so much time there's little chance of real communication. That (sometimes) leaves him with a poor impression of Amateur Radio, especially radiotelegraphy. So he pines to upgrade to a status that'll permit radiotelephony. Good! One always applauds upward progress. But why let the tyro miss the pleasures of effective radiotelegraphy?

Why not walk (you walk) with the tyro as he takes his first steps along the pathway leading from "newcomer" to "seasoned Amateur"? But as you walk, make damn' sure you're leading along the right path! Having an old call is no absolute guarantee of being the repository of knowledge of correct operational procedures! Don't be too proud to do a bit of research through authentic sources to ascertain what's right and what's just what you thought was right! Be a guide but be a good guide!


W5JJ




EDITOR: Virginia Beneda, 825-3302

HAM HOLIDAY HAS COME AND GONE, BUT OLD HAMS KEEP KEYING ON!

Ham Holiday was the center of discussion when the Wheatstraw Club met for their regular August meeting hosted by the Calumet members, and we really must congratulate our program committee for a job well done and beautifully executed. Many hours of research and planning were put into coordinating something to interest everyone and you did an admirable job. (So well in fact they have been requested to play a return engagement in 1981) The Intermode Party seems to have been the "Belle (or Bull) of the Ball", but did I hear of a little "Hanky-panky" in making contacts? Oh, well! All's fair in love and war, and this was war with everyone loving it. Our own "Take Me To Your Leader" image WD5JNT came in third so we are real proud of you Ted. About the only real need I heard voiced for next year was a hospitality room for the men. However, not being much of a segregationist I would be in favor of a combined hospitality room with only the activities being separated. The women had some really good presentations. I'm not aware of who may have been responsible for these programs but whom-ever-you-are you did good!

We did have a regular call to order, reports and business meeting. A letter was read from K5NK Chuch Wilhite, President of CORA, thanking Wheatstraw for services rendered to Ham Holiday and CORA. A request was made by our president for a third representative to CORA and we do appreciate K5VRL Jim for agreeing to serve in this capacity. WB5PFW Ralph was reimbursed for the battery used on field day plus getting a big surprise when Goldie, YL of WA5PFK Ralph, presented him with a great big beautifully decorated  cake to go along with the delicious home made Ice Cream furnished by the Calumet hostesses, so all-in-all it was the finger lickin' good meeting as was predicted. K5GGL George will be our Net Control for August. Join in on 01-61 Wednesdays @ 9 PM - Visitors always appreciated.

W5MGZ Perry and WA5FFE Fred invited the group to Weatherford for the September meeting and . Sounds good, huh? Wonder if a Watermelon seed spitting contest could develop? K5VRL Jim also invited the group to a watermelon feed in OKC on August 15, so if anyone goes watermelon hungry it has to be their own fault. Meeting was adjourned to meet at the park in Weatherford in September. Drive downtown, turn north on Caddo street until you come to Clark Park - monitor 146.52 simplex if you need directions. See you September 7.

73,

WB5VTM

P.S. Surely meeting in the park will bring a good rain.

FOR SALE: Heathkit HW-101 xcvr, 10-80 meters, CW filter, AC power supply, speaker, mic, extra set finals, 3 years old, like new, \$325.00. Don Sullivan, WB5RAX, 787-0092. OKC

FOR SALE: Heathkit SB-101, mic, AC power supply, speaker and all manuals - all for \$275.00. Also Drake TR-22C, xtals for 8 channels and the local repeaters, nicad batteries, Drake AC power supply and all manuals for \$140.00. Bill Oliver, K5KDR, phone 329-6333.



The August meeting of the Oklahoma City Autopatch Association was a very lively one with Doc, WA5CZN, having a ball running the elections. Much to Doc's relief, a motion to retain all present officers for another term was declared out-of-order. It was worth attending the meeting to see the expression on Doc's face.

A new slate of officers were chosen for the coming year. They are:

President - Chuck Wilhite, K5NK	721-4926
Vice-President - Henry Israel, N5IH	722-3848
Secretary - Clara Storm, WD5KFT	495-6228
Treasurer - Zach Zachry, WB5QPI	732-2888

I would like to take this opportunity to express my appreciation to those who placed their confidence in me by electing me as the new president of the club. I don't know if this is a compliment or not, for it is a big job. All I can say is, that I will do my best. I welcome your suggestions on how we can make the club better. I will need help from all members. One of my main objectives is to make the club a more active club and to increase attendance at the meetings. Hopefully, we can get some good programs lined up for meetings, and your suggestions would once again be appreciated.

I feel we will have a good year. Henry has previously served as the Vice-President of the club. He will be the new editor of the club for news to the C&E. If you have articles you would like to see published, please give them to Henry.

Clara is a professional secretary by trade, and should make an excellent secretary for the club.

The adoption of the recent proposed constitution and by-laws provide for us to now have a treasurer and a secretary. Zach is known for his ability to keep a close watch on funds, and should be able to properly maintain an adequate club account.

A DX Association is being planned for the Oklahoma City area, and radio amateurs with a particular interest in HF DX'ing are invited to join the new "Oklahoma DX Association" - OK - DX.

Members will have a 24 hour monitor frequency (on 2 meters) enabling them to know instantly when and where the elusive DX pops up. DX and QSL information resources of members can be shared for the benefit of all. Quarterly meetings will be held to present topics and speakers of interest to DX enthusiasts. It is possible that DX'peditions may be sponsored on a limited basis.

Please contact George, AD1S (722-6195) or Henry, N5IH (722-3848) for further information. Let us have your ideas and suggestions for "OK - DX".

SEPTEMBER MEETING: Please don't forget the September meeting. The proposed adoption of two new by-laws will be voted on at that time. They were published in the August issue of the C&E. Make your vote count.

We will try to come up with an interesting program for the September meeting. If you would like to put on a program, give me a call. That keeps me from having to call you.

K5NK



As most club members know, our newly elected Vice-President, Mr. Henry Israel, N5IH, is an insurance salesman. Henry, like most agents, will sell an insurance policy to anyone. One of Henry's clients recently had an accident. Henry felt he needed more information concerning the accident and asked the client for this. He received the following statement from his client.

Dear Sir:

I am writing in response to your request for additional information. In block number 3 of the accident reporting form, I put quote - poor planning - unquote as the cause of my accident. You said in your letter that I should explain more fully, and I trust that the following details will be sufficient.

I am a bricklayer by trade. On the day of the accident, I was working alone on the roof of a new six story building. When I completed my work, I discovered that I had about 500 pounds of brick left over. Rather than carry the bricks down by hand, I decided to lower them in a barrel by using a pulley which fortunately, was attached to the side of the building, at the sixth floor.

Securing the rope at ground level, I went up to the roof, swung the barrel out, and loaded the brick into it. Then I went back to the ground and untied the rope, holding it tightly to insure a slow descent of the 500 pounds of bricks. You will note in block number eleven of the accident reporting form that I weigh 135 pounds.

Due to my surprise to being jerked off the ground so suddenly, I lost my presence of mind and forgot to let go of the rope. Needless to say, I proceeded at a rather rapid rate up the side of the building.

In the vicinity of the third floor, I met the barrel coming down. This explains the fractured skull and broken collarbone.

Slowed only slightly, I continued my rapid ascent, not stopping until the fingers of my right hand were two-knuckles deep into the pulley.

Fortunately, by this time, I had regained my presence of mind and was able to hold tightly to the rope in spite of my pain.

At approximately the same time, however, the barrel of bricks hit the ground-----and the bottom fell out of the barrel. Devoid of the weight of the bricks, the barrel now weighed approximately fifty pounds.

I refer you again to my weight in block number eleven. As you might imagine, I began a rapid descent down the side of the building.

In the vicinity of the third floor, I met the barrel coming up. This accounts for the two fractured ankles and the lacerations on my legs and lower body.

The encounter with the barrel slowed me enough to lessen my injuries when I fell on-to the pile of bricks, and, fortunately, only three vertebrae were cracked.

I am sorry to report, however, that as I lay there on the bricks - in pain, unable to stand, and watching the empty barrel six stories above me - I again lost my presence of mind ---I let go of the rope.

K5NK

I HEARD: BS has photographers chasing his bikini clad sailor.....JJ doesn't need five extra hot kitties at his age.....CXW splattered his new water bed all over the highway.....PTQ's XYL wants to know who Clara is.....KFT asked BS for a date.....KFT likes to sit on the boss's lap.....M is trying to make the top of all lists.....IH is planning on having another antenna party.....CZN is working on his EXTRA CLASS.....FXP stays busy keeping momma happy.....and a whole lot more.

K5NK

AMATEUR RADIO EMERGENCY SERVICE



Bill Skipper, KB5BS,
449 N. Air Depot #20, Midwest City, OK 73110

I would like to thank all the amateur radio operators in the Oklahoma County and surrounding areas. Thanks to the support of the local 146.22/82 Weather Net and the weather information coming from all over the state into the National Weather Service. The Oklahoma County ARES group was presented a Letter of Appreciation and Certificate, found in this issue of C&E. I believe that the Amateurs on the 22/82 Weather Net and the 3.9Mhz Weather Net should be reconized for their great work to create One of the best weather information systems in the United States. Every Amateur Radio Operator in Oklahoma should be proud to be involved in this system. Thanks

WD5EXY
N5BEQ
N5PS
K5VRL
K5SJV

N5BEV
WD5IRB
W5OZE
K5YAO
WA5PDH

WD5IHF
WB5PWZ
WB5TKG
W5WZM
N5GE

May 27 at 6:00PM Jack Muse of the American Red Cross contacted me about the Wilshire Nursing Home loosing all their phone lines. Amateur Operators were asked to provide Emergency Communications till they recieved phones again. 7:30PM the first Ham was in operation at the Nursing Home. The operators above were directley involved in the operation, most of which operated for 6 Hour shifts. Thanks to the quick and effecient procedures of the operators, several patients were admitted to the Hospital Quickly and effecintly. Shortly after one patient was admitted he had a heart attack and since he was in the Hospital he recieved proper attenition. All the operators did an excellent job and were thanked by Doris Ligon R.N. She also sent a copy of a letter that was recieved from the patients Doctor, it briefley stated that the HAM operators were directly responsible for the patients life. Next time you run into any of these HAM'S you might thank them for Demonstrating again that Amateur Radio Operators can be relied upon to deliver reliable imformation.

Ham Holiday 80 had more surprises then met the eye. That Friday at midnight amateurs were called upon for a search party in the southwest area of Oklahoma county to find a young boy. To my deepest regret we didnot find Michael Gann, His body was discovered a few days later in a house 1 1/2 miles west of Lake Overholster. The Amateurs that were involved in the search stayed up all night, most of which missed Saturday morning at Ham Holiday. Once again I'am thanking all these hams for their efforts.

S.E.T.
SIMULATED

S.E.T.
EMERGENCY

S.E.T.
TEST

There will be a SET OCT. 18 and 19. This, is the large nation wide Test, so lets have a good showing. The Sep. ARES meeting will have a pre-discussion on the test so, GET INVOLVED and lets show ARRL how its done. SEE YOU THERE, 73 DE KB5BS Bill

SELL: Dentron DTR-2000L 2KW 160-10 metr. linear \$875.
ICOM desk mike \$25. Thorens TD-125 stereo turntable,
Shure V-15 cartridge, \$115. Mac, K2GKK 672-4947

FOR SALE; Regency HR-2B, like new, full of crystals, including AD MARS Firm \$150.00. Harry Watts, WB5DGT, (405) 995-4761, Vici, OK 73859.

FOR SALE: Galaxy 550A -- transmitter problem, will sell as is \$225.00. New Leader oscilloscope \$125.00. Signal Generator \$45.00. N5AUH 354-2061

FOR SALE: Motorola HT-220. 2 freq. with rubber duckie and TT pad. Brand new battery and charger WB5YII 732-1724

FOR SALE: SBE 34 4 band HF SSB XCVR. 115 AC and 12V DC Power Supply built in - \$200. Bob, W5HXL 942-5375

antenna	gain (dB)				E. R. P. (%)			
A .	R	-0.34	-2.14	-3.34	100	92	61	46
B ⊥	+0.34	R	-1.80	-3.00	108	100	66	50
C †	+2.14	+1.80	R	-1.20	164	151	100	76
D ⊥	+3.34	+3.00	+1.20	R	216	200	132	100

A = "isotropic" C.Y.
WB5TKG
B = $\frac{1}{4} \lambda$ ground plane Vertical
C = $\frac{1}{2} \lambda$ dipole Vertical
D = $\frac{5}{8} \lambda$ ground plane Vertical
R = reference (compared to)
E. R. P. = effective radiated power



Ann's Chicken Fry House

*(Specializing in Chicken
Fried Steaks)*

(Home of the Chicken Fry)

Food you will enjoy . . .

Service you will appreciate!

4106 N.W. 39th Street
Oklahoma City, Okla.

#1 Ph. 943-8915

#2 Ph. 373-1677

422 Piedmont Rd. North
Piedmont, Oklahoma



U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL WEATHER SERVICE
Southern Region Headquarters
819 Taylor Street
Fort Worth, Texas 76102

July 25, 1980

To the Members of Oklahoma County ARES:

Individuals and groups of Oklahoma amateur radio operators have been providing assistance to the National Weather Service for many years. Yet, during the past year, significant additional contributions have been made by the amateur community in support of National Weather Service operations at our Oklahoma City Forecast Office. Not only have major strides been made in the collecting of reports, but also in the dissemination of weather information.

While many groups and individuals have contributed to this effort, no single organization has made more of a contribution than the Oklahoma County ARES.

In recognition of this support, I proudly present this Special Service Award to one of the finest groups it has ever been my pleasure to work with.

Oklahoma is a safer place to live because of the services of ARES and other amateur groups across the State.

Sincerely,

Larry E. Mooney
Larry E. Mooney,
Regional Preparedness
Meteorologist



United States Department of Commerce
National Oceanic and Atmospheric Administration

SPECIAL SERVICE AWARD

Presented to

OKLAHOMA COUNTY ARES

*in recognition and appreciation of
Significant Public Services rendered
for the National Weather Service*

DATE ISSUED:

Raymond E. Clark
SUPERVISOR

George O. Cushman
DIRECTOR, NATIONAL WEATHER SERVICE



EDMOND AMATEUR

RADIO SOCIETY

147.72/147.12

Sorry about that Don but it is next month for your guest column!

AUGUST MEETING: Another memorable Sunday afternoon. Here we go with the highlights:

The club search for a generator unit may be nearing fruition. The 10kW unit on the DeMand county estate down Noble way appears to be in working order - or at least enough so to try to get it up to Edmond and stored someplace where we can work on it at our leisure. Our greatest need right now is a truck suitable for loading, hauling and unloading. One of those oil country rigs with a rear winch and a loading roller at the back of the flat bed would be ideal. After that it appears to be a question of some new gas lines, a tune-up, and check out of the generator; followed by a suitable trailer or conversion of the existing skids to a trailer configuration. If anyone happens to total a Citation we might bid on the rear axle. Then we need to come up with a 1930's vintage front axle, radius rods etc. for the other end. An alternative would be totalling two Citations and we can rig the unit similar to a dual axle boat trailer.

The Novice Class closes formal sessions Monday 25 August. As of Monday evening 18 August we had a total of 8 students on the track as follows:

- 1 - Novice written exam administered.
- 2 - Novice exam application at FCC.
- 2 - Additional students qualified on code.
- 3 - Still in the running and coming on fast.

Your scribe and principal novice instructor would like to take this opportunity to thank one and all for your splendid support. Special thanks go to Bill DeMand for providing the classroom and the overhead projector in addition to teaching a session; to Bill Wright and Dee Mize who shared the teaching chores; and to Howard Wise for the preparation of code tapes. And last but certainly not least, to Don Brown for bringing us 3 lovely students of that opposite sex to brighten our evening, and for being there to help when I got off track.

Future Training: There is much talk, in fact it is building to a clamor, about a repeat of the Novice Class this fall. I am game but it will take more help to get the job done properly. First, I am not at all satisfied with the ARRL Training material. The code teaching tape is good but "Tune the World" leaves a lot to be desired. In fact it is really pretty poorly written -- lots of puffery and undefined jargon with very little substance. (NOTE: The opinions expressed here are definitely those of your scribe and do not necessarily reflect the position of the club or CORA.)

E A
R S

President Ken Stepp was observed taking the digital counter from his FT101ZD out for a lesson on how to count. Seems it didn't learn it lessons well at the factory.



We need to know if there is enough interest to support both General and Novice classes. If you or anyone you know would be interested in either a Novice or a General class, contact one of the club officers.



Frank McCollum has offered us guidance in the form of access to his lesson plans etc. and I'm sure his several years of experience will be of much help. Thanks Frank!

A considerable discussion was had concerning code practice on the repeater -- which yielded very little support. However, the alternative proposal of code practice on the 10m phone band after sundown generated considerable support. The proposal is to use an otherwise dead spot on the phone band and communicate with the session participants by voice for instructions, comments, change of schedule or pace, etc.

NOTICE TO CORA MEMBERS -- If you are interested in participating in CODE PRACTICE ON 10 SESSIONS, contact Ken Stepp, WD5HXX on 72/12 or at 341-4874.

We are advised that the code practice proposal was presented to AUTO PATCH at their August meeting and that they authorized a statement of support of the program. That is a great start.

Edmond Amateur Radio Society now has a LIFE MEMBER in the person of Martin Vinson, WD5FEI, our repeater trustee. The status was awarded by a duly presented resolution from three club members, a motion for acceptance and passage which received enough seconds to pass without a vote, and a unanimous vote for approval. The Life Member status was granted in recognition of Martin's tremendous past and present contribution to solid growth and vigorous good health of EARS. Congratulations Martin!

Our repeater now has a new link antenna on the tower and our borrowed hardware has been returned to the donor. In an additional development Art Roberts has become a new member of that elite group who have donated to the repeater fund. Give Art a hearty thanks when you see or hear him.

Our program consisted of the showing of two training films courtesy of Bill DeMand. The first was on electron flow and the second on Doppler effect. Old but very well done.

EARS

**** WELCOME ANOTHER NEW MEMBER ****

Bill Boland KA5ESA Tech., Lic. since 1978
3008 Rankin Terrace, Edmond 341-0123
Also MORI and 76ers

You stay-at-homes missed out again! President Ken had acquired a polar chart and several accessory items for door prizes courtesy of Chuck at Kryder's; and Charles Frodsham contributed a "Keep Every Body Country" bronze belt buckle. Your scribe came home with a BNC to Type P adapter. I can use more of that kind of loot.

Bill Wright was observed in the final stages of building a digital readout for his Drake HF unit. The unit in question is a-la QST January '80 -- with certain mods of course. Bill's unit will have 6 readouts to record the VFO plus the IF frequency which is the operating frequency. Thats what he said.

NEED A MOBILE 1/4 wave 2 meter antenna? Some of the discount houses are selling a center loaded 11m antenna with magnetic base, 17 ft. of coax and a 259 for \$12 or \$13, which is about 19" long. Simply slip off the vinyl jacket covering the loading coil and reduce the total wire and wand length to 19' $\frac{1}{4}$ ", or better yet tune it with a vhf SWR meter. Replace the vinyl jacket and you have an excellent performer on your hands.

I am advised that one Florida supplier is offering a "J" configuration antenna of wire which can be coiled up in a brief-case for travel; then uncoiled and be pinned up on the drapes in a motel room for some local hamming away from home.

★ Don Brown, WD5DGC, has just acquired an ICOM 2AT. Needless to say his 2 meter activity has picked up considerably, and he finds he can work our repeater from Midwest City. That ought to open up new membership territory for us. ★

★ Novice Class instructor Clarence, KB5RR, met one of lifes embarrassing moments when his hf rig refused to load for the benefit of the class. They just had to settle for a lecture instead. So far no luck locating the problem. ★

Next month your scribe will be away enjoying the grandeur of the Rockies in Idaho, Montana and Wyoming, and Don Brown will be taking over. Come on guys, pitch in and help him. He can't publish promise: of contributions which never materialize. So pick up the phone and squeal on your Buddies so he will have some dirt to print.

SK EARS DE KB5RR CL

Shawnee Amateur Radio Club



W5SXA

EDITOR: Jay Tingler, WD5BUQ 273-3033

MORE NEW CALLS: Some new faces (and call signs) showed up at our August 12 meeting. They were: DAVID STANLEY, N5CGZ; CHUCK DAUGHNAT, N5BMV; and JERRY CAIN, KA5JHW.

SCM VISIT: 'Lustrous Pot-n-tate Leonard Hollar, WA5FSN, Section Communications Manager for Oklahoma was our honored guest on August 12...He brought a film and chatted at length about the goings on in the HAM business in general...We enjoyed the visit, Leonard, - thanks.

LOCAL HAM WINS AWARD: Leonard also brought along an award for one of the locals. Seems that Paul Brown, W5IQL, had 100% participation in the O.T.W.N. during 1979 providing daily weather conditions for Bethel Acres. That's just one of the many services Paul provides. He is like a good strong corner post to our little piece of the HAM world. Thanks, Paul!!

COUNTY FAIR TIME: Let it slip up on you again? Well it really is that time again and this time SARC is going to have a display of Amateur Radio stuff. We will share a booth with Tecumseh Civil Defense. So, come on out folks, to the new fair grounds west of Shawnee and lets see what is going on.

SHAZAM!!!! I have been chastised for not reporting some three months ago that the KB5RS shack was lighteninged almost out of existence. Sorry about that, BOB. I mean really sorry about the strike - and that I didn't know about the problem. Anyway - I understand he was in process of moving to another house (1205 E Chandler) and the insurance had already been transferred - ouch! But things are looking up and getting back to normal at the new location.

OLD FACE: Good to see John, KE5N, up from Wanette (or over from Norman) the other night. Johnny's about half way to an EE degree now. Seems only yesterday.....

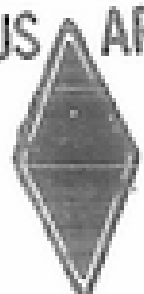
CLASSES: Pretty sure there will be Novice and Tech/General classes this fall. The details have not been worked out yet but will probably start right after the county fair. Don't even know if we have instructors yet. How's that for confidence?

THE WELLSTON CONNECTION: It is the custom for Earl, WB5ZBA; Ron, WD5CIG and the Old Philosopher to get together with the XYL's from time to time for a little socializin' - usually at the Real's in Wellston. Well -- Earl has this sick radio you see; and since we had not been up there for a while we decided to take it up to Ron's and see what we could do with it. While I enjoyed the Dr. Peppers and the pie a-la-mode, Earl watched Ron try to fix the radio. Well -- it seems the modulator wont module or the amplifier wont ample or something -- I think mostly the oscillator wont oscil very well. Besides Earl kept getting into the RF some way or another and we couldn't tell for sure if it was his radio or his ears that was making that funny looking smoke. Well, anyway ----- Earl is all right now but the radio just lies there on Ron's bench looking old. Meanwhile, the girls were in the house trying out Jan's new microwave oven. They must have been favorably impressed with it because on the way home Louella and LaDawn kept telling Earl and me how it was that they were going to get theirs.....(?)

THE TECUMSEH CONNECTION: Frontier Days went off without a hitch as far as I know. Bill, WB5TZQ was net control for the five-mile run monitoring net with Bob, K5LZF; Herb, W5TQZ; and the Old Philosopher providing mobile units. I guess Earl, WB5ZBA, was in on that too. The local Lions has a pancake feed to benefit the senior citizens center and that was a good way to start a Saturday. After the race we had a chance to take in the flea market at Tecumseh Square. That's a regular Saturday morning ritual for some anyway.

THE DIS-CONNECTION ... 73 Jay / WD5BUQ

ALTUS AREA



AMATEUR RADIO
ASSOCIATION

EDITOR: Mike Schenkke, W5VXU 482-1797

The Altus Area Amateur Radio Association held its monthly meeting in the Altus City Park, Thursday, August 14.

Present were some dozen members including a couple of esteemed men from the Vernon Club.

A fast business meeting was conducted by Mike, W5VXU, in the absence of Loren WA5CBF, who could not make this meeting. The members present confirmed that the dues to our club are now \$8.00 per year per member with \$3.00 going to pay for the C&E subscription.

Mike gave a brief description of the happenings at the recent CORA meeting at Oklahoma City as well as the new requirements for MARS membership for novices.

The financial report disclosed that the club has \$251.31 in the bank after all income and expenses to date. Not included in this figure are the three members who renewed their membership during this meeting. The Treasurer indicated that there are still three members who are overdue with their annual dues and everyone should check their C&E label for their own due date.

It was announced that there will be participation of amateur radio at the Mangum Flea Market to be held 30 Aug. A transceiver on HF as well as VHF will be set up and some materials will be on hand to distribute to the general public. Messages to family etc will be accepted there also.

It was noted that there were already nearly 15 prospective members to the new novice class scheduled for starting on 2 September at Altus AFB with up to 25 expected by class time. A request for Elmers was presented with only light interest shown.

Chuck, WB5MJS, advised the membership that chicken would be the prime item on the menu for the annual cookout to be held at the first pavilion at Lake Lugert-Altus on 13 September.

Among the many people who brought goodies for this icecream social were Brenda with cookies, Mary with cake, Audrey with cake, Chuck with cokes and Mike with ice-cream.

Since this is the first time that an amateur display has been planned in recent times for Mangum we'll let you know how it came out the next time around. If successful, there may just be many more in towns around this area thus presenting the face of amateur radio to the general public in their own back yards, so to speak.

CHOCTAW ARC



EDITOR: June Allen, N5ARV

The August meeting of the Choctaw Amateur Radio Club was called to order at 7:25 P.M. by Bob, WD5EVP. Self introductions were made and all members and guests were made welcome. Usual reports were given and accepted.

Emergency communications during disaster or when need arises were discussed. C.Y., WB5TKG invited everyone to participate in ARES net on 1676, 9 P.M. each Monday.

Meeting was turned over to WB5SVN who showed slides of Korea. The slides were very beautiful and Jack's explanation very interesting. Hope to see more of his slide collection in the very near future.

The president of the club sent word that he was enjoying his vacation very much in Germany as the temperature was 65° (sounds good compared to our 100° plus).

The September meeting of the Choctaw Amateur Radio Club will consist of a watermelon feast to be held at John Miskelly Park, Choctaw, 8 September at 7 P.M. Everyone is invited. Club Members are to bring silverware, watermelons, etc. No business meeting is planned. See you then.

QUIT SQUAWKIN, START TALKIN

It is hard to understand why any person would invest the time, effort and study required to meet requirements for an amateur radio license, put the large amount of money and work needed to set up an amateur station and then refuse to participate in the normal accepted ham activities, such as public and emergency services, traffic, nets, etc., except to be critical of those who do.

I very frequently hear more and more references of 2 meter amateur radio being 2 meter C.B. and bemoaning the fact that C.B. operating practices are becoming a threat to the survival of the 2 meter amateur band. I am afraid that we must admit that this is becoming a fact and this is the fault of good ham operators who place themselves in an ivory tower and thereby surrender the band to poor operating practice. The ranks of amateur radio operators is steadily growing. A very large part of these new hams are coming from the ranks of citizen's band radio and are, for the most part, people who are interested in improving themselves. I cannot believe that these people are going through the hard work and spending the money to become hams for the purpose of degrading the Amateur Radio Service or bringing about the destruction of any band. I believe most are looking for help, seeking to learn and expecting to take constructive criticism without being resentful. I believe they listen intently to the examples set for them and hope sincerely to be known as a credit to their chosen hobby. If they hear good operators, they will be good operators. If all they hear are poor operators, they will be poor operators. If they listen and learn from good net control stations, emergency service operators, traffic handlers, and even good "rag chewers", they will follow those examples and enhance the Amateur Radio Service.

So you people of experience have an obligation to talk and train more than you listen, criticize or insult other radio groups. There is no better way to improve amateur radio than by the example we set for newcomers, who desperately want to join us as responsible, respected ladies and gentlemen. They need our patience, good will, and understanding. They need our constructive criticism, guidance, and encouragement, and most of all they need and I believe want our good examples. Use your radio, take your place in service, and lead by your good example. If we will all do this, amateur radio can and will become greater than ever.

- 73 - Winston, WD5ETB

Dwight Dennis WB5KRH August 16, 1980
1704 Lee Dr.
Altus, Oklahoma 73521

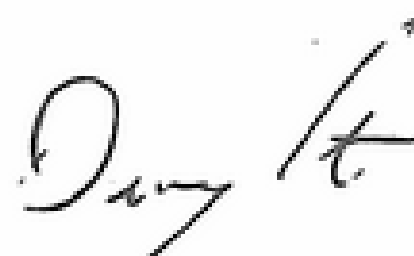
Mr. Chuck Wilhite, President
Central Oklahoma Radio Amateurs, Inc.

Dear Chuck,

In the August 1980 edition of the C & E I read Ron Recer KE9M's letter of resignation. I regret that he has resigned his position with such feelings toward CORA, its executive board, and the outlying member clubs. As to his feelings on the tremendous amount of apathy on the part of the radio amateur, I must agree with him. Yes, we do have an "Energy Crisis" within our ranks.

As a member of the Altus club I would like to express my appreciation to the members who put the C & E together. Unfortunately distance to Oklahoma City prevents very much participation by our club members in the production of the C & E.

I would like to speak for all of the outlying clubs in thanking CORA for preparing a fine monthly magazine which gives the Oklahoma amateur a statewide voice. The publication allows statewide communication, information, and an exchange of technical information which can only better our hobby both within and without. I personally know of no other state that can lay claim to this spirit of cooperation.



Dwight Dennis WB5KRH
Altus

SECTION 605 RIDES AGAIN (Or the FCC Plays "I've Got a Secret")

How many of you out there are familiar with the secrecy provisions (Section 605) of the Communications Act of 1934? Um, yeh, well, at least I can see that it is not unanimous. My next question is how many of you actually know whether the secrecy provisions apply to amateur radio? Now, I would imagine that, without much fear, that the number of you who have mastered the intricacies of §605, insofar as it applies to amateur radio may number less than the fingers on one hand. Especially confusing is that for many years, many amateurs have felt that the secrecy provisions did not apply to amateur radio as it does to CB or business band transmissions. The fact is that a recent decision handed down by the United States District Court for the District of Columbia upholding an FCC decision that amateur radio transmissions are indeed protected by §605 may make it illegal for you to reveal what you heard on that 75 meter phone QSO and if the transmission was not an amateur broadcast (?), you could be prosecuted for divulging the contents of that transmission. As the Vulcan, Mr. Spock, would say, "Fascinating."

BACKGROUND AND STATUTE

Buried in the recesses of the Communications Act of 1934 (last amended in 1968) is the now infamous Section 605, the secrecy provision of the Act. §605 provides:

605. Unauthorized publication of communication. -- Except as authorized by Chapter 119, Title 18, United States Code (Omnibus Crime Control and Safe Street Act of 1968), no person receiving, assisting in receiving, transmitting, or assisting in transmitting, any interstate or foreign communications by wire or radio shall divulge or publish the existence, contents, substance, purport, effect, or meaning thereof, except through authorized channels of transmission or reception, (1) to any person other than the addressee, his agent, or attorney, (2) to a person employed or authorized to forward such communications to its destination, (3) to proper accounting or distributing officers of the various communicating centers over which the communications may be passed, (4) to the master of a ship under whom he is serving, (5) in response to a subpoena issued by a court of competent jurisdiction, or (6) on demand of other lawful authority. No person not being authorized by the sender shall intercept any radio communication and divulge or publish the existence, contents, substance, purport, effect, or meaning of such intercepted communications to any person. No person not being entitled thereto shall receive or assist in receiving any interstate or foreign communications by radio and use such communication (or any information therein contained) for his own benefit or for the benefit of another not entitled thereto. No person having received any intercepted radio communication or having become acquainted with the contents, substance, purport, effect, or meaning of such communication (or any part thereof) knowing that such communications was intercepted, shall divulge or publish or publish the existence, contents, substance, purport, effect, or meaning of such communications (or any part thereof) or use such communications (or any information therein contained) for his own benefit or for the benefit of another not entitled thereto. This section shall not apply to the receiving, divulging, publishing, or utilizing the contents of any radio communication which is broadcast or transmitted by amateurs or others for the use of the general public, or which relates to ships in distress.

If you don't mind ten tons of gobbledygook, you might think that the meaning of the statute is straightforward. Actually, there is enough there to pack both your cheeks. It would take a small computer to keep the meaning of the two sentences over 100 words in length, but at least judging the last sentence, one might reasonably conclude that amateur transmissions are an exception to the web of secrecy. Not so, broadcast breath. We shall soon see that this is not the case.

Section 605 as it appears in the above paragraph (as last modified in 1968) is the latest attempt by Congress to legislate secrecy on the radio waves. The first reference to such a provision began back in 1912 under Regulation 19 of the Radio Act of 1912:

No person or persons engaged in or having knowledge of the operation of any station or stations, shall divulge or publish the contents of any messages transmitted or received by such station, except to the person or persons to whom the same may be directed, or their authorized agent, or to another station employed to forward such message to its destination, unless legally required to do so by the court of competent jurisdiction or other competent authority.

Section 19, 37 Statutes 307 (1912)

Additional legislation was proposed in 1924 with regard to the confidentiality provisions, but nothing was passed until 1927 when the following exception was added by Congress:

. . . (that) this section shall not apply to the receiving, divulging, publishing, or utilizing the contents of any radio communications broadcasted or transmitted by amateurs or others for the use of the general public or relating to ships in distress.

Section 27, Radio Act of 1927

In 1934, Congress enacted the Communications Act of 1934 with the provision under Section 605 very much as it now stands. In 1968 the additional falderrall "Except as authorized by Chapter 119, Title 18 U.S.C. . . ." was added to provide an exception for wiretap disclosures provided for in the Omnibus Crime Control and Safe Streets Act of 1968. This was added to prevent criminal charges for violation of Section 605 by police officers testifying in Court or otherwise as to conversations heard during wiretaps or bugging operations. With this exception, the language of 605 has remained relatively untouched since 1927 when the statutory exception for amateurs was added?

SO WHAT HOPPENED?

Author James Reston, Jr., sought to obtain recording tapes under the Freedom of Information Act from the Federal Communications Commission that the FCC had made during investigatory monitoring of amateur radio stations WD6DVI, WA6DTJ, both located in San Francisco and WB6MID/8R3 located in Jonestown, Guyana, and WB6MWH/8R1 located in Georgetown, Guyana, both in South America. The tapes were made by the Commission's monitoring facilities in May 1977, March, April, May, and October of 1978 related to the so-called People's Temple. (Notices of violation were sent to the two licensed amateur radio operators in May 1977 and in March, April, May and October of 1978 and fines were assessed.

The Commission had collected some 25 cassette tapes and four reels between the California and Guyana stations, not including one tape cassette made by an amateur radio operator and submitted to the FCC in July of 1978 as evidence to support his complaints about rule violations by the People's Temple stations. Why did Reston seek to let himself in for Excedrin Headache No. 73 by listening to all of these tapes? It was just a simple matter of converting the information on the tapes plus his other research into bucks in the form of a published book about Jim Jones suicidal antics. Don't take this wrong, James Reston is a very respected nationally known author, but there can be no doubt that the commercial possibilities of this book fueled this rather extensive (and no doubt expensive) effort to unscramble the vagaries of §605. It was certainly a heck of a lot more effort and \$\$\$ if Mr. Reston had only been interested in a little bedtime listening. And even more amazing, all of this from a statute honored only in the breach and certainly seldom enforced (and in this case, interpreted).

Reston had submitted an informal inquiry to the FCC General Counsel, Robert Bruce, in January of 1979 for the release of all materials held by the Commission regarding the People's Temple radio transmissions. This initial request was denied and in March of 1980, Reston then submitted a formal Freedom of Information Act request to the Full Commission.

The Commission responded in July of 1979 by releasing certain documentary evidence it had (various written records), but denied Reston access to the tapes in the Commission's possession. Among other arguments, the FCC claimed an exception to disclosure under Section 552 (b) (3) of the Freedom of Information Act which provided:

(This section does not apply to matters that are) . . . specifically exempted from disclosure by Statute. . . provided that such Statute (A) requires that the matters be withheld from the public in such a manner as to leave no discretion on the issue, or (B) establishes particular criteria for withholding or refers to particular types of matter to be withheld.

5 U.S.C. §552 (b) (3)
Freedom of Information Act

The Commission claimed that §605 met the requirements of (B) above that it established a criteria that specified all transmissions were protected except those listed in the exceptions. The Commission also claimed various other exemptions because of the ongoing Grand Jury investigation in California into the death of Congressman Ryan.

Reston had no choice if he wanted the tapes, but to go to Federal District Court in the District of Columbia (Appeals under the Freedom of Information Act are prosecuted through the District Court rather than to the Court of Appeals as would a normal Administrative agency appeal).

United States District Judge Joyce Hens Green issued a decision May 30, 1980 upholding the Commission's ruling denying Reston the tapes. The Court found that §605 did establish "particular criteria for withholding or refers to particular types of matters to withheld." Judge Green also held that the Commission was a "person" within the terms of Section 605 so that the prohibition against disclosure also applied to the Commission.

Having reached the point the Commission is bound by the statute, the Court looked at the exception itself:

. . . a further provision must be found elsewhere within
Section 605 that would allow the disclosure plaintiff (Reston)

seeks. To this end, the final sentence of Section 605 becomes the object of scrutiny for it declares that "this section shall not apply to the receiving, divulging, publishing, or utilizing the contents of any radio communication which is broadcast or transmitted by amateurs or others for the use of the general public, or which relates to ships in distress." More specifically, the parties focus on the phrase "amateurs or others for the use of the general public." Plaintiff arguing that this language exempts all amateur transmissions from Section 605's prohibition on interception and disclosure, while defendant (FCC) asserts that it applies only to those amateur transmissions intended for the use of the general public, which those in question here (the taped conversations relating to the People's Temple) were not.

Reston v. FCC, No. C-79-2476
DC, District of Columbia, p. 7

What do you mean, "amateur transmissions intended for the use of the general public?" You mean an amateur transmission can be a broadcast? Judge Green then went on to quote the FCC in their decision:

It is crucial to note that the phrase "or related to ships in distress" is set off by a comma from the phrase "broadcast or transmitted by amateurs or others for the use of the general public." Since no comma precedes the word "others," it is apparent that Congress intended the phrase "for the use of the general public" to modify "amateurs" as well as "others."

Reston v. FCC, Supra., at p. 8.

So now we are more concerned about where a comma isn't rather than an examination of the meaning of the statute itself. No difference, forging along the Court borrows wholesale the Commission's analysis of the Statute:

A primary tenet of statutory construction is that statutory language should be given its ordinary common sense effect. Simply reading the sentence here in issue makes it clear that in addition to broadcasts, there are three types of radio transmissions which are excluded from 605 protection: amateur transmissions for general public use, other transmissions for general public use, and transmissions relating to ships in distress. Congress rationally carved out certain categories of radio transmissions where no privacy was intended or expected. Clearly, broadcasts, such as AM or FM radio are meant to be heard by anyone listening and the content may be divulged. Messages regarding ships in distress are meant to be divulged if they are to be of any use. In this vein, it would be clearly be illogical to apply the Section 605 proscriptions to amateur radio transmissions which are intended for use by the public, and equally illogical not to apply the Section 605 proscriptions to amateur transmissions which are of a personal nature and not intended for use by the general public. Thus, the phrase "for use of the general public" must be read to modify the word "amateurs" as well as the word "others."

Reston v. FCC, Supra., at p. 9.

At this point, the Court ran full into a dilemma faced by the FCC in their decision and that is, "How could amateurs "broadcast" (defined as the dissemination of radio communications intended to be received by the public, directly or by the intermediary or relay stations" when broadcasting was prohibited by Part 97 (47 C.F.R. §97.113)?

. . . broadcasting. . is prohibited for amateurs, as inconsistent with their statutorily defined role as "duly authorized person(s) interested in radio technique solely with a personal aim and without pecuniary interest," thereby limiting their transmissions almost solely to personal point to point transmissions, nonetheless an amateur is permitted in certain emergency situations to "broadcast" a general call to all stations, referred to as a CQ transmission, which is intended to be received and used by anyone.

Reston v. FCC, supra., at p. 9

Even though many amateurs might feel that CQ's are appropriate in instances that are not "emergencies", it is incredible to believe that by this interpretation the mighty Congress of the United States wrote in a specific exemption to the secrecy provisions for the lowly CQ. You certainly would have never thought that if Congress intended to protect the CQ, they would have said so. But perhaps this is a statutory construction that gives "ordinary common sense effect" to the words of Section 605.

It is interesting to note that the Court cites in a footnote that this is the first time that the Commission has had to interpret Section 605! The Commission has also never issued any regulations under Section 605. The reason may not be as simple as it seems. Section 605 is a morass of mumbo jumbo having little relevance to modern radio. The electronic dinosaur has been permitted to stand because a replacement of the statute would create such a can of worms that one might never recover. Think of the commercial interests who long to write exceptions or restrictions for themselves, especially the cable, satellite and common carrier boys. (Interestingly enough, the Court answered an argument by Reston that the interpretation suggested by the FCC and adopted by the Court would "render criminal what he contends is a common amateur practice of listening to the conversations of other amateurs." The Court said that such "a reading of this provision, however, would ignore its plain language, which requires not only that there be an interception of a transmission, but also the divulgence, publishing, or use of the contents of that transmission in order for a violation of Section 605 to occur." Does this mean that no prosecution could lie under §605 for the person who builds a microwave satellite downlink receiver and watches the premium cable channels without permission as long as he does not "divulge, publish, or use the contents?" It would seem that the Court is ignoring the word "use" in its broad context. Use might encompass the mere fact that you sit in front of the radio and listen to the transmission.)

The Court also responded to Reston's argument that since the transmissions monitored were illegal transmissions in the sense that the operators were eventually fined for FCC Rule violations, that the general exception to the secrecy provision that illegal operation is not entitled to any secrecy was applicable. The Commission and Court agreed that the determining factor here was whether or not the station was properly licensed, not whether any particular activity or transmission was illegal. That is, if the station possessed a license, but was sending illegal transmissions, they were entitled to Section 605 protection, but if the station was unlicensed, there was no protection and thus disclosure was allowable. In this instance, the stations and operators were properly licensed, but the transmissions were illegal and §605 could be invoked to again prevent disclosure. This analysis makes absolutely no sense because in a policy sense.

it stifles the Commissions enforcement powers and the self regulation aspect of amateurs. If an illegal operator bootlegs a call, how can an amateur know whether or not the station is unlicensed and therefore not entitled to §605 protection? By the same token, if an ARRL Official Observer monitors a station in violation of the rules and sends a notice, if the operator is licensed, the OO may find himself in violation of §605 for the interception and divulgence of a radio transmission. There can be no doubt that this ruling jepordizes the entire OO program as well as the self-policing aspects of amateur radio.

What is a proper interpretation of §605 and what was it intended to protect? It actually is very difficult to say. In the last page of her opinion, Judge Green called it a "close" question. A rather thorough study of the legislative history of §605 in her opinion offered no answer any more enlightening to Judge Green. But after having examined the FCC decision and the subsequent District Court opinion, I am of the opinion that the Commission (actually, probably some low level bureaucrat) decided that if they could be forced to release one set of tapes covering a series of recordings of amateur transmissions, any of the other tapes in their files would be also suitable fodder for disclosure under the FOIA requirements. If this question has arisen in a different context, for instance a criminal prosecution under the act instead of a Freedom of Information inquiry, the result might well have been different.

The fact is that amateur transmissions are transmissions which provide no benefit to the people who make them and because of the hobby nature of the activity probably not entitled to secrecy protection. Look at the clear language of the statute (as clear as might be) and try to give effect to all the words of the exception rather than just the few emphasized by the Court. We are talking about radio communications in the last sentence of §605, not broadcasts. The logical construction of the sentence given its ordinary common sense effect in such a manner as to give full effect to all the words is to pair broadcast radio communications with "use of the general public" and pair radio communications transmitted by amateurs together. Broadcast is merely one of the two exceptions joined by the connective "or" relating back to radio communications. This result seems more satisfying without leaving the Commission twisting slowly in the breeze over the strained interpretation of "CQ" Amateur "broadcasts."

Another argument from a historical perspective is that the need for secrecy was recognized early. However, amateur operators, in sending and relaying messages, found it necessary to divulge such messages to other operators during the relaying process, especially since such messages were frequently passed on nets where numerous amateurs were listening, but only one would accept the relay. This message handling capability plus the historical perspective of nonpecuniary gain may have led to the eventual adoption of the general exception for amateur radio operators. Poor draftsmanship resulted in the ambiguous language present today.

I don't know if I am entire opposed to the application of the secrecy provision to amateur transmissions. After all, VHF and UHF repeaters has made conversations much more entertaining, yet a lot more personal. Maybe its a good idea that some of these conversations not be repeated or promulgated. Many more amateurs on private repeaters or microwave links have developed a greater expectation of privacy by the fact that they have the little used frequency or oddball split. Again, these amateurs may never dream that there conversations may wind up being fodder at the local ham club meeting. You know, it might even outlaw the "I Heard" column. How about that Chuckles?

Micheal Salem N5MS

MOTOROLA GAIN BLOCKS REVISITED--THE ALTUS VIEWPOINT

I got a nice letter from Dwight Dennis WB5KRH regarding the article on the Motorola RF Power Amplifier Gain Blocks and thought I would reproduce it here because of the information contained. Dwight is one of those people who began initially using the General Electric Master II Exciters as a driver for the Gain Blocks. Here goes with Dennis's letter:

Thank you very much as to -the credit given on the design of the UHF transmitters. I have also gone one step further in this design and made one for VHF repeater use with the Motorola MHW 252 and GE 19D430230G03 (\$106.20 list) exciter board. (Salem Note: See K5JB article this issue C & E regarding the MHW252 VHF gain block) It works just as well and with a good heat sink will take a lot of abuse. I was a little afraid of spurious output on this band so I mated the Motorola TLD 6090A Filter after the PA module. It is the one used in MOTRAC radio and is only \$14.31 list price and I thought this would be good insurance. This filter has RCA phono input and output so it is easy to interconnect.

I would like you to think about some decent UHF frequencies that we could start reserving for the use of linking repeaters. These channels should not be any of the common pairings or simplex UHF channels, but still be close enough to use converted commercial equipment. It also must not interfere with those who have UHF repeaters at the same site. We also need to get some pairings on the low end of 70 cm band in case we must have some full duplex links. There are some areas where back to back UHF link operation must be considered if we really need to cover some distance between sites where there is to be a VHF output. You might discuss this with some of the OM's in the ORS (Oklahoma Repeater Society).

Thanks Dennis and I agree that UHF frequencies must be chosen not to interfere with present UHF repeater growth. I had thought that initially, the simplest link could just be an output simplex frequency channel between the repeaters. All this would require is a simplex transceiver for UHF hooked to the VHF repeater and controlled by touchtone or PL. In this way, the UHF would be a simple party line for all the VHF repeaters operating much in the manner of a remote base. What Dennis is proposing is considerably more advanced than that, what with full duplex links and such. This would be a definite and specific interconnection with known linking paths and not just a party line configuration. My suggestion could be implemented on 220 MHz with each repeater buying a commercial 220 MHz transceiver and crystallizing it up on a common simplex frequency. This suggestion may be more practical for linking repeaters located, say in Norman and Oklahoma City. Dialing up the 220 link could allow, after the proper tone sequence, you to bring up a VHF repeater in Oklahoma City from Norman allowing Handie Talkie coverage by using the local repeater as a pseudosatellite receiver. Dennis' suggestion would be the next step and in fact, full duplex might be easier if we use a frequency from the low end of the 70 cm band and the 220 Mhz simplex frequency. Dunno, this could still get a little expensive.

A couple of months ago, Tony K5PJR and myself, after suitable lubrication at one of the local restaurant's here in Norman began discussing Tony's plan to establish a link between Oklahoma City and his present home in Grove by way of Tulsa. We traipsed up to the 28/88 repeater site at the University and ran a couple of tests on UHF into the Tulsa repeater. We found that we could talk to Tulsa with my UHF Handie Talkie just sitting on top of the building. K5JB was listening at the time and told me that he wasn't hearing the Tulsa repeater which usually means that conditions are less than average. This tells me that it might be possible to make a full time link to Tulsa with just very little trouble.

Oklahoma City or Norman would be a logical extension on this link, especially if Dennis and the guys get the link established between Oklahoma City and Altus. This is just all food for thought, but still very interesting. I am looking to buy a couple of the GE Master II UHF exciters like the ones I got at Dayton for just these purposes. A Motorola Gain Blook and a small beam antenna and you could have a very potent link transmitter. Anybody wanting to correspond with Dennis in this regard would do well to contact him at the following address: Dwight Dennis WB5KRH, 709 East Sutherland, Altus, Oklahoma 73521.

Micheal Salem N5MS

ROCK CRUSHER ESTABLISHED ON 40 METERS IN NORMAN

I surprized everybody the other day (actually about 2 years ago by announcing my intention to put an HF antenna up so I could work the low bands. I never really abandoned the HF bands, I just sort of got out of the habit when I moved away to college. In my hometown of Drumright, I put up a beautiful 40 meter antenna between two sets of pipes donated to me by K5CPZ's father. My dad made arrangements to have the pipes welded into two 30 foot sticks and the whole family was out in the yard huffing and puffing to get them in the air. This was so much trouble, I never really got in the mood to do it again, that is until a month ago. WB5TZZ and a couple of others have threatened to come over and help me get a set of dipoles or inverted vees up so I could blow the dust off of my Swan 350 and get back on HF. I kept putting them off so much that I am not really sure the offer really stands. The incentive came as a result of a conversation with WB5YWO at Ham Holiday. Jim saw me eyeing the Heathkit QRPP HW-8. One of the flea marketeers had one sitting on his table for the better part of a day with what appeared to be nary a nibble. I couldn't stand it any longer and went over to bargain for it. Alas, someone had just bought it out from under my very nose. Hurrumph! I have been thinking about buying one of these low powered CW rigs for quite some time, but just never took the plunge. YWO said he had one and would lend it to me but didn't want to sell it. I said that I was looking to acquire one, but needed to put up an antenna at my house (I've only lived in my present location for 11 years, really not a proper period of gestation for a HF antenna). I forgot all about the conversation for a week or so and then got a package in the mail. When Jim had returned from his vacation, he had boxed up the HW-8 and sent it to me. The temptation was too much. I spent a couple of sundays outside cutting away the underbrush in my yard and trimming trees to find a suitable location to string a 40 meter dipole. After discussions with K5JB, I also decided to begin construction of a set of inverted vees for 75, 40, and 20, with tripling to 15 meters and quintupling to 10 meters. My efforts netted a semiclear spot approximately 67 feet in length between which I attached a 40 meter antenna I constructed about 10 years ago.

I might also add that this cleaning job in my front yard was not as easy as one might think. The trees and bushes had been allowed to grow unfettered for at least 11 years and I spent considerable time perched on the house or up a tree trimming away. The biggest problem came when I had to shinny up one of the trees with my climbing spikes to try off one end of the 40 meter antenna. Coming back down, I took the express route for the last five feet putting a considerable dent in my behind and leaving a scratch on my face that had everybody asking me if I had wrestled with a tiger over the weekend. Actually, some of the comments were a lot more suggestive than that.

Anyway, I fired up the HW-8 and found that it would put out power, but not enough to activate my SWR bridge. I tuned it by peaking for maximum smoke from a field strength meter I acquired a couple of weeks ago at the WA5AOB estate sale. Seemed to be working. I listened carefully around the band. Lots of signals and the receiver seemed sensitive enough.

I listened for a couple of CQ's and after a couple of calls got a 579 in Chicago! Not bad. Since then I have talked to stations in Houston, Kansas City, Lafayette Louisiana and Oklahoma City (K5JB and I had to get together to have a CW cliché sending contest). This little rig puts out a very fine sounding signal and the semibreakin operation is very convenient.

What are the impressions of someone tuning up on the HF bands who hasn't had his ear to the ground, HFwise, for over 10 years. Well, I can only talk about the CW portions of the band because that is all I have listened to, but it is much the same. There are still an incredible number of bad sounding signals and poor fists. I can forgive anyone who is using a straight key and has a bad fist, because, hopefully, if he does any operating at all, he will eventually improve and the desire to operate is strong, but it is incredible to look at the number of people who fire up the old semi-automatic key or electronic bug and stutter dots and dashes all across the band. I have built a couple of keyers, including a CMOS version of the Accu-Keyer, and I still am very careful before taking one of these on a sortie across the band. The little beggars are hard to control and will bite you if you don't watch it.

Anyway, it really is fun and I have enjoyed it. Jim said that I could make any modifications to the rig that I wanted. I don't think that I will do much except maybe put an Accu-Keyer in it. I have another board already built up. I tried to fire up my Swan 350 to see what the SWR on the antenna was and maybe try a shout or two on the phone bands. Wouldn't you know it. The sucker won't work.

Micheal Salem N5MS

HAM HOLIDAY REVIEW AND KUDOS

I know that everybody and his handie talkie is probably going to be saying something about Ham Holiday in this issue of C & E, so I don't intend to belabor the matter by tacking on an extensive review, but just let me say that I really enjoyed HH this year and I think that the members of CORA should be proud of the fact that they sponsored something that is so much fun. I twiddled around the flea market with WA5JXX and WB5YWO, then visited the commercial exhibits and even saw one or two of the programs. I noticed that Bullet Electronics was there but that they did not bring Ms. Bullet, who was present at Ham Com. . Shame on you boys! And I especially went by to purchase some varactor diodes and one of your noise machines. K5JB, WA5JXX and myself all bought one of the sound effects boards. JB got his running and just about diddled with it all night. Roger wanted to keep his for a steam whistle sound effect as a substitute for his telephone ringer. I had to have one because Roger and JB gottem.

I enjoyed meeting the guys from Nebraska who specialize in Collins surplus. Anybody who didn't purchase an assortment of those tiny Eire capacitors (not sure of the spelling of Eire, or Eerie, or Aerie, whatever, the little red capacitors) for tuneup of handie talkies and miniature project building sure missed a good deal. Dennis also promised to look for a couple of rare coaxial connectors for aviation radios. Also in the line of surplus, Ellard had his EXcELlent collection of goodies on display and JB and I spent quite a bit of time fooling with a new Icom 720. I talked to Bill Brodie to see if he could help me get delivery on some equipment from the DSI counter people (they offer a .5 ppm time base for use on the 3500 and I ordered one at Dallas, but have never gotten delivery, Bill said he would shake them out for me) and I played IFR pilot on the computer simulator at the Heathkit booth. All in all, a good show, although I never won any of the prizes at the drawing. I never win anything. At lease this year, ole' Lucky Joe, K5JB didn't win anything either.

Micheal Salem N5MS

MID-OKLAHOMA Repeater Inc.

A NON-PROFIT ORGANIZATION
OF RADIO AMATEURS DEDICATED TO PUBLIC SERVICE

EDITOR: We Need One

MID-OKLAHOMA REPEATER, INC.

Well, Ham Holliday is past history now. It was the high point of the year for Oklahoma City area amateurs, and many others as well. Various committees and individuals of the various CORA clubs worked hard and long to make this event a success. That they succeeded, is evident from the numerous comments that have been heard in many places; and from personal observation. Space and time would not permit the listing of each worker's part, and how hard he worked; even, if they were all known to me. Besides, I might accidentally leave out somebody, and I am not ready to leave the county, at my age. I wouldn't be running for a political office, but I would be running for the county line.

Chuck, K5NK, and Mark, WD5DYI, make good prize callers, even I could hear them; Chuck called the door prizes last year, also. I wonder how many glasses of water they drank, and how many throat lozenges they had to use? That had to be a tough job, but they did it very good!!

I arrived at the Lincoln Plaza about 9:15 AM, and parking was at a premium. Met Doc, K5BUX, from Tulsa and conversed a little, then he went to a meeting while I went to the Flea Market. I was astounded at the size of it and all the goodies, mostly anyway, but didn't have time to go through all of it. I bought one item, a heavy one, and extend my thanks to the two gentlemen that helped me, in different places, to get it to my car. Funny thing, that piece of equipment wouldn't have weighed so much thirty years ago. Wonder how it got so heavy? Doc and I went to two meetings. The CORA meeting at 11:00 AM, presided over by Chuck, K5NK, CORA president, was very interesting and educational. We, also, attended Biological Effects of Non-ionizing Radiation, presided over by ARRL representatives Ray Wangler, W5EDZ, and Dale Clift, WA3NLO. It was interesting to learn that the net effects of ordinary radio emanation were not injurious to the human body in the amateurs' use of them.

Now, of course, sticking your hand in an operating micro-wave oven, or standing in front of the transmitting dish of a military radar, could cause some problems--like being very injurious to your physical health. One other thing, I read somewhere, that maybe an ordinary HT with a "rubber ducky" might cause some eye problems, if the top of the antenna was operating close on the same level as your eyes. Otherwise, I gather that there is no known harmful effect from radio waves to the average person, in normal usage. Persons with heart pacers should probably discuss the matter with their doctors, I don't know.

I had a very enjoyable day, and in company with Doc and some others, I can't say enough for the high quality of this convention. It was great!!

Went back in time for the big drawing on Sunday, after church. Of course, I didn't win anything; but, hope springs eternal, and I did enjoy watching the others win the goodies, and was glad for them.

Regards,

George, N5BWW

For Sale: Crystals, mixed, various (see Jun C&E); 2-Ampere power supply at 12 Volts attached to a TR-2200 (ibid.), still \$125.00 - I've had two nibbles but no cash-in-hand. Jim N5BEQ.

MORI

MINUTES

The July meeting was called to order by Prez Fred KA5CXW at 8 pm on the 1st at the EOC, 4600 N. Eastern, with 45 members and guests present representing over 340 paid MORI members and families.

The Audit committee reported the Treasury records to be accurate and complete as of 22 Jun 80 and that the Treasurer was conscientious in his duties and all bills have been paid promptly. The audit was accepted, the Treasurer, Jim K5PER, gave a current report and was applauded a round of thanks.

A reading of the minutes of the June meeting was approved as published in the July Collector And Emitter (C&E).

It was announced that Jerry W5MCJ, Meredith WA5GVH, Ben WB5TFX, Clarence K5YAQ and Joe WB5TDW were on the sick list but mending.

Vice-Prez Bob WB5PWZ (not S as in July QST) was appointed alternate CORA Representative, replacing John WD5FXP.

Following much discussion about complaints regarding not receiving bumperstickers upon renewing membership dues, it was moved, seconded and passed that a bumpersticker be provided to members at each renewal if requested, in addition to the one received at first joining.

Since MORI as a club is responsible for prizes at Ham Holiday VII (#7), it was announced that volunteers were still needed to present door prizes at all programs but the Ladies events (which are being managed by the Aeronautical Center Club). Volunteers were asked to notify the Prize Committee Chairman and/or the Secretary in advance.

The meeting broke at 8:43 pm for refreshments till 9:08 at which time Ben K5IRO gave a brief description of his "delta loop parasitic director" for 40 meters and how important the tuning capacitor was for bringing in the Ukraine clearly or not.

Also it was announced that the Choctaw Club operated Field Day under a halo (circular fluorescent)!

Members were reminded the Wayne Hogan WA5A0B and Fred Miller WB5WLS Estates would have public sales 19 and 6 July respectively.

In the absence of a formal program, door prizes were drawn by Tanya and Brandy Boland, harmonics of Bill KA5ESA and Connie KA5ERZ. Winners were Ken K5VVZ, Tom W5OZE, Joe WA5ZNP, Fred KA5CXW, Marvin K5HQP, Connie KA5ERZ, Cecil W5QAC, Ellard W5KE, Bob W5HXL, Don WD5HPR, June K5UJP, Bill N5AH, Jim K5PER, Mark Grennan and Lee Swanson - door prizes were compliments of Heathkit and Ben Allen K5IRO.

It was moved, seconded and passed to adjourn to the after-meeting at 9:43 pm.

Next meeting: same time, 5 Aug, place to be announced.

Jim N5BEQ
Secretary

AFTER THE TEN O'CLOCK NEWS AND JOHNNY CARSON'S MONOLOGUE, MANY OKLAHOMA AMATEURS ARE FINDING SOMETHING REFRESHING ON TWO METERS. MOBILES OUT-AND-ABOUT, LATE-SHIFT WORKERS, AND RELATIVELY DISTANT HAMS KNOW OF IT, TOO. IT'S CALLED THE NIGHT OWL NET, THE BEST WAY TO KEEP IN TOUCH WITH AMATEURS IN OKLAHOMA. EVERY AMATEUR, TECHNICIAN CLASS AND HIGHER IS WELCOME TO PARTICIPATE. THE NET PROVIDES ASSISTANCE TO MOBILES, PASSES TRAFFIC AND KEEPS THE BAND ALIVE WITH GOOD AMATEUR CONVERSATION. JOIN US ANY EVENING AT 10:30 P.M. - EVEN ON WEEKENDS. YOU MAY GET HOOKED!

The Night-Owl Net
146.07/.67 Oklahoma City

MINUTES

~~Minutes~~ ~~Minutes~~

The August meeting was called to order at 8:04 pm by Prez Fred KA5CXW on the 5th with 60 members and guests representing 319 paid club members.

A vote of confidence was expressed in the direction of the lack of published minutes or notes concerning the July meeting and events, same accepted as if published.

The Treasurer's report was approved as presented by Fred.

Announcements: Bob W5HXL mentioned the sprucing up taking place at the American Red Cross Center, downtown OKC, and in accepting donations for carpet and the like, passed the coffee can;

Charlie WA5JGU described the month-long travels and efforts across Western Oklahoma and the Texas Pan-handle in commemoration and celebration of the Red Cross' 100th Anniversary;

Bill KB5BS, Oklahoma County Emergency Coordinator (EC), described the awards presented to Amateur Radio Emergency Service (ARES) local group by the ARRL in conjunction with the State Convention at Ham Holiday 80 (#7) identifying specifically the May storm-damaged telephone outage at the Wilshire Nursing Home with attendant letter (see elsewhere this issue) and an unfortunately unsuccessful search for a lost boy July 26: Bill expressed a keen appreciation of MORI for its members' multiple assistance, "more than twice the numbers of any other club,"

As a result of the Executive Committee meeting, the Secretary was asked to read to the assembly certain excerpts from pages 57 and 64 of the August 80 issue of QST pertaining to third party traffic on repeaters and holding repeater trustees responsible for traffic on said repeaters, both perennial debates. Club members were specifically requested to make their individual wishes known to the powers that be regarding the petition and regulation by consensus voice vote.

The business meeting adjourned at 8:39 for homemade ice cream and cakes made, bought, brought and served by the following:

Clara WD5KFT
Susie KA5FED
Tom K5KZV
Irene " YF
Donna KA5GEP
John KA5GFI

Ellard W5KE
Garnet " YF
Fred KA5CXW
Ken K5VVZ
Rosemary" YF
Stephanie

Jerry KA5DCM
Pat " YF
George W5DDI
Eunice " YF
Angie Bickel
Kim Bickel

All waisted dimensions forthcoming are directly attributed to the above with glee, napkins and much appreciation.

The group reconvened in the dark(tee hee) for a videotape presentation from Satellite Television Technology courtesy of Tom K5KZV. The intriguing subject was Molniya, the Russian Bird. This is the name given to the northeastern Russian TV satellite. We were shown how it was found, tracked, plotted and deciphered - and how you can do it too.

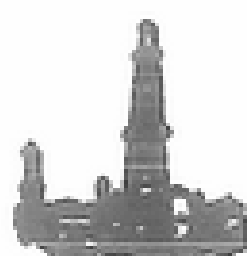
The group adjourned to the aftermeeting at 10:07.

Next meeting is same time, same place, 2 SEP 80, CU.

Jim N5BEQ
Secretary

FOUR SAIL: one each, authorized, convertible 11-10M Cobra by name, 139XLR by model, 40-channel, AC/DC, AM, USB, LSB - base-station-size, first \$100.00 snaps this up for your very own: 405)275-5717, Jerry, N5AUP, Shawnee, Ok. OK?

1 . 2 . 3 , 4-SALE, FOR SALE : TR-22 with NiCds, 6 positions of .67, .76, .82, .85, .94, 72/12; regulated 2-A PS; 10-watt matching amp: \$160.00 the lot (\$100, \$30, \$30 respectively) 236-0368, Jim N5BEQ



MID-OKLAHOMA REPEATER

USERS OF THE PHONE PATCH ! ! !

HERE IS THE RECOMMENDED WAY TRY IT! !

1. Call the repeater as you would any other station. "K5ELL Repeater" this is _____ (your call sign). Press the STAR(*) for ONE FULL SECOND, then release your transmit button.
2. Listen for the dial tone - dial your number. If you disconnect you may be holding your tones too long or they are too hot.
3. Phone will ring approximately six times (35 seconds). If you do not transmit for 35 seconds the patch will disconnect.
4. To end the call. Identify as in #1 above, press the pound (#) for ONE FULL SECOND.

DO'S AND DON'TS FOR THE PHONE PATCH

- DO Let the phone ring at least 5 times.
 DO Tell the party that they are on the radio.
 DO Remember at least 200 people may be listening (including the FCC).
 DO Make each transmission short.
 DO Make a list of emergency numbers and keep it handy.
- DON'T Do not call ANY business number unless you are calling a specific person about something NOT RELATED to that business.
 DON'T Do not ask someone to dial a number for you for an unnecessary call.
 DON'T Do not ramble on and on and on, etc. Someone may be waiting to use the patch.

NOTES FROM THE PREZ....

The estate sales of Wayne Hogan WA5AOB and WB5WLS Bill Millers estates have come and gone. I attended both of them plus the second Saturday of August final deposition of WB5WLS estate. We wish to thank all for their attendance. Yours truly overloaded by junk, the courtesy of some rascals who loaded my truck when my back was turned.

Our September meeting will be a great one. The program will be presented by "I.E.E.E." representative W5HXL. Subject "???" Recent designs for communications receivers.

My "Water" Bed -- ??? Well -- it was sloshy for awhile. The story was that , picked a sunny day to pick up a bedroom suite, 17 August (Sunday). Susie and I set out for Bob Cooper's ranch (6 mi. North of Arcadia) After picking up the furniture and King Size bed, Susie and I set off for town and surprise!! It started raining. I guess I went thru every rain squall in town and at least one stopover under a underpass, our soggy load arrived home. You should have seen Susie and I re-loading that soggy mattress back on the truck after it blew off. Susie balanced -- I lifted a very wet mattress. "Murphy was with us for sure...

Glad to see K5Yaq, WB5TDW back up and about. Rosemary XYL of Ken K5VVZ is going into the hospital the 25 of August (Presbyterian) after which a 6 week convalescence -- will ensue. Good luck to Ken while he batches.

WD5KFT is all furnished after her purchases at Bob Cooper's. Bob left for the islands and he may be contacted via his net on 14.310 or 28.8660.

See you next meeting 2 of September
 September 1980

Fred KA5CXW

CORA Collector & Emitter

EDMOND AMATEUR RADIO CLUB

President Harold Plunk K5GBF
Vice-President Bob Shaw WA5BQX
Sec/Treasurer Stan Van Nort WB5UIY
Trustee Dennis Orcutt WB5ISN

P.O. BOX 75252
Okla. City, Okla. 73147

AUGUST MEETING

The August meeting was another social dinner being held on the 4th at the Red Lobster Restaurant. Attendance was real good, even Mike Salem from Norman made it to far northwest OKC to sample the goodies. The dinner was alright, but not as good as the ladies have been able to fix up in the past. After dinner most of the group headed to Gary McCormick's home to get a GRAND TOUR of his satellite Earth station and ham shack. (Including the remote computer terminal) The 10 foot dish in the back yard was somewhat unique to the neighborhood since most others had swimming pools, swing sets, and tennis courts. However Gary's kids have an advantage over the rest since they have acces to over 100 TV channels off of 6 satellites. If they happen to get bored from that they fire-up the computer terminal and can play against THE BRAIN with about 50 or so games. Even your author here was sliightly entertained at one game. (Stupid computer shouldn't be programmed so well. Whoever heard of 10 green midgets attacking you in cave...) Thanks to Gary's wife for the popcorn and drinks.

NEW MEMBERS

Several new members have joined lately and have not yet been mentioned in the C & E. We would like to welcome Leo Neyer-KØLOT, Glenn Rawdon-WD5FVI, Jim Shideler-WB5YWO, and Dan Schroeder-K5FVL. Now you fellas have proof in writing to show to your wives that the money was truly used to join the club.

NEXT MEETING

Normally we hold our meetings on the first Monday, HOWEVER, take note that since this is the Labor Day Holiday it has been changed. The September meeting, a business affair (huh?), will be held on the SECOND MONDAY. This being SEPTEMBER 8, 1980 at 7:30pm. The meeting will again be held in the cafeteria at the T.G.&Y. Headquarters building at 36th and N. Sante Fe. There will be an Excutive committee meeting at 7:00pm, just prior to the regular meeting.

UHF REPEATER UPDATE

The UHF repeater is still on the air & working. Despite what it may sound like, it is there and since the first week of August it is running at full power. Dennis, Stan & Martin got the power amplifier reattached August 8th and it is putting out about 60 watts to the antennas. The control functions of the squelch tail and autopatch were disabled August 17 while Dennis some modifications at the repeater site. Everything should be back to normal soon.

TRIVIA DEPT. or ARE YOU LOOKING FOR A NEW CAR ?

(Reprinted from the OKC Police Dept. "COSMOPOLITAN")

Among the 1979 models, the choice of thieves is the Lincoln Continental 2 door, followed by the Chevy Corvette.

The HIGHWAY LOSS DATA INSTITUTE (HLDI) reports that in the first 18 months in which the 1979 models were on the road, the 2 door Lincoln had the worst theft loss experience. The Corvette, with the second worst ranking in theft, had the largest average payment per theft claim, over \$3,800.

Other cars in the top 10 list, in descending order, were the Lincoln Mark V, the Buick Riviera, Lincoln Versailles, Cadillac El Dorado, Cadillac Fleetwood Brougham, Pontiac Firebird, Oldsmobile Toronado, and Olds Ninety-eight.

The car which was stolen less often any other 1979 model, was the four door Plymouth Volare. In ascending from the least stolen Volare is the Subaru DL wagon, Datsun 310 two-door, AMC Concord four-door, Mazda GLC, Honda Civic two-door, Mercury Zephyr four-door, Olds Cutlass Wagon, Dodge Omni four-door, and the Datsun B210 wagon.

It used to be that all Ford products were stolen proportionately more often than other makes because it had an ignition lock which could be defeated in 10 seconds using a body repair reamer tool. However, Ford changed the locks some years ago to make them harder to defeat. Thus, it may be that the Lincoln is being stolen more often than other cars because it is harder to steal & brings a better price.

STAN WB5UIY & 141(shift 3)

GREAT PLAINS A.R.C.

W5HGH Repeater 146.13/73

EDITOR: Wes Duer, W4ZSL

The G.P.A.R.C. was well represented at Oklahoma City at the Ham Holiday, in fact, it was a good thing there was no severe weather in this part of the state. The few who had to remain behind would have been hard pressed, manning the radar etc. At the Holidays' WA5OUV--O.C. was presented a plaque for his diligence and service on the Oklahoma weather and traffic net. The plaque was presented by Larry Mooney in behalf of the National Weather Service. Congratulations to O.C.!! Larry, WB5BPY, also recognized the different clubs who participated in the Sky Warn Watches which help to track the severe weather across the state. Gordon, KB5XI, attended as many of the different meetings as he could, but reported, "there was no way" he could attend all he wanted to, and still make a few passes around the swap tables and see the new gear; let alone visit with old friends and look for all the call signs, "of on the air QSO's". There just was not enough time. KB5XI also passed on "special thanks" to Ted, WD5JNT and George, K5GGL who put on the intermod party. It was great and everyone had fun. You sure couldn't help but get acquainted with the Hams there. Also, congratulations to Joe, K5JB on his win--(was he really using an amplifier on his H.T.???) Hi. Three hams from the G.P.A.R.C. were initiated into the great fraternity of the "Wouff Hong". All had thoughts of bolting for the safety of their rooms, but W4ZSL, Wes--N5CCV, Gerald and KB5XI, Gordon "braced" each other up and marched into that dark and unknown tabernacle where the unknowing and unsuspecting were to be initiated. It calmed our fears somewhat to see the familiar faces of hopefully "nice" amateurs. At the witching hour our ordeal began, and we all became intrigued with the path of our sister ham, who represented all being initiated. The path was rough and rugged and it seemed at times "our Ham" would not survive the ordeal, but surely and persistently she moved on to claim her (and ours) right to be a loyal member of the "Wouff Hong". I should have made a list of all of us that were in attendance at Ham Holiday, but I didn't--sorry. A memorable sight however, was David, WN5LUI (got his up-grade) strapping a tri-bander on the top of his Puegot. We couldn't tell if the car was carrying the beam or the beam was carrying the car. There were some great bargains at the swap tables. Wes, W4ZSL bought a keyer and paddles from Sapulpa Ham KA5AEQ, Earl, who manufactures them. Gerald, N5CCV also bought a box and paddles from Earl. The only trouble was that Wes turned around and won a Tract Memory Keyer at the drawing. Maybe he can learn to use one for either hand? or just have the dashes on one and the dots on the other, Hi. KA5AAE, Jim, reports the Laverne repeater tower was blown over recently so they will be out of business for a few days--and this was just a "normal" squall for northwest Oklahoma. It seems the hot weather we had this summer was equally hard on the local repeaters and it was nip and tuck until Steve WA5UTO returned from harvest and put the "heavy" fix on both of them. Plans are also in the works for new gear at the 73 machine with the one now in service to 'stand-by' as a back-up. A special thanks from this end to all the hams who participated in the Allen Hurricane watch and helped pass along the traffic. As you know, we were the only means of communication at times in the tough areas. Makes you feel good to hear some and see some of the good words that were thrown our way..... I still haven't figured out what the Dairy Queen and K0CIO Larry and KA5AAE had in common at the Holidays?? Thoughts on the hurricane and this and that: The FCC managed to pinpoint and name a couple of disgrunteled hams who were interfering on net frequencies during the emergency and from this key we're glad. To be an amateur is a privilege not a right and a little courtesey and give and take is part of the fun. To deliberately block an emergency frequency, we think, should be dealt with severely. I don't think any of us are perfect in all of our operating procedures, but a little thought before that first CQ or "test" is all that is required. That's my editorial for the month. Schools here--so be careful driving and 73's. W4ZSL wes.

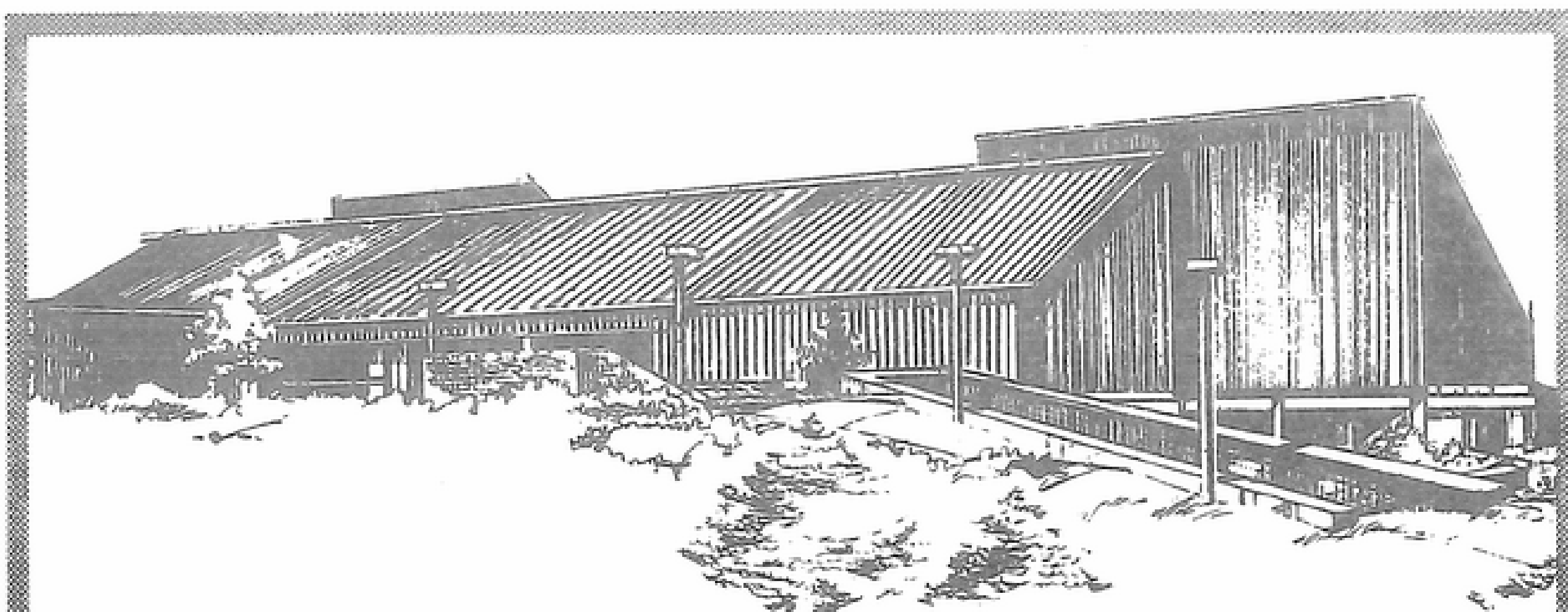
THE COVER

THIS ISSUE IS DEDICATED TO JOE HARDING, WA5ZNF. JOE IS "MR. COLLECTOR AND EMITTER, AS WITHOUT HIM THIS MAGAZINE WOULD NOT EXIST IN ITS PRESENT FORM. THE COVER WAS TO HAVE BEEN A SURPRISE TO HIM WHEN HE AND HIS WIFE FRANCES RETURNED FROM A MOTORCYCLE TRIP TO COLORADO. THEIR TRIP WAS CANCELLED, BUT THE COVER THIS MONTH REMAINS A SURPRISE TO THEM. THANK YOU JOE AND FRANCES. SPECIAL THANKS TO JUDY AND MAC MACDONALD FOR DESIGNING THIS COVER.

In response to a plea for help in searching for a missing 10 year old boy, the following amateur radio operators assembled at 7915 N. W. 10 about 1 AM, Saturday, July 26, 1980. Many, many thanks guys. You will never know how much your efforts were appreciated.

N5BEV Bryan DeHart
KB5BS Bill Skipper
KA5CXW Fred Taylor
WA4PLG Charles Kennamer
WB5TKG C. Y. Chandler
AE5N Don Duck

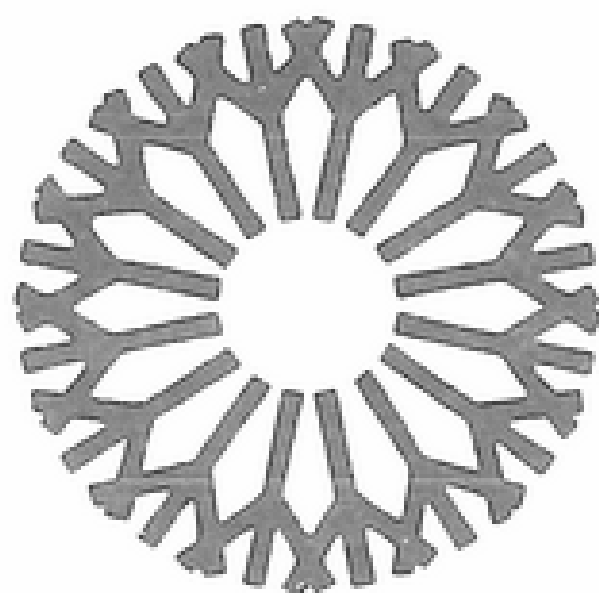
KA5CWT Dave Holder
KB5NV Dave Downing
N5IH Henry Israel
W5FX Calvin Ladd
N5PS Pat Sherrill
N5GE Tom Childers



Beat The Rush!

New Classes Start

OCT 20



Enroll Now!

South Oklahoma City Junior College

7777 S. May

682-1611

See individual club sections for times, places & details.

SEPTEMBER '80 HAM HAPPENINGS						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	LABOR DAY 1	MORI GREAT 2 PLAINS	3	4	FAA 5	6
WHEAT- STRAW 7	CHOCTAW EDMOND CLUB 8 A.F. MARS	76ers SHAWNEE 9 OU	10	ALTUS ATV 11	12	13
14	ARES 15	OCAPA 16	17	KAY COUNTY 18	VHF 19	SCARS EDIT 20 C & E
EARS 21	22	CORA SHAWNEE 23	24	25	26	SCARS mail C & E 27
28	29	30				

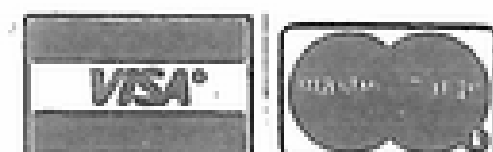
Can you wear SOFT CONTACT LENSES?

Find out if *you* can wear soft contact lenses. Just drop by for a *free computer analysis* using our System 6600 Autorefractor.

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!*

840-1234

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



NO APPOINTMENT NECESSARY

Ask Doc, WA5CZN, about his fantastic contacts!