

# Collector & Emitter

A CORA Publication

**January 1995**  
Volume 21, Number 01  
Issue 239  
50¢

Postmaster See Page 2  
For Postal Information

Second Class Mail

**Eating Right - Help On Losing The Holiday Bulge**

**Winter 2 Meter Antenna Projects**

**New Look For the Collector and Emitter**



**Central Oklahoma Radio Amateurs, Inc. Constitution**

**To Many Packet Beacons ?**

**Harmonic Arrives Early**

## Collector & Emitter

Harold C. Miller, KB1ZQ

Editor

Linda G. Miller, N1LPN

Circulation Manager

## Central Oklahoma Radio Amateurs, Inc.

President: Chuck Wilhite, K5NK

Vice President: John Guida, NJ1V

Secretary: John Brassfield, N5SAM

Treasurer: Perry Jenkins, KB5TOT

Dear Subscriber:

PLEASE help us keep your information up to date. What time, where, when, who are your officers, editors, and their phone numbers. Check your entry, it can be changed. If there appears to be a mistake, check with your club officials. We can't do a thing about it if you don't. Below is a sample label:

4	95/12	2
DOE, JOHN E.	KA5ABC	
1234 SW 56th STREET		
RADIOVILLE, OK	74321	

The "4" means Autopatch Club, "95/12" means the year/month dues expire. The "2" is for postal zones.

Dear Secretary / Treasurer:

When you want a change of any sort to your membership, you must completely fill out a subscription slip. Watch for the date you received their funds and the date the subscription expires. Have your slips, or list of deletions submitted by the 22nd of each month. If there is anything about C&E subscriptions you need to know, please contact us.

**January 1995**

**VOL. 21, No 01, Issue 239**

## Collector and Emitter (USPS 116-150)

is published monthly by CORA, Inc.  
4216 Spiva Drive Del City, OK 73115-  
4424. Second Class postage paid at  
Oklahoma City, OK.

Subscription rates:

CORA Member \$4.80 per year

Paid subscription \$7.00 per year

**Postmaster:**

**Send address changes to;**

**Collector and Emitter**

**P. O. Box 95942**

**Oklahoma City, OK 73143-5942**

<b>1. Aeronautical Center ARC</b> Meets: 1930L, 1st Thursday, FAA, S. MacArthur, OKC Pres: Dick Russell, KJ5VV 733-2141 Sec/Tr: Brad Nelson, KJ0W 793-9470 VP: Chuck Bryant, KB5ZVZ 737-0423 Editor:	<b>11. Edmond Amateur Radio Society</b> Meets: Odd Months, 1400L, 3rd Sunday, Edmond EOC, Even Months, Dinner, 3rd Friday Pres: John Thomason, WB5SYT 340-1798 VP: Richard Winnard, KJ5QU 840-4237 Sec: Ken Stepp, N5DBM 341-7651 Treas: Sue Snyder, N5VWI 341-8753 Editor: Richard Winnard, KJ5QU 840-4237
<b>2. Oklahoma Central VHF ARC</b> Meets: 1100L, 3rd Saturday, Neighbor's Resturant 3401 N. Classen Blvd, OKC Pres: J. Frank Fields, KB0QJ 789-8469 VP: Bill Noland, WA5FWD 354-5018 Sec: Joe Buswell, K5JB 732-0676 Treas: Ellard Foster, W5KE 789-6702 Editor: Joe Buswell, K5JB 732-0676	<b>14. Cimmaron Amateur Radio Society</b> Meets: 1930L, 1st Thursday, WX5Y Playhouse 827 S. 13th, Fairview Pres: John Medley, N5WVU VP: Kenneth Monahan, KB5SOM Sec: Dennis Painton, WK5V 764-3599 Treas: Nadine Painton, N5FMH 764-3599 Editor: Kenneth Monahan, KB5SOM
<b>3. Mid-Oklahoma Repeater, Inc.</b> Meets: 1900L, 1st Tuesday, Favorite's Cafe, 36th and S. Western, OKC Pres: Scott Walsh, N5NYS 787-3804 VP: Rick Masters, N5WNR Sec: Jim Buswell, N5BEQ Treas: Craig Conwall, N5VIS Editor: Dean Ward, N0PAD 681-4606	<b>15. South Canadian ARS</b> Meets: 0930L, 2nd Saturday, Red Cross Bldg North OU Campus, Norman Pres: Don, KJ5KB 321-1673 VP: Mike Winkel, N5SOF 366-8639 Sec: Keith, KB5FCI 329-2213 Treas: Bill, N5UMH
<b>4. Oklahoma City Autopatch Assn.</b> Meets: 1930L, 3rd Tuesday, Salvation Army Bldg N.W. 50th and Penn, OKC (Back Door) Pres: Brad Nelson, KJ0W 793-9470 VP: Mike Fields, KB5WIC 720-9123 Sec: Perry Jenkins, KB5TOT 354-5075 Treas: Cheryl Brassfield, KB5WQR 685-8070 Editor: Mike Fields, KB5WIC 720-9123	<b>16. Edmond Amateur Radio Club</b> Meets: 1900L, 2nd Monday, Various Locations Pres: Mark Northcutt, WD5DYI 755-4672 VP: Wendell Cochran, WB5ISO 396-8224 Sec/Tr: Kay Northcutt, WD5DYJ 755-4672 Trustee: Dennis Orcutt, WB5ISN 340-0034
<b>6. Altus Association</b> Meets: 2nd Thursday, Check Daily Net on 146.79 / 146.82 for current location. Pres: George Mayetko, AA1IJ 266-3357 VP: None Sec/Tr: Mike Brown, KC5AWB 481-6665 Editor: Mike Brown, KC5AWB 481-5928 Hosp: Vallie McClain, KC5AHX 477-3357	<b>18. Great Plains Amateur Radio Club</b> Meets: 1415L, 1st Sunday, Home of N5LRR 2914 Osage Dr, Woodward Pres: Bob Bayless, WB5GAX 254-3561 VP: Andy Taylor, N5LRR 256-4017 Sec/Tr: Rod Ford, WB5OVT 923-7683 Editor: Freida Patterson, N5EQX 256-2111
<b>9. Wheatstraw Amateur Radio Club</b> Meets: 1430L, 2nd Sunday, Location Varies Pres: Leo Peil, WZ5H 886-2998 VP: Jimmie E. Payne, N5VDY 233-4215 Sec/Tr: Joe Garland, WA5FLT 893-2660 Editor: Ralph Wilder, WA5PFK 623-5421	<b>Central Oklahoma Radio Amateurs</b> Meets: 1930L, 4th Tuesday, Salvation Army Bldg N.W. 50th and Penn, OKC (BackDoor) Pres: Chuck Wilhite, K5NK 721-4926 VP: John Guida, NJ1V 340-6518 Sec: John Brassfield, N5SAM 685-8070 Treas: Perry Jenkins, KB5TOT 354-5075 Editor: Harold Miller, KB1ZQ 672-7735

## CONTENTS

On The Cover: Jeeves Returns - Old Timers Will Remember, Thanks WA5LKS

Edmond Amateur Radio Society News.....	3
Eating Right.....	4
Technical Corner, IC-2800A Mod.....	5
C. O. R. A. News.....	6
Mid Oklahoma Repeater Inc. News.....	7
A. R. R. L. Bulletins.....	8
Central Oklahoma Radio Amateurs, Inc Constitution.....	9
Oklahoma City Auto Patch Association News.....	11
VHF Club Minutes and News.....	12
Wheatstraw Minutes and News.....	12
On the Air Net Listings.....	14
Harmonics Can Happen At Any Time.....	14
Chit - Chat.....	15
South Canadian Amateur Radio Society News.....	16
Aeronautical Center Amateur Radio Club News.....	17
Letter From The Editor.....	19



## Edmond Amateur Radio Society

Edmond, OK  
January 1995

Happy New Year ! Here is a summary our club's activity over the past 30 days or. As, before, sit back, relax & enjoy. Well, I hope you enjoy.

### Dinner Meeting, Dec. 16th

Wow! We did have a Christmas Dinner deluxe. We had a bundle of food, St. Nick, alot of visiting, a door prize (won by Gloria) callbook awarded (to Pat Gray's daughter). Seems like our club treasurer, Sue, reported about sixty folk showed to celebrate Christmas with their EARS buddies. Edith, put forth strong effort in preparation, lining up support, motivating, and communicating- all before the day of the event ! Not to mention her contribution of time, energy and other. Nice work, Edith ! Lee, Dee and Shelby were at the church early on said day to set up tables, chairs and do decoration of such level that the Rose Bowl Parade committee would be envious.

The food came together nicely-the names of Edith, Gloria, Jana, and Shelby come to mind as the A team in this project. What wonderful groceries! I failed to inquire as to other participants, so apologies for anticipated oversight. Many of us made return trips to the trough to demonstrate our appreciation to the culinary skilled of our flock. Many thanks to Chuck, K5NK, CORA President, and wife, Sue, as well as Hal, KB1ZQ and wife, Linda, N1LPN, *Collector and Emitter*, editor for joining EARS in our Holiday Celebration. St. Nick did a superb job of visiting with EARS kids, of all ages. The Civil Service Director for the

City of Edmond came to extend Holiday Greetings to us and to get in a chat with the North Pole native.

### Board Meetings

We had two Board meetings since the last *Collector and Emitter*. At the November meeting we had quite a time as Dee took the minutes with a high level of assistance from the rest of us. You can probably figure the type of assistance we extended to Dee. Topics discussed included, "significant problems with the repeater (147.135) p.a. deck, ham classes, nominating committee, Christmas Dinner, and the club station. David, new club member, participated in our meeting. Post meeting he still wanted to be a club member, which is a testament to his understanding nature.

The December meeting was held on the 21st. Dee did not take the minutes nor was David present. Is there a connection here? I forgot to mention that a donation to St. John the Baptist Catholic Church was agreed upon in the November meeting. This is our token way of saying: Thank You. These are the kinds of Thank You's that Denise, my daughter, enjoys. Discussion among the common topics was completed along with agreement to expedite availability of the club station. A.C. and Dee came to the meeting in preparation for their being on the board in 1995. Like David, they still want to belong to the group despite sitting through a meeting. Maybe, they are giving the rest of us the benefit of the doubt.

### Club Meeting

Our November business meeting was held on Sunday the 20th at St. John's the Baptist Catholic Church. A great turnout was brought up to date on a bunch of club activities to include the repeater, roster rolodex, Civil Air Patrol, licensing classes, and the Shuttle Amateur Radio Experiment (SAREX). We were treated to pizza by the University of Central Oklahoma homecoming committee. Similar to the thank you, as above, we were being shown their gratitude for helping with their project. New club

officers were elected for 1995, they are as follows:

President- John, Thomason, WB5SYT  
Vice-President- Richard Winnard, KJ5QU  
Secretary- Ken Stepp, N5DBM  
Treasurer- Sue Snyder, N5VWI  
Board Member- A.C. Adams, KA5WGV  
Board Member- Dee Mize, WD5FHR

### Licensing Classes

The EARS licensing classes continue at St. John's. The class members sure seem to be enjoying the material and getting to know our club members. In the next several weeks, we should begin to hear some more new call signs- let us be sure and make them welcome. Recollect the term- Elmer ? Thanks to Frank for conducting our classes.

### Upgrades

Belated congratulations to Toni Winnard, KC5ICQ, for her rapid upgrade success ! She does know how to get those licensing material down smooth. Generally speaking, do not be suprised if her upgrading continues to the Advanced License and beyond. Just this morning, her smooth operating technique during the Monday night net was praised by another club member. I can sure see her being an effective net control for some pretty neat HF nets.

### Birthday's

Opal presents the January EARS Birthday list:

Gary Mooore, KB5UKS January 1st  
George Mastena, N5GFG January 5th  
Terry Tiller, KB5RQT January 7th  
Harold Wells, WA5ZKX January 14th  
Dale Johnson, AB5MP January 14th  
John Thomason, WB5SYT January 18th  
Tommie Guinn, KA5WAV January 23rd  
Al Jenkins, KI5CW January 23rd  
Rick Tasetano N5KLM January 28th

### In Memory

The club gratefully acknowledges receipt of the dual band antenna to the club's emergency services by Kay Sage,

KB5LDO. This is in memorial to her husband, Alton, KB5LIC, and EARS Past President. Thank you Kay. We will strive to use this equipment in concert with the way Alton would desire.

### Next on the Agenda

Each Saturday, 8:30 am coffee at Grandy's

Each Monday at 8 pm, EARS Information Net. 147.135 +

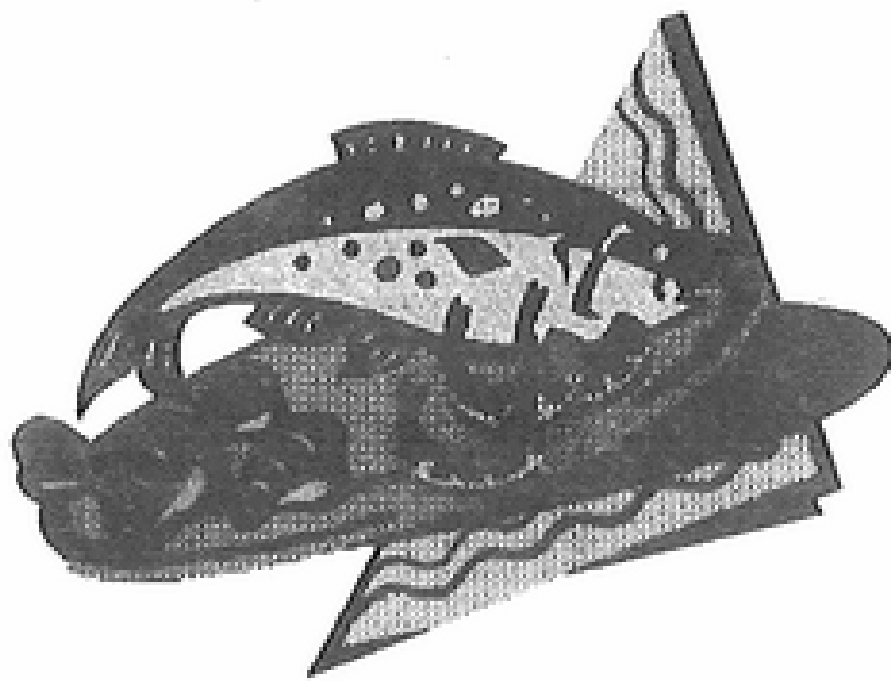
Saturday-January 7th, 12 noon: Siren Test-Contact Edith, KA5YPX

Wednesday-January 11th at 6 pm, Board Meeting - Contact John, WB5SYT, Coventry Villa, 1300 East Ayers, Edmond

Sunday-January 15th, Club Meeting 2:00pm, St. John the Baptist Catholic Church.

Happy New Year !

John, WB5SYT  
President/Editor



## EATING RIGHT

Very few people swear allegiance to a fat-free diet during the holidays or choose this time to reform their eating habits. All my friends said they planned to eat whatever they wanted for Thanksgiving, Hanukkah and Christmas.

Here are some of the best tips I have gathered over the years to help reduce calories and fat without anyone noticing.

### Cooking

\*\*\*\*\*

1. Buy the best quality non-stick cookware in several sizes to reduce the amount of fat needed. To sear without using any oil, use an iron skillet.

2. For browning with the smallest amount of oil, heat the pan until very hot, reduce the heat to medium-high and add the oil or nonstick spray.

3. To stir-fry with the smallest amount of fat, cook uncovered for a few minutes, add a tablespoon or two of stock to the pan, cover and steam.

4. Or pan-steam foods, using a film of oil in a nonstick pan. Keep the lid very tight to contain the steam.

5. Grill foods like chicken or salmon filets with skin on, then remove skin before serving.

### Flavoring

\*\*\*\*\*

1. Use a little olive oil to finish off no-fat sauces based on vegetable purees. This provides a smoother consistency and more flavor.

2. Forgo the ham hock in soups. A roasted pepper or some smoked turkey will provide the smoky flavor without the fat. Or bacon can be seared, the fat poured off and bits of meat used for flavor.

3. Cook leeks and onions until they "melt" for flavor and sweetness.

4. Use Basmati or Vietnamese rice in place of regular long-grain rice. They have more flavor and aroma.

5. Marinate meat, poultry and fish for a few hours to replace flavor lost when fat is removed. Especially good are fruit-juice marinades flavored with Asian seasonings like ginger, hot chilies, coriander root, lemon grass and kaffir lime leaves.

6. Use fruit juice reductions for sauces.

7. Keep small amounts of reduced-sodium chicken stock in the refrigerator and use as needed for cooking.

8. Add herbs for more flavor when soaking beans, peas or lentils. Soak black beans with cumin or coriander and garlic; soak lentils with thyme.

9. Roast spices on top of the stove to draw out flavor.

10. Poach fish in a broth flavored with ginger and lemon grass.

### Salad Dressings

\*\*\*\*\*

1. Use equal parts balsamic vinegar and oil (or make the ratio one and half parts vinegar to one part oil).

2. Use vinegar that require less oil, like raspberry or Asian rice vinegar.

3. For less acidity when using less oil, add some honey mustard or any sweetened mustard.

4. Use mustard as an emulsifier.

5. Reduce the oil in salad dressing by substituting a bit of chutney.

6. To make a creamy blue-cheese type dressing, use four parts light sour cream or yogurt and one part blue cheese.

7. When using yogurt for a dressing add strong condiments like horseradish, chutney or flavored mustard.

### Other Low-Fat Tricks

\*\*\*\*\*

1. Mash potatoes with light sour cream or nonfat buttermilk instead of butter.

2. Use arrowroot or cornstarch as a thickener in place of buttery roux.

3. In place of cream-type souce, use either nonfat buttermilk or nonfat yogurt thickened with cornstarch (one tablespoon per cup of sauce).

4. Drain plain yogurt through double thickness of cheesecloth overnight in the refrigerator. Use it like cheese or creme fraiche (a dollop in soups or in the center of chive omelets).

5. Salsas are good replacements for cream and butter sauces.

6. Meatloaf can lose fat if some of the meat is replaced by cooked mashed beans or lentils and some finely chopped vegetables with lots of herbs and spices.

From the Happy Club,

73 de Mirta, KC4SBL @  
KF4OJ.#ARCFL.FL.USA.NA

Via the packet BBS system  
Edited/forwarded by K2GKK

## Technical Corner

### IC-228A 9600 Modification

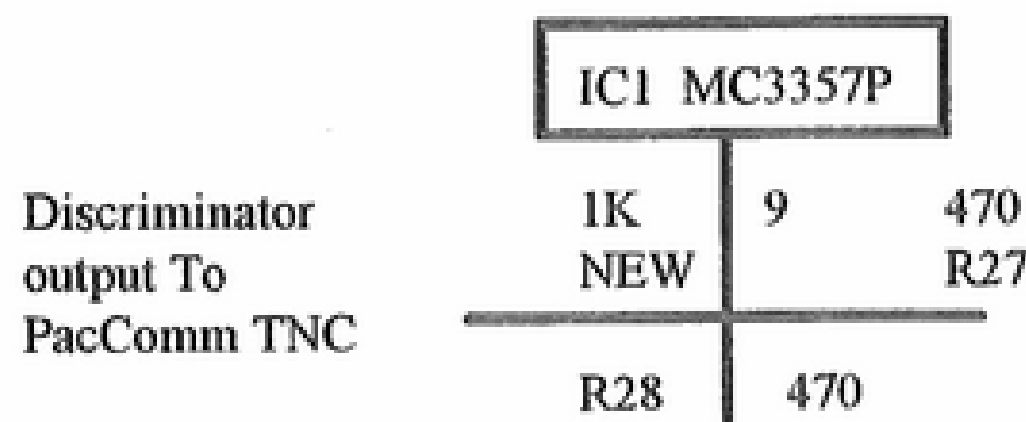
#### Icom IC-228A Mod. for 9600 bps packet

This modification is quite simple with the addition of two 1K resistors and shielded audio cable routed out the back of the radio through a hole that is currently blocked by a plastic cover. The PacComm TNC-NB96 already has coupling capacitors in its analog interface circuitry, so just bring the audio cable to the TNC. The Transmitter PTT signal is routed internally from the rear hole to the front controller head of the radio. The PTT and Ground are next to each other on pins 5 (PTT) and 6 (GND) of the microphone jack. The microphone jack pins are accessible on the rear of the controller head PC Board and the new audio cable is soldered there.

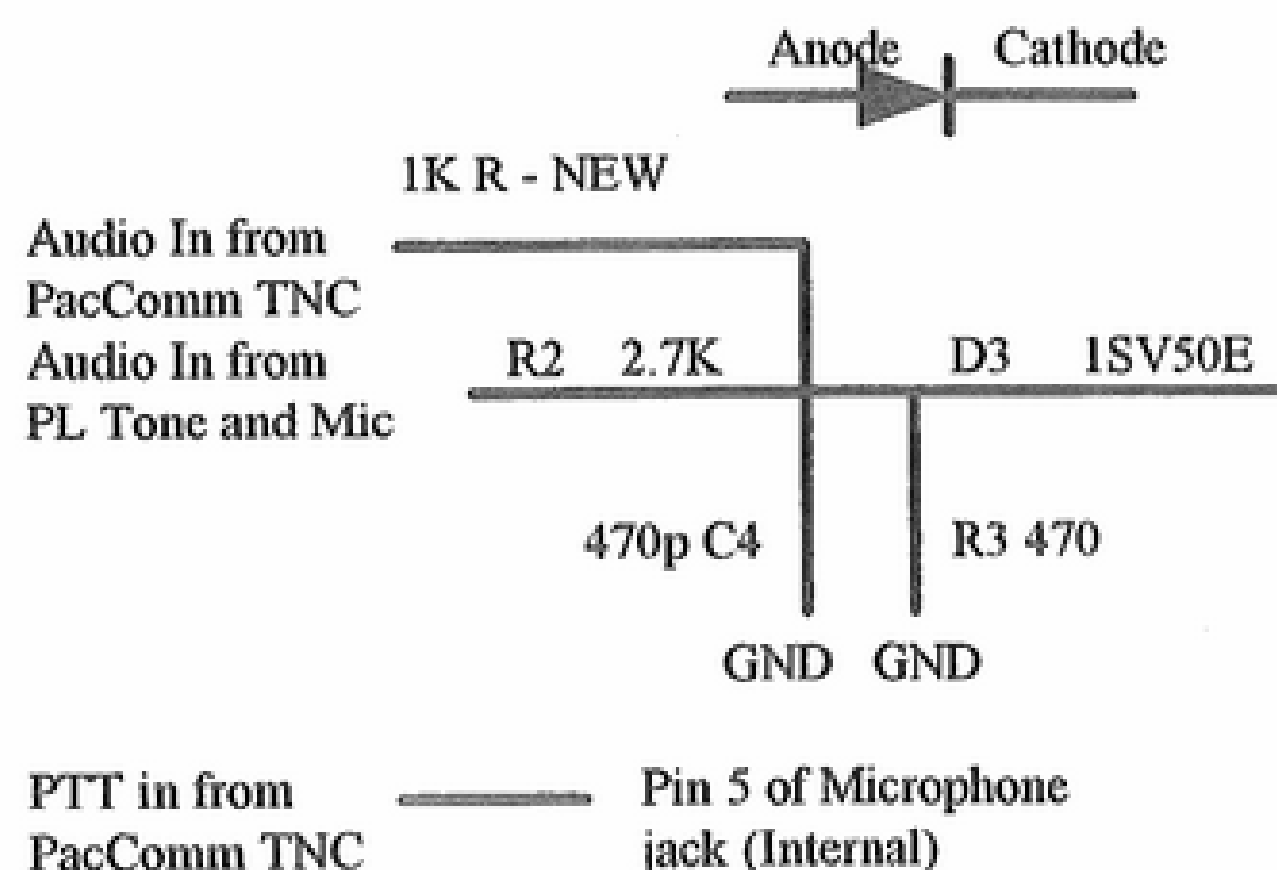
The radio removes power from the receiver when transmitting. This feature requires that other users use a longer TXDELAY. I've had problems even on 2m AFSK with a local NetRom Node which has a short TXDELAY, and the 228 just can't recover fast enough. A check of the circuit shows the receiver shunts any RF to ground via a standard diode switching circuit design. I therefore clipped out and bypassed the receivers 8 Volt power switching transistor (Q8).

So here's the big picture:

#### RECEIVER



#### TRANSMITTER



Adding two resistors sounds pretty easy, but you are going to disassemble the whole radio. This radio is very easy to disassemble and no small wires or components are endangered. Basically after you remove the screws, the parts just fall off. You could save a few seconds by soldering onto the receiver IC-1 pin 9 on the top of the PC, but since you really have to pull the transmitter board out, you might as well do it nicely on the bottom.

Remove the screws from the covers and lift the covers off. The bottom cover has the speaker on it which can be unplugged from the radio. The front controller head is secured with four screws and three jacks, so remove the screws (on the sides of the radio) and pull the jacks. Solder in an audio cable to pins 5 (PTT) and 6 (GND) on the back of the front panel microphone jack. You can then set aside the controller head. The receiver board comes out nicely after removing the screws (pull forward and up). The transmitter board has about twice as many screws and also drops right out. You have to remove the Power Amp chip from the heat sink (two screws) also.

I installed the 1K Ohm resistors in-line with the audio cables. I then put heat shrink tubing around it, and followed that with electricians tape to prevent shorts. On the bottom of each board, solder in the audio cable/resistor combo and provide a good length of wire for running out the back. On the transmitter board you will need to unsolder a square metal shield at two points and bend it back. Solder the audio cables to the D3 Anode pad, and the IC-1 pin 9 trace. Re-install the shield, and put everything back together.

#### Transmitter Parts Location

To find the Anode of D3 (the RX pin 9 is easy) I'll try and give you a good description that hopefully will preclude the need for a service manual. At the front of the TX board (the controller head side) you will see a square metal cage with a cover soldered on at each corner. Flip the board over and you will find a square metal shield directly below it. Unsolder the top two legs and bend it back slightly (the board should be oriented so that the controller head side is at the bottom, top is now the rear of the board). At the top left under this cover is a triangular pad which D2, D3, and L1 connect to. The top connection is the D3 Cathode. Go straight right and the next pad is the D3 Anode with three other connections (C4, R2, R3) for a total of four connections on the pad. Solder your TX audio cable to this point, with the ground lead tied close by.

#### Receiver Parts Location

Looking at the receiver board with the external speaker jack at the upper right hand corner (component side up), you should be able to identify Q8 as an upright rectangular style chip just to the left of the center mounting screw. It may even say Q8 just below it. Clip this out and solder a jumper on the leftmost two pins. The receiver will now be on at all times, but the Front End will still be protected by the switching diodes. After performing these

# C. O. R. A. NEWS

## CENTRAL OKLAHOMA RADIO AMATEURS

Minutes of the November 22, 1994 meeting:

The meeting was called to order at 7:30 by Chuck K5NK. All 6 officers were present with 6 clubs represented and 28 people attending the meeting.

Frank, N5FM (the Salvation Army amateur radio control operator) stressed the importance of the supporting the Salvation Army. The SA has a net on the second Saturday of the month at 8am. Local net freq is 146.82mHz, HF net freq is 3.900mHz and Amtor freq is 14.165 mHz. MOTION to donate \$200. to the Salvation Army. Seconded and approved.

The minutes of the October 25, 94 meeting were accepted.

The treasurers report was accepted with corrections.

*C&E* - The November issue is at the printers and will be folded by the printer. The deadline for the December pre-Christmas issue will be Dec 9 and the regular January issue deadline is Dec 21.

*C&E Editor note* - If you miss an issue of *C&E* or know of someone not receiving the *C&E*, contact your club treasurer or the *C&E* Circulation Manager Linda, N1LPN.

### *Ham Holiday 95*

Bill, NW5M and Liz, KC5GLP are in charge on non-tech programs. Dennis WB5ISN and Mike KB5WIC are in charge of technical programs. SCARS is in charge of the flea market.

The Friday evening and Saturday *HA95* is in further discussion with some vendors opinions being asked. The banquet is

Collector and Emitter, January 1995

planned with a program to encourage attendance.

Some questions were raised by MORI about the *C&E* circulation and billing. With explanations of postal requirements and billing procedures, their questions were answered.

Meeting adjourned at 9:20 p.m.

John Brassfield  
CORA Secretary

Minutes of the December 27, 1994 meeting

The meeting was called to order at 7:30 by Chuck, K5NK. Five officers were present with 4 clubs represented and a total of 14 people attending the meeting.

The minutes of the November 22, 1994 meeting were accepted.

There wasn't a treasurer's report available because the treasure resigned after the last meeting. There was discussion about the CORA constitution and the decision was made to appoint a treasurer. Perry, KB5TOT volunteered. Hal, KB1ZQ made the motion to appoint Perry as the treasurer with Craig, N5VIS as second. Motion carried without opposition.

The position of Circulation Manager was approved with Linda, N1LPN in the post.

A review of the constitution and by-laws of CORA will begin soon. If you have ideas, contact John NJ1V.

Circulation problems for the *C&E* in the Altus club were discussed. Chuck volunteered to go to Altus, to talk to the members there. Also, Hal, KB1ZQ (a confessed northerner) was corrected to the pronunciation of Altus - (Al-tus not Ahl-tus).

*C&E* editor note - If you miss an issue of *C&E* or know of someone not receiving the *C&E*, contact your club treasurer or the *C&E* Circulation Manager Linda, N1LPN. Also, the 3 month subscription grace period to the *C&E* will be dropped and will return to the original 12 months.

Also, each club will be billed monthly for their member mailing with payment due the 23 of the month.

Meeting adjourned at 8:35

John Brassfield  
CORA Secretary

## Technical Corner (*Con't*)

### IC-228A 9600 Modification

modifications I ran my KPC-4 TNC to the front jack on the radio as before, and the new audio cables came out the back through a hole that was previously blocked with a plastic cover. I connected these wires to the PacComm TNC.

For tune-up I connected an O-Scope to a scanner tuned to the correct frequency (any O-Scope will do as this is just audio frequencies). The scanner has a one chip receiver just like the IC-228 and I watched it on Pin 9. I viewed several commercial and amateur stations and got a feel for what sounded good and how many Volts P-P the good ones produced. It looked like 3 kHz deviation was about 1 Volt P-P. I then adjusted the TNC audio pots to produce 1 Volt P-P on the scanner monitor. I then tuned up 145.01 and everything seems to be working as it used to AFSK-wise, with both the KPC-4 to the front jack, and the PacComm to the rear.

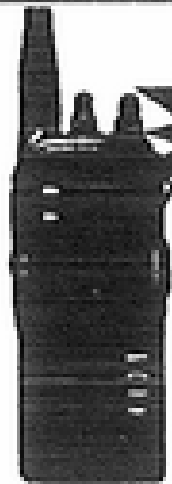
The PacComm TNC has a very narrow range on the DFSK pot in which it will work correctly. Too high produces garbage, too low nothing. The internal TNC jumper JP9 should be in the low (pins 2 to 3 jumper) level setting.

The surprise for me is that the Discriminator output gets properly decoded even in the AFSK mode! As usual, I'm usually the last to learn these basic things:-) So now I could actually run both TNC's with one radio (each having a separate callsign of course). The PacComm hardware DCD is very nice!

73,  
Steve, N5OWK @ WB5FWE.OK

# KENWOOD

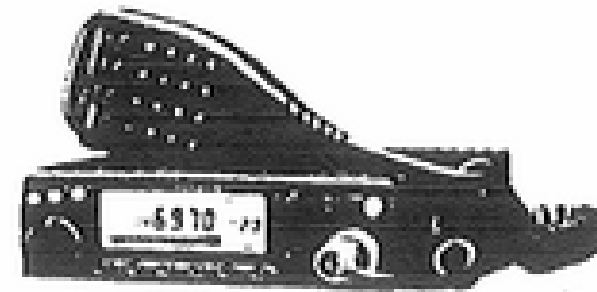
## Newest North American KENWOOD Dealer!



**99¢**  
Deluxe Cordura  
Soft Case  
Thru 12/31/94

**TH-79A**  
144MHz/440MHz  
FM Handheld

### WE WANT TO BE YOUR KENWOOD DEALER



**TM-241A**  
2 Meter  
FM Mobile  
Transceiver,  
50 Watts  
Extended Receive

**HF**  
TS-950SDX  
TS-850S  
TS-450/690S  
TS-140  
TS-50

**ALL MODE  
TRANSCEIVERS**  
TS-790A  
TS-60S  
TM-255A/455A

**MOBILES**  
TM-742A/642A/942A  
TM-733A  
TM-241A/331A/441A/541A  
TM-251A/451A

**FM  
HANDHELDS**  
TH-79A  
TH-28A/48A  
TH-22AT/42AT



**Orders & Quotes 800-765-4267**

FAX 405-748-3077

Local & Info 405-748-3066

Oklahoma Comm Center

13424 Railway Drive, Oklahoma City, OK 73114

**FREE  
SHIPPING**  
on orders \$50  
or more



Oklahoma owned and operated. Not affiliated with any other store.

**145.210 146.670**  
**MORI**  
**146.925 444.100**

Mid - Oklahoma Repeater Inc.

Minutes of the 6 December 1994 meeting.

A brief meeting was called to order at 8:50 p.m. with President Scott, N5NYS in the chair and 82 diners present (including 51 members in 18 families) at the club's Christmas Celebration Dinner; visitors and guests identified were Jake Fisher, KC5KXH; Deidre (guest of Jerry, N5KNU); Larry Loeffelholz, N5SOY; James, KC5BTW; Joe Overman; Starla Overman and Carol Richards.

Scott, N5NYS led a discussion of details about last weeks mailing to the membership, beginning with explaining that the identified 15 cent cost per issue

was reimbursed by payments from the two advertisers on the back, so the entire thing cost the club nothing.

A drawing for a Ham Holiday T-shirt from the "Joe Harding Memorial Scholarship" fund was held by Jim, N5BEQ and won by Chris Love, son of Jerry, N5ABF and Lesta Love, N5AWI.

The minutes of the November meeting were accepted as distributed. As the absence of the treasurer was required by his employer there could be no report of the treasury given.

#### Reports:

**CORA** - On motion from Garland, NQ5Y with second by Forrest, N5VWF it was agreed without opposition that Scott, N5NYS would appoint a committee of at least five to resolve the club's position regarding CORA and the Collector and Emitter. The volunteers who agreed to meet at 7:00 p.m. Thursday, 15 December at Braum's 500 S. Agnew are Garland,

NQ5Y; Rick, N5WNR; Tim, N5USM; Forrest, N5VWF; Farrell, KB5TOM and Jerry KB8LXR. They will report their recommendation at the next meeting, 3 January 1995.

**VEC** - Robin, N5SPA reported our VEC, his dad, Toy, AB5ET was released from the hospital today after successful heart surgery and is recuperating nicely at home, but not quite able to attend the dinner this evening. He sends his appreciation for the well-wishes and flowers from the club membership.

#### Old Business:

On announcement from Scott, N5NYS it appears agreeable to the club membership to not do a club newsletter of its own.

There being no new business, the meeting was adjourned at 9:25 p.m.

The next meeting is scheduled for 3 January 1995, at the usual time and place.

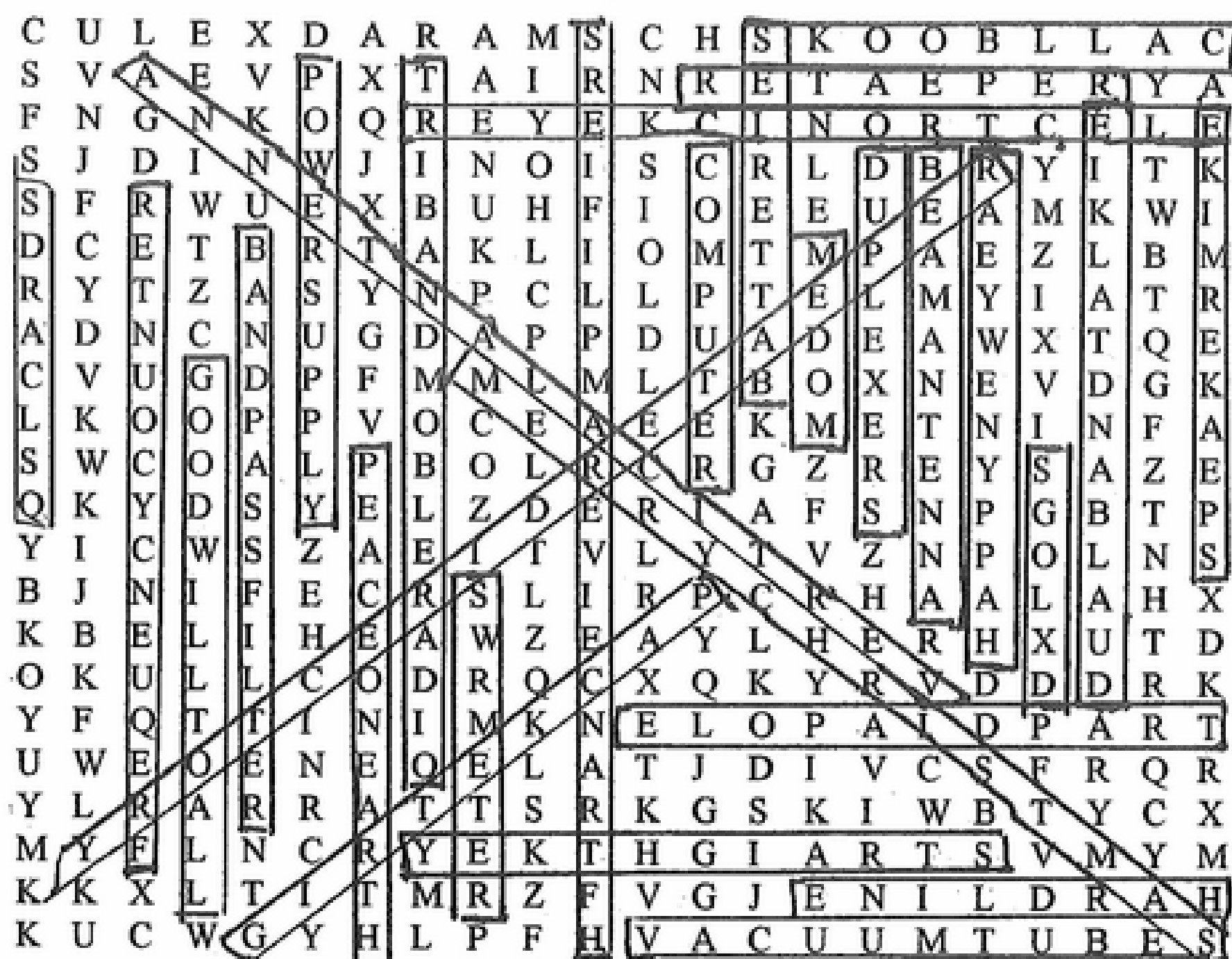
Jim, N5BEQ  
Secretary



## SOLUTION TO A HAM'S CHRISTMAS WISH LIST

by Edith, KA5YPX

As promised here is the solution to last months word search.



## A. R. R. L. Bulletins

From ARRL Headquarters  
Newington CT

### ARRL Bulletin 95 December 6, 1994

#### More FCC reorganization

The Federal Communications Commission on December 1 established a new Wireless Telecommunications Bureau, as part of its continuing reorganization begun last summer.

The new bureau will have seven divisions and will "handle all FCC domestic wireless telecommunications programs and policies, except satellite communications," the FCC said. The new bureau also will "serve as the Commission's principal policy and administrative resource (regarding) spectrum auctions."

Ralph Haller, formerly Chief of the Private Radio Bureau, was named one of two deputy bureau chiefs, reporting directly to the Chief of the Wireless Telecommunications Bureau, Regina M. Keeney. Both of Keeney's parents are licensed amateurs. The new Private Radio Division, along with the Licensing Division, will handle amateur radio matters at the FCC. The FCC said that the

Private Radio Division would "project demand for existing and possible new communications requirements and services."

### ARRL Bulletin 96 December 16, 1994

#### Two New Astrohams

Two more astronauts have qualified for amateur radio licenses: Mission Specialist Wendy Lawrence, KC5KII, and Payload Specialist Sam Durrance, N3TQA. Both are scheduled to fly on mission STS-67 in late February or early March.

### ARRL Bulletin 97 December 16, 1994

#### Vanity Call Update

The FCC Authorization Act that would have converted an annual regulatory fee for amateur radio so-called "vanity call signs" to a one-time application fee failed to pass in the last session of Congress. The bill, HR 4522, passed the House but failed in the Senate, despite a concerted last-ditch effort by ARRL to have the bill considered during the lame duck session December 1. "Broadcasting and Cable" magazine attributed the bill's defeat to opposition (to unrelated provisions) by the National Association of Broadcasters. The FCC now is expected to introduce a vanity call sign program with a \$70 fee, renewable every 10 years. More information on this and other Washington matters will appear in January *QST*.

### ARRL Bulletin 98 December 16, 1994

#### PRB-1 Victory

PRB-1 helps win another one. An amateur in Lyme, CT, has won a Federal Court go-ahead to install a 78-foot tower after a battle of some three years. F. Parker Heinemann, WIYG, was denied a special exception permit by the Town Planning and Zoning Commission. He then filed a civil suit against the town. In late October, US District Judge Gerard L. Goettel said that the town had acted in good faith based on the information it had at the time of the application, in March 1991, but ordered the tower approved because, the judge said, "I think federal law is on the side of ham radio operators in this case."



**ARRL Bulletin 99**  
December 20, 1994

**FCC-issued Call Sign Update**

The following is a list of the FCC's most recently issued call signs as of December 1.

District	Group A Extra	Group B Advanced	Group C Tech/Gen	Group D Novice
0	AA0UN	KG0RV	++	KB0PTK
1	AA1LM	KD1YE	N1TQD	KB1BLO
2	AA2UX	KF2ZD	++	KB2SOZ
3	AA3JD	KE3QE	N3TWX	KB3BFO
4	AE4AD	KS4IM	++	KE4TEA
5	AB5ZA	KK5FX	++	KC5LCE
6	AC6IA	KO6MH	++	KE6ONG
7	AB7GH	KJ7FZ	++	KC7GZS
8	AA8RE	KG8NH	++	KB8VTG
9	AA9NE	KF9ZB	N9ZHC	KB9JBM
N. Mariana	KH0O	++	KH0DO	++
Guam	AH2I	AH2CZ	KH2LP	++
Midway	++	AH4AA	KH4AG	WH4AAH
Hawaii	++	AH6NQ	WH6ZP	WH6CRM
Amer. Samoa	AH8L	AH8AG	KH8BJ	WH2ABB
Alaska	++	AL7PV	WL7ZA	WL7CHW
Virgin	WP2P	KP2CD	NP2HS	WP2AHV
Puerto Rico	++	KP4XY	++	WP4MUL

All call signs in this group have been issued in this area.

**ARRL Bulletin 100**  
December 21, 1994

**Penalties in VE Fraud**

Two former Volunteer Examiners in southern California have surrendered their amateur station and operator licenses in an examination fraud case, and a third has agreed to a settlement.

Amateur Extra Class licensees Robert L. Flores, N6WPQ, and Rose Marie Flores, N6WPR, both of Santa Monica, California, faced an FCC Order to Show Cause and Suspension Order from September 1994, in a case involving examinations conducted in August 1993. The FCC alleged that the VEs willfully signed VE certificates and Certificates of Successful Completion for persons who did not actually take exams.

The FCC also said that the VEs misrepresented material facts to the Commission.

The third Volunteer Examiner, Amateur Extra Class licensee James B. Williams, AA6TC, of Wilmington, California, agreed to a one-year suspension of his operator license and a "voluntary contribution" of \$500 to the US Treasury. Williams also agreed to cooperate fully with the FCC's Private Radio Bureau's

investigation of possible additional fraud in amateur license exams.

The licenses of Robert L. and Rose Marie Flores have been canceled.

**ARRL Bulletin 101**  
December 22, 1994

**2400 MHz Comments Filed**

The ARRL has filed comments on an FCC Notice of Proposed Rule Making, in ET Docket 94-32, a proposal to reallocate a block of spectrum from federal government to commercial use. Some of that block includes parts of the 2400 MHz band shared by amateur radio on a secondary basis with the government.

The ARRL asked that the amateur service be given primary allocation status at 2402 to 2417 MHz, and that it be given at least co-primary status at 2390 to 2400 MHz.

The League also said that because a previous government study had recommended the 2400 to 2402 MHz segment for amateur use, it would be desirable to make the entire segment 2390 to 2450 MHz amateur primary.

The ARRL also said, in a 29-page comment, that any fixed or mobile service station that is granted an assignment at 2390 to 2400 Mhz, "must be" required to protect the Amateur Service from interference and must tolerate any interference received from amateur stations.

The League requested that the FCC not make any additional allocations in the 2390 to 2417 MHz band and, instead, grant amateur radio primary allocation status in that band.

More information is in January, 1995 QST, page 91. The reply comment deadline in this docket is January 3, 1995.



## CENTRAL OKLAHOMA RADIO AMATEURS, INCORPORATED

### CONSTITUTION

ARTICLE 1 - NAME: The name of this organization shall be *Central Oklahoma Radio Amateurs, Incorporated*, a non-profit organization, hereafter referred to as CORA.

ARTICLE 2 - PURPOSE: The purpose of CORA is to coordinate group activities in the public interest between the Amateur Radio societies in central Oklahoma. These activities consist of a statewide meeting of Amateur Radio operators *to be held annually in Oklahoma City metropolitan area [Amendment 23 October 1979]*; better use of communication skills in support of the American Red Cross, Civil Defense, and The Radio Relay League (ARRL); and the seeking of solutions to problems facing Amateur Radio licensees throughout the State.

ARTICLE 3 - MEMBERSHIP: Membership in CORA shall be as follows:

a. SUPPORTING - Each of the several constituted Amateur Radio societies in the central Oklahoma area, endorsing the purposes stated in Article 2 above and providing financial or other support to this organization shall be a SUPPORTING Member of CORA.

b. ASSOCIATE - By virtue of an individual's membership in a SUPPORTING Member Central Oklahoma Amateur Radio society, s/he shall be an ASSOCIATE Member of CORA.

c. DIRECTORS OF CORA - A Board of Directors shall be established as follows:

1. Each SUPPORTING Member of CORA shall duly appoint or elect Three Directors to serve on the Board of Directors of CORA for a term of one year beginning in September of each year. Each Director shall have one vote.

2. The immediate past President of CORA shall serve as an advisory member of the Board of Directors for a period of one year. S/He shall have one vote.

3. *The Managing Editor and the Circulation Manager of The Collector and Emitter(C&E) are full Directors of CORA in perpetuity and shall have a vote.[Amendment 24 January 1984]*

ARTICLE 4 - OFFICERS AND THEIR DUTIES: The Officers of CORA shall be the President, the Vice President, the Secretary and the Treasurer.

The Directors of CORA at the Annual September meeting shall nominate and elect the above officers to serve for a period of one year. Nominees for the above offices are to come only from the Members of The CORA Board of Directors. They shall be elected by the majority vote and shall hold office *beginning on 1 October [Amendment 22 November 1981] for a period of one year*. There is no restriction on the re-election of any individual to an office s/he has held in the previous year so long as s/he remains a Director of CORA.

a. The President shall call and preside at all meetings and shall represent the organization in all matters. S/He shall appoint all committees that are necessary in the administration of the organization's business.

- b. The Vice President shall assume the duties of the President in the President's absence. S/He shall have all the authority of the President when acting in the Presidential capacity. S/He shall assist the President in performing all activities of the organization.
- c. The Secretary shall keep a written record of the Minutes of each meeting of CORA and originate as directed by the President.
- d. The Treasurer shall receive and disburse all funds entrusted to CORA and keep an accurate record of such, shall be personally responsible for all funds entrusted to him/her and shall give an accounting of the disposition of all funds at each meeting of the organization.

ARTICLE 5 - FINANCIAL MATTERS :

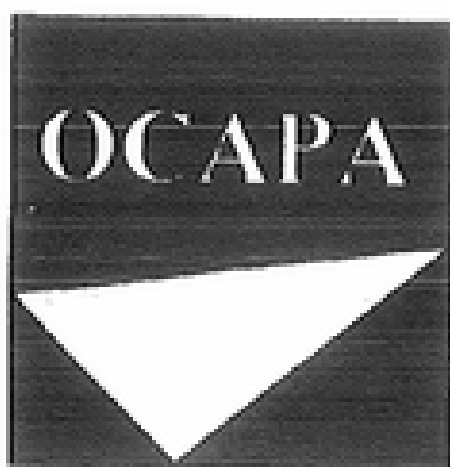
- a. CORA will receive financial support from each SUPPORTING Amateur Radio society as approved by each individual society. Funds for a specific activity shall be requested by the President from financial SUPPORTING societies upon the approval of the Director membership.
- b. Upon completion of a specific project or activity by CORA, the financial SUPPORTING societies will be repaid their financial support if possible. Any liability for loss shall not exceed the amount allocated for that activity.
- c. A complete accounting of the financial matters of any CORA activity or project will be made available to the financial SUPPORTING societies when funds are returned.
- d. *The fiscal year shall be January 1 to December 31 [Amendment 26 May 1980]*
- e. *In the event of dissolution of CORA, all wind-up expense, payment of outstanding obligations and distribution of excess shall be made as provided by law; in no event shall distribution be made to individuals [Amendment 26 August 1980].*

ARTICLE 6 - EXPENDITURE OF FUNDS: The President shall authorize any expenditure up to an amount of \$25.00. Expenditures above \$25.00 require the majority concurrence of CORA's Officers and Board of Directors in attendance.

ARTICLE 7 - VOTING: All matters of CORA shall be decided by a majority vote of the Director members present at any meeting.

ARTICLE 8 - MEETINGS: Meetings of CORA shall be called by the President as may be necessary to conduct activities meeting the several objectives stated in Article 2 above. Advance notice of meetings including time, date and location shall be given all Director Members

ARTICLE 9 - CHANGE OF CONSTITUTION: This constitution may be amended by a majority vote of the Director Members present at any regular meeting provided that Director Members have received thirty-days-advance notice of the proposed change.



Minutes of OCAPA Meeting November 15, 1994

The Meeting was called to order by Brad, KJ0W at 7:30 pm. The minutes of the October meeting were read by Perry, KB5TOT. There was a motion and second to accept the minutes. The motion passed. The treasurer's report was submitted by Cheryl, KB5WQR. There was a motion and second to accept the treasurer's report. The motion passed.

#### COMMITTEE REPORTS

Severe Weather: John, NJ1V said there has been no severe weather. Technical Committee: Mike, KB5WIC said the technical committee met about a week after the October club meeting out at the repeater sight. The power system was completely overhauled. All machines were put on a UPS (uninterrupted power supply) system. A constant voltage transformer and a band pass filter were put on the 146.82 repeater. Both machines have been placed in a racks. The main receive line has a problem at about 650 ft. The technical crew has not been able to get on the tower to fix the problem because the elevator is broken.

Christmas Party: The Christmas party is set for December 20th at 7:00 pm at the Midwest City Community center. Perry, KB5TOT reported that he had contacted Bob, N5PVM about the quantity of meat purchased for last year's party. The quantities for last year's party were 45 lbs of brisket, two 15 lb turkeys, and 10 lbs of ham. It was decided to get 50 lbs of brisket, two 20 lb turkeys, and two 10 lb hams. Chuck, K5NK agreed to smoke the 2 turkeys; Mike, KB5WIC volunteered to smoke the hams; and Ed volunteered to smoke the brisket.

Properties Committee: Ed, WA5YDF said there was no change in the property

Collector and Emitter, January 1995

status. Salvation Army: The trailer was vandalized. A fire extinguisher was discharged inside the trailer.

#### OLD BUSINESS:

Club insurance was discussed. There was a motion to table discussion of club insurance and move its discussion to the executive committee. The motion was seconded and passed.

#### NEW BUSINESS:

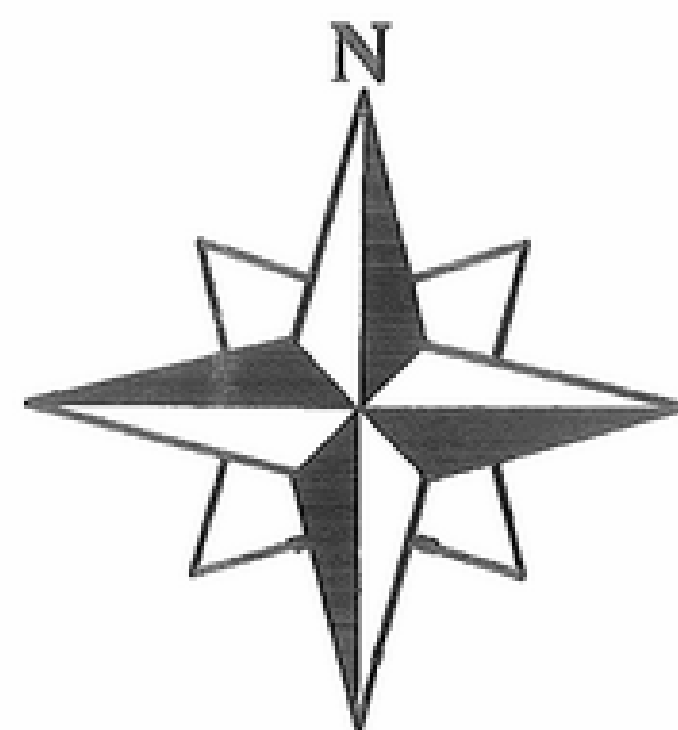
Hal announced that the *C&E* will be selling advertisements.

CORA: Chuck said there was nothing to report at the moment.

There was a break for raffle ticket sales. The winners and prizes were as follows: WA9FCT won a subscription to nuts and volts. He declined the prize. WD0GTY won a chocolate cake. NJ1V won a cake. KI5XA, won a subscription to nuts and volts. KATIE HARGROVE won a wreath. WV5S, declined a prize. WD0GTY won a candle holder. N1LPN won a candle holder. N5ENQ won a candle holder. KB5TOT won a candle holder. N5VWF won a Test and Measurement Catalogue.

There was a motion to adjourn at 8:40 pm. The motion was seconded and passed. Attendance was 43.

Respectfully Submitted by,  
Perry, KB5TOT



## PACKET BEACONS

The frequency 145.05 MHz has been set aside by "gentlemen's agreement" for use by BBS traffic as the primary user. This occurred approximately seven or eight years ago. This was done to separate as much as practical (by frequency) the various packet uses which are fairly incompatible with each other.

I have recently noticed a proliferation of non-BBS stations which are sending fairly frequent BEACONS on 145.05. While I understand the inclination of the packet newcomer to announce his or her presence by the use of beacons, it adds a few more packets to an already highly congested frequency.

Since most all packet users come over to 145.05 to check a BBS and then return to another frequency, it is unlikely that very many users will see the beacon of the newcomer. If you feel that you **MUST** beacon, please set your beacon interval to the maximum possible time frame.

Nodes and digipeaters which provide access to a BBS have a valid reason to send out beacons as it assists the newcomer to find the optimum route to a BBS. This BBS sends a beacon every 30 minutes to announce the stations for whom MAIL is waiting.

I hope that this will help you to make better use of the 145.05 MHz Packet LAN and of ALL packet facilities.

73 de Mac/K2GKK @  
K2GKK.#OKC.OK.USA.NA (SysOp)

### Estate Sale Silent Key - KJ5C

Drake TR-7 Transceiver w/PS  
Drake SP-75 Speech Processor  
Drake MS-7 Speaker  
Yaesu YP-150 Dummyload/Wattmeter  
Packratt 232 Multimode Controller  
Avatex 1200 Communications Modem  
Shure 444D Desk Mike  
J-38 Straight Key

Sell as Package, if interested call:  
Don Ayers, KC5BRO @ 340-0458 or on  
the 146.82 repeater.



## VHF Club

### NEWS

W5LOW

Elmer Goekler Memorial  
Station

#### Minutes of December Meeting

Meeting was called to order, for President J, KB0QJ, who couldn't make it, by the Secretary, Joe, K5JB, at 12:00 p.m. with 15 members and guests present. Treasurer Ellard, W5KE, had to leave early but had left his report which was presented by the Secretary. It was approved, as were the minutes from the last meeting.

The nominating committee delivered a list of recommended nominees for next year's officers. The are:

Jackolyn Olson, KA5ENU, President  
Ken Eason, KF5JS, Vice-President  
Ellard Foster, W5KE, Treasurer  
Joe Buswell, K5JB, Secretary

Elections will be held at next month's meeting. Additional nominations can be made at that time.

Charlie, WA5JGU, gave a comprehensive CORA report, including information that Frank, N5FM, was asking for more active support of the radio operations at Salvation Army. (I think the details were covered in the December C&E.)

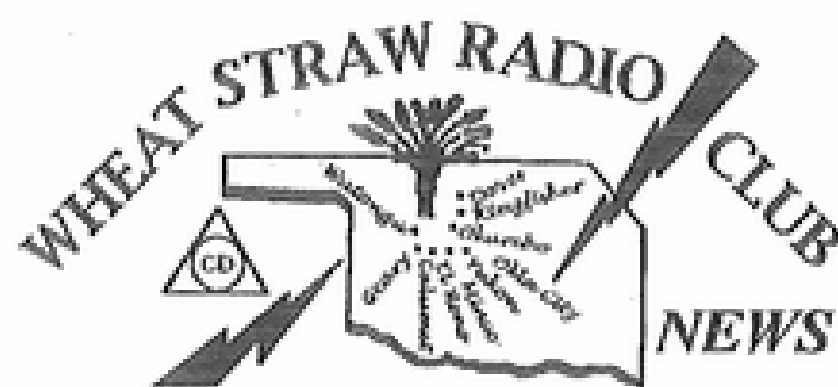
The VHF Club Turkey award was brought out of retirement and awarded to John, KA5VCW, for what reason? Heck if I know! He doesn't seem like a turkey to me! Anyway, meeting was adjourned at 12:15 p.m.

Joe, K5JB, Sec'y

#### Profound Truth

The other day I noticed a message from one amateur radio operator to another containing a number of things that might improve his results while trying to access packet radio systems. Buried deep in that message was a striking and profound truth that seems to escape most. That profound truth was "improve your station". Simple, eh?

Joe, K5JB



#### Wheat Straw Club Meeting

At 1:30 Sunday, invocation was given by Johnny, K5GBN. The double food line was started. The End-O-Main counted 40 people going through the lines. At 2:30, the vice president, Leo, WZ5H, called the meeting to order in the absence of the president, Joe, WA5GHK. Joe, WA5GHK, and Mary Ann, WA5VNF, were in Branson MO.

After reading minutes of the previous meeting, Johnny, K5GBN, gave the technical committee report. The repeater is doing OK now but he had gotten some prices for a new transmitter antenna. The repeater is operating on separate transmit and receive antennas. When the weather is good they will get it all worked out.

The box was passed around again this year. It has been a tradition for several years that the Wheatstraw club take donations to send to the Crippled Children's hospital for the children's Christmas presents. The club members opened up their hearts and donated \$100.

The elections were held for new officers who will take their posts during the January meeting. Leo, Peil, WZ5H, was elected president; Jim E. Payne, vice president; Joe Garland, WA5FLT was reelected secretary and treasurer; and, Ralph, WA5PFK, was reelected as reporter.

Ralph brought up the fact that he thought the Wheatstraw should celebrate its anniversary. It was discussed by members. The Club was organized in February 1960. After some questions were asked and answered, Neil, N5KCO made a motion that the club have its thirty fifth anniversary after winter is over in 1995. Tom, N5IKN, seconded the motion, and it carried. As soon as the date is set it will be published in the club news.

The next meeting will be January 8, 1995,

beginning another year. Let's all wish for a better year for everyone. We had a good year except for sickness among the members. I wish you the best.

The next meeting will be in El Reno at the Northwest Community Center, at 520 N Grand Street. Grand Street is the street on the west side of Homeland grocery on Sunset Blvd. We have been having meetings there so most of you should know where it is.

Leo, WZ5H, doesn't know yet whether he will hold a school this winter. At this time he doesn't have enough students. If you know of anyone interested get them on the ball.

We must not forget Bus, W5VVU, who teaches all kinds of electronics, including repair, computers, and amateur radio. Bus is located in rural Calumet.

The FCC has begun auctioning of some of the frequencies. The auctions started December 5. They last for weeks, or even months. The first narrow band raised \$1 billion this past summer. The wide band auction was expected to bring about \$10 billion, but now is expected to bring \$15 billion.

I had thought about buying one or two of the wide spectrums, but I didn't know how to write a small check like that! Ha!

Ralph, WA5PFK

#### Song of the Wheat Farmer

Written by Clarinda Davission,  
many years ago.

I do not see the fields of wheat,  
I see the bills it has to meet.  
The bounteous harvest stretches far,  
I owe two hundred on the car.  
Till the green gold earth meets with gold sky,  
The cost of living is getting high.  
The wheat's like soldiers, rank on rank;  
I owe four hundred at the bank.  
Or, like a room of eager scholars;  
The tractor payment's ninety dollars.  
Or graceful dancers of ballet,  
For oil and gas, I'll have to pay.

A silvery mist in morning light,  
 That grocery bill I must make right.  
 It's yellow brown in moon's sunshine;  
 Three hundred yet for the combine.  
 The sunset lends an orange hue;  
 The mortgage on the land is due.  
 The wheat is mother nature's hair.  
 I owe one twenty for repair.  
 The wheat's a billowing swirling sea;  
 Three hundred for my penalty.  
 The wheat's a cloud of golden show;  
 My quota is so very low.  
 The wheat is sold, the money's all.  
 I'll have to borrow some this fall.

### **Peanut Brittle**

It is candy making time, Christmas is just around the corner, as the elders always said. My wife Goldie makes the best peanut brittle to my taste buds. Understand she says do not make it on a cloudy day, or when the humidity is high.

#### **Ingredients:**

- 2 c. sugar
- 1 c. white corn syrup
- 1/2 c. water
- 2 generous tsp. soda
- 2 c. raw peanuts.

Prepare all pans and ingredients ahead of time. Use a candy thermometer.

Boil together sugar, syrup, and water (260 degrees) until it threads from spoon and big bubbles form in boiling. Add peanuts, continue cooking until syrup becomes hard crack, stirring constantly with large spoon. Remove from fire, then add soda, stirring rapidly until it foams. Then pour quickly onto well buttered cookie sheets. Do not spread.

### **Royal Navy Going No Code**

From Royal Naval Amateur Radio Society Newsletter, London, England, I learned that as of July 1994, Morse training has ceased for radio operators in the surface fleet and will cease for submariners from 1996. This is due entirely to the demise of Royal Navy and commercial CW activity. I am of the opinion it won't be too many years until CW will be a thing of the past, although the International Amateur Radio Union will neither propose or support a

change. The IARU made a decision in Singapore in September 1995 and adopted a resolution recognizing that the Morse code provides a means of intercommunication between people with language barriers.

### **Spectrum Guide Book**

The Spectrum Guide book has 312 pages. It covers 30 MHz to 300 GHz, profiling major government and scientific uses of the U.S. spectrum in the 325 officially designated VHF through EHF bands. It is available for \$34.95 from Publications Services, Inc., 8870 Business Park Drive, Austin TX 78759. The toll free number for ordering is 1-800-460-0090.

### **New Zealand Backs HF Morse**

The New Zealand Association of Radio Transmitters Inc. (NZART) has issued a statement regarding its position on the International Telecommunication Union rule requiring Morse proficiency for amateurs operating below 30 MHz. NZART is New Zealand's IARU member society and recognized by the New Zealand Ministry of Commerce as the body representing amateur radio in New Zealand.

The NZART said it used a nationwide membership survey in 1993 to develop its policy on Morse code. The NZART presented its policy statement at the IARU Region 3 conference at Singapore in September 1994, where the matter was debated. The Conference endorsed a recommendation that the status quo be continued.

### **Grandma's Lamp**

I read this article about the old kerosene lamp (called coal oil in those days). I don't remember what year we had electricity, but it was in the late thirties. I liked this poem that Jewell Egbert wrote about her grandma's lamp.

Grandma had a coal oil lamp,  
 It had been her family's pride.  
 This lamp was made of thickened glass  
 And had a handle on the side.  
 Sometimes she lit the little lamp  
 Before the break of dawn,  
 And carried it to the kitchen,  
 Where she put her apron on.  
 In the middle of the table,

The lamp would then preside  
 Along with soda biscuits,  
 And potatoes crispy fried.  
 By time the day was breaking,  
 We felt the warming sun.  
 The light was then extinguished;  
 Its morning's work was done.  
 The glow of the lamp was special,  
 Though not "electric" bright.  
 We all knew that Grandma's love  
 Was shining through its light.

### **W5YI Reports the Numbers of PCS**

The older 800 MHz cellular phone service began operating in 1983, and now has about 12 million subscribers. Each subscriber phone bill runs an average of \$80 per month. That amounts to about \$10 million a year air time. Business Week estimates there could be 70 million regular subscribers in the next five years.

PCS, is Personal Communications Service, and is considered to be the next technological wave of the future. Some believe that by 1998 everyone will be carrying a lightweight shirt pocket communicator.

It will be 1.8 GHz, having low power -- only one to ten milliwatts -- compared to 3 Watts for a cellular phone. It is estimated that the batteries will have 8 to 10 hours talk time per charge. It looks like the FCC is getting \$522 million for the spectrum. The federal boys should think about paying some of the national debt.

Goldie and I wish everyone a healthy, happy new year.

Ralph, WA5PFK

### **Antenna Feedline Length**

After much contemplation and after consulting with my friend Joe, K5JB, I think I can finally advise what the proper length of an antenna feedline should be.

Those who know all about reflection coefficients, parasitic resonance, secondary radiation, and Fresnel zones already know the answer but those who haven't dug deeply into the technology may not know that the proper length is whatever it takes to reach from the transmitter to the antenna!

Ralph, WA5PFK

## On the Air

**ARES** - Oklahoma County Thursdays @ 8:00 p.m. on 146.22/82.

Packet check-in on 145.07

**Salvation Army** - Second Saturday of the month @ 8:00 a.m. on 146.22/82.

HF 3900kHz; Packet 145.07

**AMTOR** @ 8:30 a.m. 14.064mHz

**Night Owl** - Daily @ 10:30 p.m. on 146.07/67 with alternate 146.325/925.

**OKC Swap-n-Shop** - Saturdays @ 10:00 a.m. on 146.22/82.

**Geritol** - Daily @ 8:00 a.m. on 145.41 minus input.

**Edmond Info** - Mondays @ 7:00 p.m. on 147.135/735.

**QCWA Chp 63 VHF** - Thursdays @ 7:00 p.m. on 145.41 minus input.

**QCWA Chp 63 HF** - Sundays @ 8:00 on 3856.5kHz.

**Wheatstraw** - Wednesdays @ 9:00 p.m. on 146.01/61.

**Purcell** - Mondays @ 8:00 on 145.19 minus input.

**Cimmaron** - Tuesdays @ 9:00 p.m. on 145.45 minus input.

## AVVid

is an

*Authorized "**Kenwood**" Service Center*  
Warranty and Non-Warranty Repairs  
For Kenwood Amateur Equipment Only

### "Labor Charge"

Normal Repair: \$65.00

Modifications: \$50.00

Estimates: \$40.00

Lightning Damage: Varies

All Are Plus Parts

**10040A Monroe Dr. Dallas, Texas 75229**

**1-800-214-5779**

**214-350-6770**

**Fax 214-350-7743**

**10:00 a.m. - 6:00 p.m. Mon to Fri / 10:00 a.m. - 4:00 p.m. Sat**  
**We Accept Visa/MC/Discover, Cash, and Good Checks**

**Call and Let US Help You!!**  
**Owned and Operated By "Ham's"**

## Cryptoquote Answer

qkhp k upwwm zqwsveukv ktg k qkjjm toi mpmw  
Have a Merry Christmas and a Happy New Year !

## HARMONICS CAN HAPPEN AT ANY TIME

It all started on Saturday, December 17, 1994, at 7:59 am/1359Z. A third Male harmonic occurred at University Hospital in Oklahoma City, OK. The proud amateur John Zilavy **KC5DRI** and his spouse Nancy, astonished that a harmonic of such proportions could happen 9 weeks early. Measurements noted during this blessed events are as follows: 3 pounds 15 ounces; 19 inches long, and a signal report of 599 shortly after birth. An event of such magnitude needs a name, so with the concurrence and excitement of his big sisters Kaitlyn 5 and Jessica 3. Jason Anthony Zilavy will now be known as son and little brother.

## Letter to the Editor

Re: Kudos, Chit Chat (Butter Nut Chewies) and "Sugar Cured Hams"

1. I have been meaning to tell you that you are doing a great job with the C & E. Keep up the good work.
2. The Butter Nut Chewies make our mouths water but there are an increasing number of us out here who are no longer able to partake of that much sugar.
3. Here is an alternative for the Non "Sugar Cured Hams" among us;

### SUGAR FREE COOKIES (Almost)

#### WHOLE WHEAT CHOCOLATE CHIP COOKIES

1/3 c raisins

Place raisins and water in a small sauce pan and bring to a boil. Set aside to cool

1/2 c water

3/4 c whole wheat flour

Place dry ingredients in a mixing bowl and blend thoroughly.

3/4 c all purpose flour

1 T brown sugar

Note: the 1 T of Brown sugar and 7 T of Sugar Twin compromise 1/2 c. Sugar Twin is a saccharin based 1:1 sweetener. Original recipe used 1/2 c brown sugar.

7 T brown Sugar Twin

1/2 t baking soda

1/2 t baking powder

1/2 t cinnamon

1/3 c white sugar twin

Beat the ingredients at low speed in a mixing bowl until smooth. Add water from the rasins and 1/3 c vegetable oil beat at high speed until

1 egg

1 T molasses

frothy. Add to dry ingredients and stir into a stiff batter.

1/3 c (2 oz) semi sweet

Stir in the rasins and chocolate chips and let rest while you grease the cookie sheet.

chocolate chips

Drop with a teaspon (an iced teaspoon with its longer handle works best) on the greased cookie sheet. Makes 25 - 30 cookies. Bake 12 - 15 minutes.

Diabetic exchange of the original recipe was 1 bread and 1 fat.

Merry Christmas and Happy New Year.

Clarence, KB5RR



## CHIT - CHAT

Like many of you, we just finished celebrating Christmas and now is a time for reflections. I honestly do not remember when I began using the last week before the New Year to look back on the joys, tears, mistakes, and counting the many blessings I had received. Out of all that happened this last year, there are two events that stand before all others. One has to do with faith and hope and the other has to do with all the anger I have seen over the past few months.

The anger that I have been witness to could have been avoided if the persons involved had just thought before they spoke. I was in a store and there were two people in front of me talking while also blocking the way. I couldn't go pass them nor could I back up, there were others behind me, so I waited. I attempted to say "excuse me" and received a dirty look. I got hit a few times from behind with a shopping cart and asked what my problem was, push my way through if need be but move it! The two blocking the way finally moved while the ones behind me were boiling mad. There has also been ugly hurtful words exchanged over the air waves lately, again said without thought or any respect for others. I know that many good and cherished hams in this community have been deeply hurt by these mean spirited hate filled words that were spoken over the air as well as in person. My question is "WHY?". I just turned 40 this year and had always been taught to think before speaking because once said the words can never be taken back. I was also told that people remember anger longer than anything else you did or said. I'm not perfect by any means, just ask Hal, but I do try to stay out of trouble as much as possible. So, for the New Year lets try to be less angry and become more understanding toward each other, think before you speak. As my grandmother use to say, "sweet words are like honey for the soul while anger is like a festering sore in needs of healing".

The event that happened in our life that took Faith was Hal's retirement from the service and my illness that was happening

at the same time. Hal was looking for work while I was falling apart health wise. It took over 5 months for the base to find out what was wrong, I had a kidney infection that they had said was "just nerves" and given dope for. It was allowed to go untreated until I demanded tests be ran. I was told later if I had not acted against my doctors orders I would not be here now. I also ended up having a toxic reaction to the med. that I was given to get rid of the infection that was now throughout my system and again was told if I had taken one more pill it would have killed me. Talk about developing a case of nerves, I did after that. Still, I am now okay and have been told it is going to take time to completely heal. I have been given another chance at life. Hal was given a lead to a job by a fellow ham in August that he enjoys. FAITH and HOPE were the lifelines I held on to, never refusing to let go, there were times when my hold was weak but I held on all the same.

I have so much to be thankful for as this year comes to a close and am grateful. If I had one wish for you in this coming year it would be "may your troubles be few, your blessings be many and that you never begin or end a day in anger. Stand strong on that which you hold as true and be wise enough to admit when you are wrong. Walk in Peace and see the goodness in those around you. Life is too short to go through it with a harden heart".

HERE'S TO NEW BEGINNINGS AND  
A NEW YEAR,

LINDA NILPN

### Ham Happenings in the Oklahoma Area

VE Exams, Social Gatherings, Hamfests,  
Licensing Classes and other Events:

VE exams on 3rd Monday of each month sponsored by C.O.R.A. 1800 @ Salvation Army HQ at NW 50th and N. Penn, Oklahoma City.

VE exams on 3rd Saturday of each month are held at 0900 in Math Science building at Rose State College in Midwest City.

VE exams on 1st Sunday of each month sponsored by M.O.R.I. 1400 @ radio station KOMA, 820 SW 4th Street, Moore, OK [This month's session will be held 8 Jan 94 due to the New Years Holiday]

VE exams on 4th Tuesday of each month are held at 1800 in the Shawnee Public Library, 101 N. Philadelphia.

VE exams on 2nd Saturday of each month sponsored by SCARS are held at 1000 at Red Cross in Norman.

VE exams on 4th Saturday of each month are held at the Wilson Center in Altus, OK, times are 1830 for code and 1900 for theory.

Hams on the Southeast side of Oklahoma City meet at various locations for lunch on Tuesdays from 11:00 - 12:00 a.m., to find out where they meet listen to 146.22/82.

Hams from all over Oklahoma City meet at various locations for lunch on Thursdays at 11:00 a.m., to find the lunch location of the day listen to 146.22/82.

Hams from around the central Oklahoma area meet Fridays at 8:00 p.m. for supper, coffee, friendship and overall story telling at the Skyline Restaurant, on 15th and Eastern in Oklahoma City.

MORI sponsors a transmitter hunt each week, alternating between north and south Oklahoma City at 7:00 p.m.. The hunt frequency is 147.470MHz. Check on the 146.07/67 machine for the hunt announcement.

Edmond area amateurs meet each Saturdays, 8:30 a.m. for breakfast and coffee at the Grandy's on Broadway Edmond, OK

Is anyone interested in a CW net? If so, please mail a POST CARD to Scott Kelly, AB5MI P. O. Box 1030 Bethany, OK 73008. Purpose of net would be to help those working on learning or upgrading Morse code.

## S.C.A.R.S. HOLDS CHRISTMAS PARTY AND DECEMBER MEETING

The members of the South Canadian Amateur Radio Society held their annual Christmas party and dinner at Ryans Steak house on Dec. 5th.

About 50 people showed up for the feast and it seems that everyone had a good time. Bill, N5UMH was able to squeeze some money out of the kitty and Mike, N5SOF and Keith, KB5FCI, got up real early on the day after thanksgiving and made our way to wally world where we purchased some small guy gifts and Ken, N5BEW and Leland, W5MCN wives donated some very nice handmade girl gifts. Don't know who won the last gift, but Leland's name was the first name drawn out of the can. Ye ole editor didn't win anything, but I'm waiting for the granddaddy of all prizes! (yeah right!)

### Monthly meeting

The monthly meeting for SCARS was held on Dec. 10th at the Red Cross building in Norman.

Don asked everyone to stand and be recognized and if they had something to sell or trade do it at that time.

### Club dues are due--

Bill, N5UMH, gave the treasury report and reminded everyone that their dues are due. Dues for the year is \$20.00 for a single club member or \$21.00 for a club member and his spouse or a sibling. I know everyone is probably tired of being reminded, but it takes a lot of money to run a club like ours and in the past year we had a lot of expenses for radio repair and all.

### VE tests and new Spring Class for Novice and Techs-

Jim, NW0K, gave a report on the success that the SCARS VE team has had the last

year. Jim reported that 98 people took the tests with about 55 people being passed. Jim said that the VE team is looking for some more volunteers to help with the tests and if anyone is interested, step up and talk to Jim.

Jim also gave a report on some recent ARRL rule changes. Jim and the VE exam team needs a pat on a back for their effort..

Mark, N5HZR, is wanting to have another radio class this spring and said the class would last about 8 weeks. Mark said he would like to have a room that would hold about 50 people. As in the past, the code would be offered to those wanting to take the code test.

Mark said that ARRL league is offering some video tapes to help with some of the teaching and said he is looking into that idea.

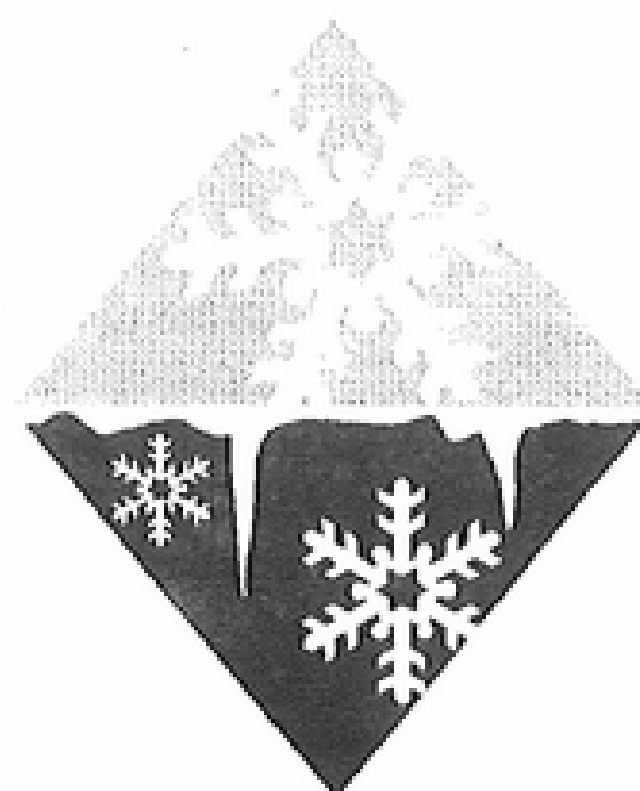
So, if anyone knows of anyone that is wanting to get their amateur radio license, stay tune for further announcements.

### Odds and Ends--

Dennis, KC5GVH, gave a brief report on SARA and asked that if anyone is interested, contact him.

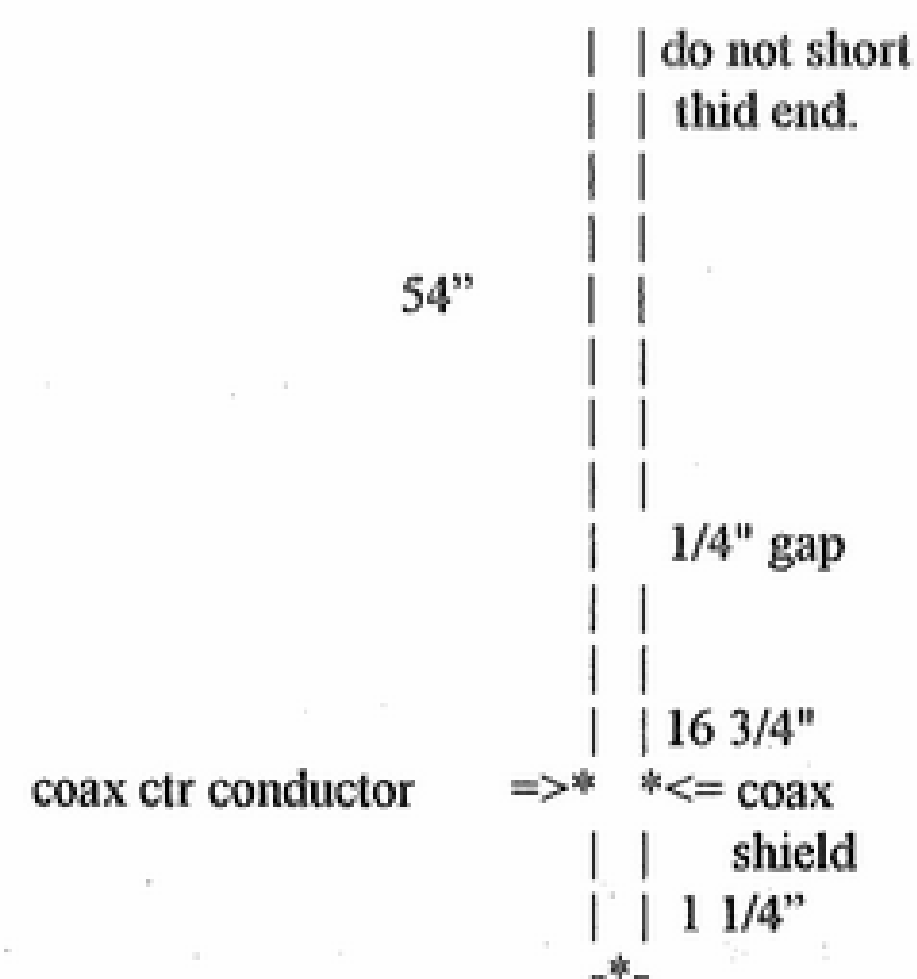
Joe, W5PNO, made an announcement that someone is having code practice on the radio and if anyone is interested in this just contact him for more details.

-30- Keith, KB5FCI



## Easy J-pole for 2M

The following is a description of a J-Pole antenna made from 300 ohm TV twin-lead. Quite a few of the hams in the area have successfully built one or more of these antennas. They have quite a few advantages which include improved performance for 2-meter HTs, portability, and last, but never least, they are inexpensive.



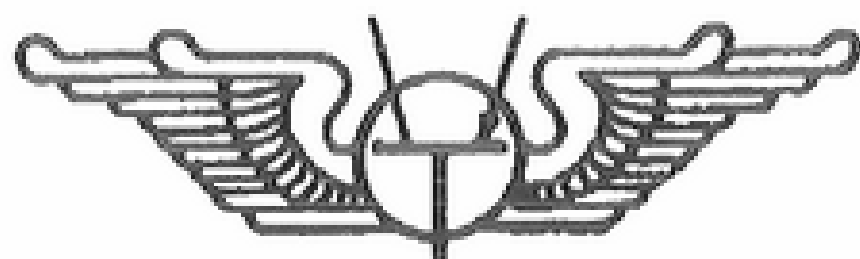
solder the twin leads together at bottom

1. Start with 54 1/2" of TV twin lead (foam core does not work as well)
2. Strip 1/2" of insulation at bottom and solder wires together.
3. Measure 1 1/4" from soldered wires and strip insulation on both sides. This is the solder point for a coax feedline.
4. Measure 16 3/4" from bottom and cut out 1/4" notch on one side.
5. Feed with a length of RG58U coax. Tape coax at feedpoint to the twin lead for strength and weather protection.

I have also attached an alligator clip to the plastic on the top of the antenna in order to conveniently hang it. I am successfully using one in my attic to avoid any CCNR problems. I have another that I can take with me camping, sailing, etc.

This design has appeared on many BBSs and in club newsletters; the earliest reference that I know of is a Jan. 1984 D.A.R.C. antenna article by James Burks, KA5QYV.

Enjoy, N6UBM



## W5PAA - Areonautical Center Radio Club

December 1, 1994

The December ACARC meeting was attended by 23 members while others were assisting with the Novice/Tech classes of 36 students. President Dick, KJ5VV, provided an overview of the Special Events Operation for December 17 and 18 and details regarding the Club Christmas Party to be held December 10th. There was some lengthy discussion regarding the potential of club equipment for Six-meter operation and potential Satellite Communication for Aerospace America Airshow in July 1995. Brad, KJ0W, stimulated discussion about potential operation of linked 2-meter-to-HF transmission as he witnessed in England while with the Air Force.

Everyone was reminded that January is election time for selecting officers for the 1995 calendar year. We expect to elect officers in January and plan 1995 events and participation schedules.

W5PAA operated a Special Events station December 17 and December 18, 1994, to commemorate the anniversary of powered flight by the Wright Brothers at Kitty Hawk, NC, December 17, 1903. Although we had permission to operate "W6OI ON-THE-AIR" as W6OI/W5PAA, by Ten-Ten International, Inc., Station Trustee, there was no activity on 10 meters due to poor propagation. W5PAA also plans to operate a Special Events station at the Tenth Annual Aerospace America Airshow at Will Rogers International Airport in June 1995.

December Special Events Operators were Brad, KJ0W, Jeff, WD0GTY, Perry, KB5TOT, and Dick, KJ5VV. The club will have special QSL cards for exchange with contacts made that reflect the new FAA Challenger CL601 Flight Inspection airplane.

Does anyone remember a "Worked All 77 Oklahoma Counties" award? The ACARC previously was the focal point and Manager for that award in years past. Should we "re-invent the wheel" and become the sponsor and focal point for such an award?

The ACARC had it's annual Christmas Party at Homestyle Buffet on December 10 with 38 members in attendance. Several members and spouses were lucky winners in the door prize drawings, some taking poinsettias home for the holidays while others were 'lucky' winners of an ARRL Antenna Book or other 'necessary' ham "stuff".

73, editor (Dick, KJVV)

## 2M J-Pole Antenna, Version 2

Here's a variation on the twinlead J-pole design that uses copper tubing. The dimensions are a little different and the feed is different from what has been previously posted but then that offers some opportunity for experimentation (which is part of what amateur radio is all about). I haven't personally constructed one of these but I know several local hams who have and they are very pleased with the results. This makes a very unobtrusive and rugged antenna.

### SIMPLE J POLE ANTENNA

The J-pole antenna offers good gain, compact size, simplicity and very low cost. They are easy to build and compare very favorably against commercially available antennas. As a side benefit they are DC grounded for lightning protection. The construction style provides for a very durable antenna and one that is very easy to mount. The total material costs should be about \$10.

#### Material list:

- 1) One ten foot piece of 1/2" rigid copper tubing
- 2) One 90 degree elbow fitting
- 3) One T fitting
- 4) Two 5/8" rubber chair leg caps (or 2 copper end caps)
- 5) Two small stainless steel hose clamps

#### Construction:

- 1) Cut the copper pipe to the following lengths (save the piece that is left over):

57" (66 1/2" for a 5/8 wave)	57"
19"	(66 1/2"
3/4" (used to join the two fittings)	for 5/8

- 2) Using normal plumbing techniques (solder, flux, torch) connect the tubing as shown in the illustration.

- 3) Install either the rubber feet or solder the copper end caps in place.

90 elbow-

#### Tuning:

- 1) Attach the hose clamps about 3" up from the bottom of the "U" (5" for the 5/8 wave).
- 2) Attach the inner conductor of the coax to the 19" side and the braid to the 57" (66 1/2") side.
- 3) Check the SWR. Slide the clamps with the coax up or down until a 1:1 SWR is achieved

If the copper color is not to your liking, paint it any color you wish. It is strongly suggested that you use a good silicon compound to weatherproof the coax connections against the elements.

## Collector and Emitter Changes For The New Year

Over the past six months, I as Editor of the *Collector and Emitter* have done my best to present an interesting and informative newsletter, to the clubs associated with the Central Oklahoma Radio Amateurs (CORA). I have not heard many, if any negative comments on what I have published here so far. I plan to keep the same standards as those I started with, to publish a paper you want to read. I have many people to thank for the assistance. The editors and persons in your clubs that send me things to print. There are those, who run the packet system that give me a great many of our news items and bulletins. It is these people you need to thank and support also when giving me credit for the *C&E* as it is known.

If you will notice the cover has changed again from the old square box shape to the cover of the last six months. This particular change has come about to update the paper and to conform to Postal Regulations. I wanted to keep the cover the way I have been doing it, but the post office would require me to change the headers I put on the pages. Or to totally redo the newsletter. So I have compromised. The name is still the *Collector and Emitter*, along with the transistor as the emblem, but I am going to drop the CORA of the title. It will still be published as CORA's newsletter, with a few changes to satisfy the postal people.

As most of you may know by now CORA's treasurer resigned, and we are temporarily doing the best we can in submitting the bills and keeping things flowing. In the interim Linda, NILPN is acting as circulation manager for CORA and we are trying to get the bills caught up and to the clubs in a timely manner. We are going to incorporate some changes to make things easier for the clubs. One is a monthly bill instead of a three month bill. Also the bills will be broken down so that you will only see the members of your club sent a *C&E*.

Something needs to be said here about who receives the *C&E*. Only the primary member of a household receives the *Collector and Emitter*, unless the other members of that household request a second or more copies. The family member must then make arrangements to pay for those copies and fill out a slip as if they were a primary member. This does not mean they pay a clubs full dues only the \$4.80 to receive the newsletter.

Receipt of the newsletter is not restricted to club members. We have had several people

PLEASE PRINT

I \_\_\_\_\_ Call \_\_\_\_\_  
NAME

Address \_\_\_\_\_ Apt \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Telephone \_\_\_\_\_ Do hereby transmit my dues of

\$ \_\_\_\_\_ X \_\_\_\_\_ Total Paid \_\_\_\_\_  
YEARLY AMOUNT NUMBER OF YEARS

In the (Club Name) \_\_\_\_\_

Month and Year ending: \_\_\_\_\_ / \_\_\_\_\_ Date Paid: \_\_\_\_\_ / \_\_\_\_\_  
YEAR/MONTH YEAR/MONTH

\$4.80 OF YEARLY AMOUNT IS FOR A SUBSCRIPTION TO CORA'S COLLECTOR AND EMITTER

Member's Signature \_\_\_\_\_  
NEW RENEW DROP CHANGE-OLD ZIP/CALL \_\_\_\_\_

request to get the paper in lieu of joining a club. To do this all we need is a slip filled out and send a check / money order for the amount of \$7.00 to pay for a nonclub member subscription.

Linda and myself are trying our best to do the correct things and make the *Collector and Emitter* better as time goes on. We have already had several calls reference lost or missing mailings. There will be a roster going to all the club treasurers to bring the database to current levels.

Also please note in the past if a member went over on their dues then they kept getting the *C&E* for three months as a buffer. With the new year we feel that this is no longer possible so a one month grace period will be given, however please read your label as this is the date we show as the expiration date for your subscription.

So please help us help you, keep the articles and ideas for things to print coming. I repeat what I said in the beginning I print what you send in.

Happy New Year and Best of Wishes from the *Collector and Emitter* Crew.

Harold C. Miller, KB1ZQ - Editor  
Linda G. Miller, NILPN - Circulation  
Mike P. Miller, Artist at Large

Please fill out all the information on the slip. The Dates and Amount paid is required for Postal Regulations.

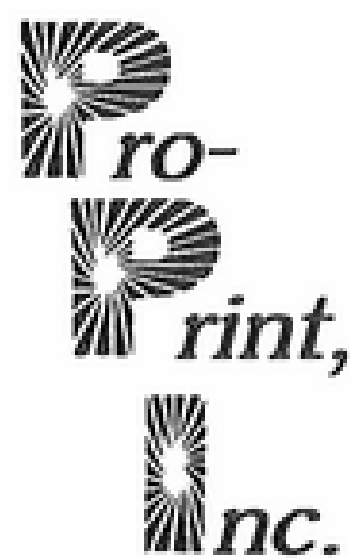
Telephone numbers are only used in the event of a question on your membership or subscription to *Collector and Emitter*.

Signatures are not required but requested to verify that you are aware of you subscribing to the *C&E*.

Thank you for your assistance

## January 1, 1995 to Febuary 4, 1995 Schedule of Events:

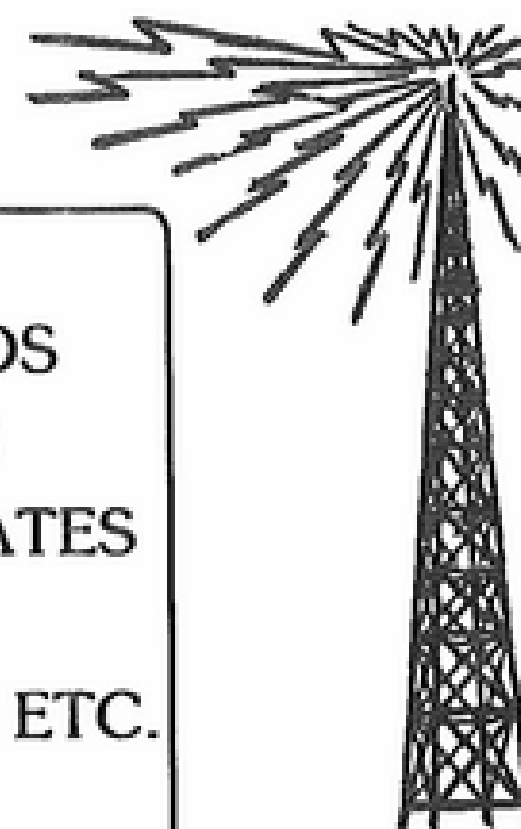
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1 2:15 p.m. Great Plains	2	3 7:00 p.m. MORI	4	5 7:00 p.m. Aeronautical Center 7:30 p.m. CARS	6	7
8 2:00 p.m. Mori VE Exams 2:30 p.m. Wheatstrow	9 7:00 p.m. EARC	10	11	12 7:30 p.m. Altus Assn	13	14 9:30 a.m. SCARS 10:00 a.m. SCARS VE Exams
15 2:00 p.m. EARS	16 6:00 p.m. CORA VE Exams	17 7:30 p.m. OCAPA	18	19	20	21 9:00 a.m. VE Exams (RSC) 11:00 a.m. VHF Club
22	23	24 7:00 p.m. Shawnee VE Exams 7:30 p.m. CORA	25	26	27 C&E Deadline	28
29	30	31	1	2 7:00 p.m. Aeronautical Center 7:30 p.m. CARS	3	4



**THANK YOU !**  
WE APPRECIATE YOUR BUSINESS !  
**Jim Kelly, WA5LKS**



- QSL CARDS
- MINI-QSL CARDS
- NAME BADGES
- CALL SIGN PLATES
- COFFEE MUGS
- CAPS, SHIRTS, ETC.



...for the finest in all kinds of...  
General Commercial Printing...  
**RAISED LETTER PRINTING**  
**SUBLIMATION PRINTING**  
**and ENGRAVED SIGNAGE**  
Give us a call...



**VISA AND MASTERCARD ORDERS**  
Call (405) 364-6676  
FAX (405) 799-0855  
or write...  
**Pro- Print, Inc.**  
5301 Junction Road  
Norman, OK 73071-9322