

The South Canadian Amateur Radio Society

The first meeting of SCARS for the new year was called to order by new president Ken, KA5EFJ at about 9:32 on Saturday the 13th of January at the Norman Red Cross. W5UZD and W5OU were barely able to leave before the meeting started but about 17 other members were present. New treasurer Ken, N5BEW announced that there was about \$963 in the account and \$128 in the repeater upgrade fund. Secretary Ken, N5KUK stated that the minutes of the November meeting were published in C&E.

Old Business:

A Novice license class was completed in December with five people passing their novice test. Another course will be planned in the spring but no date has been set yet.

New Business:

President Ken asked if the club desired to continue with the door prize drawing (club voted yes), and if an attempt should be made to organize programs for the meetings on a regular basis (club voted no).

We could not start the business year without scheduling a bicycle race. Steve, N18W requested volunteers to help provide safety observers at a series of time trials to be held on several Saturday mornings from March 10th to April 7th. He said that about three radio operators will be needed each week for several hours. Please contact Steve if you can help out.

Committee Reports:

Technical committee: Nothing to report.

CORA: No report.

ARES: No report.

Dues are due for the new year. Once again the membership is \$16 per year. A donation for \$4 for the repeater upgrade fund would be appreciated to help with the replacement of some of the troublesome hardware and possible installation of a receiver voter.

The HF beam at the Red Cross was repaired by W5ULK and KA5BQS and now works and looks better. Next, the 2 meter antenna needs work. Ken, N5KUK

The meeting adjourned at 9:46.

CIMARRON

HEADLINE!!!!!! (WITH DRUMROLL AND FANFARE) TERRY AND JERRY BREAKS 20 WPM SOUND BARRIER!!!!!!!!!!!!!! HERO MODESTLY ADMITS TO INHERENT GENIUS!

The January sixth VE exam, held by CARA was a victory for two of our favorite Hams. Terry McColl N5MLT, and Jerry Greathouse W5EV, both passed their 20 WPM Extra Class code test. Terry is nothing if not persistent and I predict that before the year is out we will have two more Hams with Extra Class.

Leo WZ5H, Ray AB5Z, and Denny WK5V did their usual good job of fielding the event. Phillip Perry of Shattuck passed his Novice exam and the family of Mayor Walter Baker, AA5LI, of Enid distinguished themselves. His wife Barbara passed her Tech exam as did his eight year old son, Lowell. Surely Lowell must have set a record!

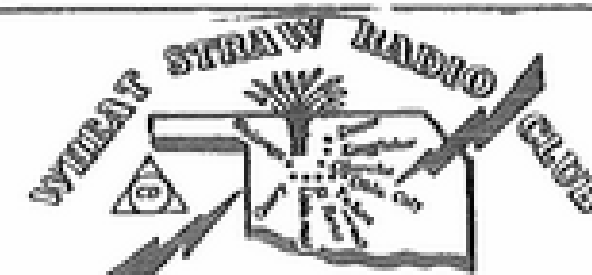
Dcn Priest also passed his Advanced theory test. Sorry, I didn't get a call sign here.

In other news....CARA met at the WX5Y Playhouse for their regular January meeting. President Leo Poil WZ5H, called the meeting to order... the first order of business being the collection of dues. This year we are issuing a membership card for voting members and also one for the auxiliary members.

Denny WK5V, trustee for the 145.45 repeater, reported that the work he had done on the receiver had borne fruit with much better selectivity. Denny does a good job on our 45 rpt, and also has a two mtr rpt at his home on 147.075, as well as one on 430.000. He is our club Secretary and his wife Nadine N5PMH, is our treasurer. They are charter members of CARA and are very much appreciated by the club.

Members attending the meeting was Hostess Ruth WX5Y, Robert N5MPH, Vern KA5SZD, Ray AB5Z, Terry N5MLT, Denny WK5V, Nadine N5PMH, Betty KA5RTW, Steve KF5SW and yours truly, Jack NN5Z. The snacks were good and the coffee was great. Cimarron Hams if you were not there....you should have been there! Next meeting will be Feb. 8th..same time..same place.

73's....NN5Z



The regular meeting was held January 14th in the Peoples National Bank community room. Being a nice day there were forty present. We had two visitors, K5IGE Robert Roden and friend Helen. They live at Guthrie. Robert is retired from Tinker Field. His hobby other than amateur radio is building air planes. He is not building remote control planes, he builds regular planes and flies them. This keeps him busy.

The radio club from the Elk City area plans to have a Hamfest in March. There has been no date set yet for the event. W5MGZ Perry was appointed by the Elk City club to see if the Wheat Straw wished to Co-sponsor the Hamfest. With no plans yet or date set, the Wheat Straw club tabled the vote for more information. It was suggested a committee go to the next meeting and bring back the details. No one volunteered.

K5GGL talked about the Wheat Straw repeater being off the air Jan. 12 and 13. The technicians George and Johnny got things going quickly.

The invitation from AB5Z Ray to host the next meeting was accepted by the club. The meeting will be held Feb. 11. The place has not been selected yet. Tune in each Wednesday at 9:00 pm for all information.

N5IKN Tom entertained the club with some films he has taken with his camcorder. The latest was Christmas dinner 1989. All of the videos were really good. We all appreciate the work Tom has done for amateur radio.

During the Christmas holidays of last month KB5FOR Mary made what some call a trail mix. It was the best I ever recall eating. Years back a potato chip company advertised you could not just eat one. That is the taste and flavor of this mix. I want to pass on the recipe to you readers. Some of you may not like the name of this mix, if not just change the name. Don't call me as we do not know whose recipe it is.

TEXAS TRASH

1 box each of the following:

Kix, Corn chex, Wheat chex, Rice chex, Cheerios, and a small box pretzels.

3 lbs pecans, 3 lbs raw peanuts, 2 pkg sunflower seeds, 1 can cashews, 1 can

CONTINUED ON PAGE 4



EARS 1989 Reviewed

It has become tradition that the outgoing president review the past year. I would like to begin by thanking the board members and total membership for their support and involvement this year. Our club is very active in community activities and this is difficult to achieve without the support of the membership. EARS began the year by hosting the ORSI meeting in Edmond in February.

EARS supplied communications for several parades this year; The 89er Parade, St. Patricks Parade, The Warr Acres Parade along with our normal involvement in the 4th of July Festival in Edmond. Along with providing communications on the parade route we handled the total staging area. We also provided communications for a bicycle race which was a new activity for The Edmond Festival. There was also a gathering to watch the fireworks display and provide communications for crowd control.

Our April dinner meeting was also the graduation for the people that had participated in the 1988 Amateur classes. This dinner was sponsored by our scholarship committee as a fund raiser.

The 1989 Bertha Watson Memorial Scholarship went to KB5DZU Ed Granger. This was awarded during Ham Holiday 89. EARS participated by handling registration this year and we had a great time.

The severe weather activity was slow this year but EARS members kept their skills by attending two seminars on severe weather. We also had a group that supported the Edmond Civil Defense Director during one of their Emergency Preparedness drills.

EARS had two Hampouts this year. The spring gathering was held at the Wichita Mountains National Wildlife Refuge near Lawton. The second was held in conjunction with the Texhoma Hamarama.

EARS also had the opportunity to support several community functions this year by providing communications for several organizations. We worked with the Oklahoma Lions in a 100 mile bicycle race, The American Cancer Society with the Quail Run, and The annual Edmond Crop Walk. When Hurricane Hugo caused so much disaster some of our members were able to handle health and welfare traffic.

EARS participated in Field Day again this year. The Oak Cliff Fire Department hosted us by letting us use their facility. The location was great and fun was had by all. During the Field Day activities we found time for fellowship over a catered BBQ dinner.

Amateur classes began again in September. We had 14 new technicians join the Amateur community from the classes.

The EARS Club was recognized by the state Civil Defense Office during their annual banquet for their activities in WX spotting. NSKUE was also recognized at this banquet for service to the Civil Defense area.

December brought our year to an end with a food drive to support the Hope Center. Our scholarship committee blessed us with another great Christmas dinner ...burp... excuse me. Santa stopped by to see the kids, Christmas Carols ran rampant and fellowship was exceptional. All in all it was a good year and we're looking for even better with the new board lead by KA5WAV, Tom Guinn. Hope to see you at some activities in 1990, there are a lot planned. God Bless. WA5ZKX, Harold Wells
EARS President 1989

Hi... Joel here, KB5FCF. As new vice president of EARS, I will be bringing you this article each month. If you have anything for this article please let me know.

Lets backtrack a minute to last months article, or lack of article. My apologies but the computer just would not let go of the article. It was written right after the Christmas Dinner and alot of thanks need to be forwarded to all those who helped make this dinner the best yet. Thanks go to the scholarship committee for the delicious meal. Thanks to everyone who helped with set up and take down. And thanks to those who decorated the church with the christmas spirit. Thanks to everyone for contributing to the Christmas basket. And one last thank you to our resident pianist Dee Mize for the great music. And thanks Santa.

But on to new business. First of all if you have not yet paid your 1990 club membership dues they are \$25.00 for adults, \$35.00 for family membership, and \$12.50 for students.

Next, the february dinner meeting will be the class graduation for the fall ham classes given by EARS. It will be on Friday, 16 Feb., at St. Johns Church, 10th and Littler in Edmond, at 6:30 pm. Present plans are for a stew dinner.

On Feb. 3rd EARS will be hosting the ORSI (Oklahoma Repeater Society Inc.) meeting at the Edmond Library starting at 1:00 pm.

On march 6th at 7:00 pm Bill Bunting will be giving a weather class in the council chambers, ground floor of the EOC. This will be open to Civil Defence and Amateur Radio weather spotters. If you are interested in spotting this will be a good class.

KB5FCF Joel
EARS Vice Pres.

All about Electricity

(From Ham Radio, December 1989 and World Radio News, May 1989.)

Electricity is manufactured in power plants where it is fed into wires wrapped around large drums. Some electricity, like that used for lightning, does not need to go through wires. This kind of electricity isn't manufactured, but just hangs around loose in the air.

Electricity makes a low humming noise. This noise may be pitched differently for doorbells, telephones, etc.

Electricity must be grounded before it can function -- except in airplanes, which have their own arrangements.

Although electricity doesn't leak out of an empty socket, you can stick your finger in it and tell that it's there. Electricity is made of two ingredients, positive and negative. One travels along a wire covered in white plastic, the other along a wire coated in black plastic. The wires connect to a device called a plug, in which the ingredients are mixed to form electricity.

The electric switch contains a vice grip that squeezes the wire very hard so the electricity can't get through. Opening the switch releases the grip and lets the electricity flow.

Electricity goes into a light bulb where we can actually see it! It is enlarged many times by the curvature of the bulb, which acts as a magnifying glass.

Finally, electricity may be stored in boxes called batteries. In big batteries the electricity is shoveled in, while in small batteries it is packed in flat. Joe, K1REC

(Picked off WA5BQX BBS by KD5IS.)

1 AERONAUTICAL CENTER ARC MEETS: FIRST THURSDAY, FLIGHT STANDARDS BUILDING, FAA, SOUTH MACARTHUR 7:30 PM PR TED ANDERSON, NYSN 685-4016 SE DOUG TEACHMAN, WODKA 392-5458 AsPR HAROLD TODD, WASVAQ 685-3685 AsVP CHARLIE GREENE, WASJGU 943-5631 EDITOR: BILL OLIVER & LUKE ELLIS 329-6333		
2 CENTRAL OKLAHOMA VHF MEETS: 11:00AM THIRD SATURDAY, THE BRICKS RESTAURANT, 3100 N PORTLAND, OKC PR JACK HUSE, NBSZKZ 691-1152 VP FRED BOARDMAN, WSNL 427-2505 SE JOE BUSWELL, KSJB 732-0676 TR ELLARD FOSTER, WSKJ 789-6702 EDITOR: JOE BUSWELL, KSJB 732-0676		
3 MID-OKLAHOMA REPEATOR, INC. MEETS: FIRST TUESDAY, 8 PM, COUNTRY HOMESTEAD RESTAURANT, 3100 N PORTLAND, OKC PR BOB MOORE, KASETA 799-1765 VP JERRY WETHORE, KDSIS 524-5080 S/T LINDA MOORE, KASNAV 799-1765 EDITOR:		
4 OK CITY AUTOPATCH MEETS: 7:30PM, THIRD TUESDAY SALVATION ARMY, NW 50 & PENN PR ROBERT SHAW, WASBQX 341-4763 VP JIM BARTLETT, KASNA 369-1199 SE LEONARD HANSTEIN, WSMEL 789-7201 TR LARRY DAVIS, KFSJN 722-4564 EDITOR: CHUCK WILHITE, KSNK 721-4926		
5 OKLA UNIVERSITY ARC MEETS: 7:30PM SECOND TUESDAY (SEP-MAY) 119 WILSON CENTER, 1334 S JENKINS PR FRANK DONALDSON, NSIOJ 329-4172 VP JOHN MUSTENBERG, KESN 325-2382 S/T JIM GREENSHIELDS, WDSHFU 321-9981		
6 ALTUS ASSOCIATION MEETS: 7:30PM, SECOND THURSDAY, NORTH MAIN FIRE STATION (CD) ALTUS PR FRANK FERITTA, KASLT 462-1398 VP NONE S/T MIKE SCHENKEL, WSVL 462-1797 EDITOR: MIKE SCHENKEL, WSVL 462-1797		
7 BICENTENNIAL (76er) ARC MEETS: 7:30PM SECOND TUESDAY 1801 N LINCOLN BLVD PARKING IN REAR PR BILL SKIPPER, KBSBS 352-4612 VP S/T JERRY SPROUL, WEAUH 354-2061 EDITOR: CHRIS EVERETT, WESSE 354-6794		
9 WHEATSTRAW ARC MEETS: 2:30PM SECOND SUNDAY, LOCATION VARIES. SEE CLUB SECTION FOR DETAILS. PR GEORGE MASCHINO, K5GSL (CHAFCE) 361-7614 VP NSJNY (LEROY) S/T JOE GAFLAND, W4SFLT (C4LME) 893-2660 EDITOR: RALPH WILDER, W4SFFX (WATONS) 623-5421		

19 OKLA INDEPENDENT ARC MEETS: 7:00PM SECOND TUESDAY SOUTHWESTERN BELL OFFICES, PONCA CITY PR VERNON TREIBER, Jr. NSANV 767-6260 VP TRUMAN STINER, WBSHRE SE GLENN COKER, NSNFC TR JIM DEL TORTO, KSFL 762-1221 EDITOR: MIKE MORRIS, NSJJR 765-6260		
11 EDMOND AR SOCIETY MEETS: 000 MONTHS, 3RD SUNDAY, 2:00PM EDMOND EOC. DINNER, EVEN MONTHS. 3RD FRIDAY. PR LUMMIE GUINN, KASWAL 341-3886 VP JOEL BENSLEY, KBSFCF 348-1614 SE DON SEIBLE, NSLZE 340-4339 TR CLARA GRANGER, K6SUG 341-2968 EDITOR:		
18 GREAT PLAINS ARC MEETS: 2:15 PM FIRST SUNDAY WOODWARD PUBLIC WORKS BLDG. PR MINOLE HATCHETT, W4SPLW (FT SUPPLY) 766-3561 VP BOB BAYLESS, WBOGAX 254-3561 SE ROD FORD, WBSOVT (GAGE) 923-7683 TR FREIDA PATTERSON, N5EOX (WMD) 256-2111 EDITOR: WILLIS RIDINGS, NSOO 689-2291		
13 KAY COUNTY ARC MEETS: 7:00 PM, THIRD THURSDAY, SEP-MAY, PIONEER VO-TECH, PONCA CITY OK PR MIKE MORGAN, NSLPZ 765-9539 VP KAREN PRONNKE, WASUBC 363-2526 S/T MARY BYARD, NSOGP 762-1966 EDITOR: DAVE LAND, KDSFX 762-9615		
14 CIMMARON ARS MEETS: 7:39 PM SECOND TUESDAY KESY PLAYHOUSE, 827 S 13, FAIRVIEW PR LEO PELL, WJTM (405) 866-2992 VP VERN BREWER, KASSZ1 (405) 227-3462 SE DENNIS PAINTON, WKSJ (405) 764-3599 TR MADINE PAINTON, NSFMH (405) 764-3599 EDITOR: JACK DAY, KNSZ (405) 227-3462		
15 SOUTH CANADIAN ARS MEETS: 9:30AM SECOND SATURDAY, RED CROSS BLDG NORTH QU CAMPUS, NORMAN PR KEN NEPTUNE, KASEFJ 321-7789 VP DORINDA SKAGGS, NSIUA 799-5363 SE KEN BROWN, WSKUX TR KEN ESADOOAH, NSBEW 329-4667 EDITOR: KEN BROWN, WSKUX		
16 EDMOND AR CLUB MEETS: 7:00PM SECOND MONDAY. SEE CLUB SECTION FOR LOCATION AND TYPE PR MARK NORTHCUTT, WDSYI 755-4672 VP MENDELL COCHRAN, WBSISO 943-4208 S/T KAY NORTHCUTT, WDSOIJ 755-4672 TRUSTEE: DENNIS ORCUT, WBSISN 340-0024		
CENTRAL OKLA RADIO AMATEURS MEETS: 7:00PM FOURTH TUESDAY, RED CROSS BLDG. 10 & HUDSON OKLA CITY (BACK DOOR) PR FRANK TASSONE, AA5GI 341-4945 VP DORINDA SKAGGS, NSIUA 799-5363 SE JIM BUSWELL, W5BEQ TR TOM MANGHAM, KSLDI 677-5291		

NOTICE NOTICE NOTICE

EDITORS: SEND YOUR COPY IN EARLY ENOUGH TO MAKE THE NEW C&E DEADLINE - WEDNESDAY AFTER THE THIRD FRIDAY - EACH MONTH.

NOTICE NOTICE NOTICE

1. EDITORS: Starting next month the "past-up" date for the CORA Collector & Emitter is being advanced TWO DAYS. In the future that date will always be on a WEDNESDAY instead of Friday. Check the calendar each month, it will show you when you have to have your copy in.

2. Your copy must be in by 8:00 pm on WEDNESDAY.

3. Copy SHOULD be 3 inches wide, but if it can't be presented that way get it to me any way possible. I will reset it if necessary.

4. Use a BLACK ribbon. If it is too light I can darken it up.

Something new has been added to your label. There is now a date, which shows when you owe your dues to "A" club. If you belong to more than one club the date will show the renewal date for the latest club. You may owe the other club now. Three months after the date shown we will have to quit sending the C&E, postal regulations. If there appears to be a mistake - check with your club official. We can't do anything about it.

Below is a sample lable:

4 89/08 2
WILSON, MIKE WA5RTY
1234 W 49
MCCLLOUD OK 74851

The "4" means Autopatch Club
89/08 means he is overdue
The "2" is for postal rates

CORA COLLECTOR & EMITTER (USPS 116-150) IS PUBLISHED MONTHLY BY CORA, INC, 1020 ARTHUR DR MIDWEST CITY OK 73110. SECOND CLASS POSTAGE PAID AT OKLA CITY OK. SUB: CORA MEMBER \$4.00 PAID SUBSCRIPTION: \$7.00 PER YEAR.

POSTMASTER: SEND FORM 3579 TO:
CORA, 1020 ARTHUR DR, MIDWEST CITY OK 73110

EDITOR: JOE HARDING, WASZNF 737-1044
CIRCULATION: BOB GRAHAM, WBSNSV 677-8685



These notes are from the 09 Jan '90 meeting.

Lowell Rogers, AA50J joined the club at this meeting. His story is somewhat interesting. He started as a non-ham and tested out as Extra class in one testing session. Well... he was a ham before but let his license lapse. Welcome Lowell.

The Christmas dinner was a big success. There were about 16 people there and all had a good time.

There is some interest in establishing a club station in conjunction with the Blackwell Red Cross. They have expressed some interest in this. This is probably more fall out from the HAM activities associated with the San Francisco earthquake.

Dave White, WN5LUI, gave an excellent presentation on traffic handling. His expertise probably comes from playing in the traffic a lot as a child! Ha! Ha!

Next month I will give a presentation on NiCad batteries, if I'm in town. Otherwise, Vernon will probably fill in.

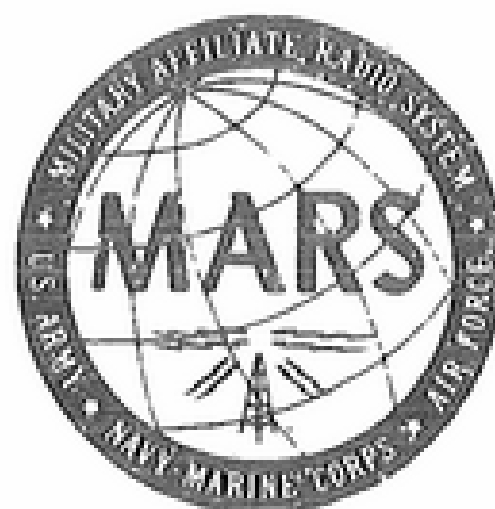
The digipeater was discussed. It experienced a little trouble during the cold spell.... Frozen bits no doubt. N5JJR

PACIFIC BELL OFFERS RESIDENTIAL RATES TO AMATEUR REPEATERS IN CALIFORNIA

Pacific Bell confirmed that, effective immediately, it is offering residence rates to amateur repeaters with phone patch facilities. Pacific Bell's Customer Services Manager Jennifer Just said, "Our decision was based on two factors. One, that ham radio operators are prohibited by law for using the services for business purposes, and... that Pacific Bell values the emergency backup help amateurs provide and would like to make the service as widely available as possible."

Any repeater groups serviced by Pacific Bell that are currently being charged commercial rates for their phone patch should call their local business office to apply for the change.

ARRL staff member John Hennessee, KJ4KB, played an instrumental role in forming Pacific Bell's decision. During the course of several telephone conversations with Ms. Just, John explained the non-business nature of the Amateur Service to her and amateurs' value to the public in times of emergency.



No, we are not going to be talking about the planet Mars but about Military Affiliate Radio System. Yes, the guys and gals with the funny call signs.

What is MARS? It's a traffic (message) operation done to military specification. Who does it serve? The servicemen and women of the branch of the military (Army-Air Force-Navy/USMC) you wish to help. Do I need any special rigs or training? No and No. Any rig that will go out of band will work, and after you join up you receive training, both out of the books and on the air on how to do it the military way...Traffic handling that is! Any age limit? 14 years old and up. What class amateur license do I need? Technician class or higher. But if you have a Novice class, you have 180 days to upgrade to a higher class. How much time must I spend on the air? 18 hours per quarter. 1 hour is not as long as you think. If there is no traffic and few checkins, maybe 15 min. But with traffic, you could go the full 55 minutes and then some on another frequency. How do I join? See your area (state) coordinator, for the branch of the service you like to serve.

For the Navy/USMC, it is Carol Ann Tierney, 4774 Darthmonth Dr., Bartlesville, OK 74006. Home Phone 918-333-7476. Next month we will have the names and addresses of the other services.

73's

Pete NNN@ACC (KF5RD)

PACKET RADIO MANUAL IN BRAILLE

Northern Nevada Braille Transcribers, a volunteer, nonprofit, tax-exempt group, now has the MFJ-1270 TNC 2 Packet Radio Owners Manual available in braille. It is contained in six volumes of various lengths. It is also available on an Apple computer floppy disk. This braille manuscript is available without charge to anyone who can use it. However, contributions in any amount are gratefully accepted. Interested parties can write for additional information to: Northern Nevada Braille Transcribers, 1015 Oxford Avenue, Sparks, NV 89431.



mixed nuts (low peanuts) - 1 cup oil, 1 stick oleo melted, 3 Tbsp barbecue sauce, 3 Tbsp Worcestershire sauce, - 2 tsp Chili seasoning, 1/2 tsp celery salt, 1/2 tsp black pepper, 2 1/2 Tbsp all-spice, 2 Tbsp garlic salt, 1/2 tsp red pepper.

Mix all cereals, pretzels and nuts together. Blend together and heat veg. oil, oleo, barbecue sauce, and worcestershire sauce. Now mix seasoning together. Pour liquid over cereal mix, along with sprinkling seasoning. Be sure to do this a little at a time, stirring really well. Continue till all liquids and spices are gone. Bake in 200 degree oven for 3 1/2 hours, stirring every 30 minutes. This will make enough to put into some kind of containers for freezing until needed, or put in zip lock bags for gifts.

LOOKING BACK FOR THE FUTURE

In 1987 the Wheat straw A.R.C. had 52 nets. Members and guest we had 1019 total check-ins, averaging 19.60 per net.

In 1988, the 52 weeks we had 1148 check-ins, an average of 22.8 per net. This is an increase of about 13% gain.

In 1989, still 52 nets, we had 1214 check-ins, averaging 23.35 per net. Only about a 6% gain.

In 1990 let us make it a 25% increase. This achievement can be reached by us going all to make the best better.

"73" WA5PFK Ralph

SWAPFEST

It's that time again!!! The greatest swapfest of this decade will be held in the Midwest City Community Center on 3 Feb 0800-1200. Location is NE of Reno & Midwest Blvd.

IF THERE'S ANYTHING WRONG
WITH YOUR CLUB LISTING,
CONTACT YOUR PRESIDENT TO
GET IT CORRECTED!



CORA COLLECTOR & EMITTER (USPS 116-150) IS PUBLISHED MONTHLY BY CORA, Inc, 1020 ARTHUR DR MIDWEST CITY OK 73110. SECOND CLASS POSTAGE PAID AT OKLA CITY OK. SUB: CORA MEMBER \$4.20 PAID SUBSCRIPTION: \$7.00 PER YEAR.

POSTMASTER: SEND FORM 3579 TO: CORA, 1020 ARTHUR DR, MIDWEST CITY OK 73110

EDITOR: JOE HARDING, WA5ZNF (405) 737-1044 CIRCULATION: BOB GRAHAM, WB5NSV (405) 677-8685

Elk City Hamfest

March 3, 1990

Elk City Civic Center

8 a. m. Until



Swap Meet

\$5 table

Testing Session

Ladies Events

Pre-Registration

\$5

Day Of Hamfest

\$8

Talk In:

146.16\76

70 free RV hookups, first come first serve! Los Cuartos Inn of Elk City is the Official motel for this event with a hospitality room Friday night! Come join us March 3rd.

For more information call (405) 243-1094, (405) 473-2572, or (405) 225-2523

Sponsored by the West Central Oklahoma Amateur Radio Club. This is an ARRL Sanctioned Event. Pre-registration \$5 per person

Name _____ Call _____

Please reserve me _____ Swap Meet tables at \$5 per table

Mail to: Elk City Hamfest, P. O. Box 2023, Elk City, Ok 73648



VHIF Club
NEWS

W5LOW
*The Elmer Gochler Memorial
Station*

Minutes of January Meeting

Meeting was called to order at 12:05 p.m. by President Jack, WB5ZKZ, with 35 members and guests present. We were fortunate to have the QCWA members present for our meeting. Ellard, W5KE, gave the Treasurer's report, which was accepted.

Steve, W5VCJ, moved that a change be made to the By-Laws. The change would correct an error in paragraph numbering and remove specific objective reference to providing emergency communications to the Red Cross. The motion was approved and under Article IX, the change will be voted on at the next meeting (February 17, 1990). The Secretary will have revised drafts of the proposed language at that meeting.

Elections were held and officers for 1990 are:

Jack Muse, WB5ZKZ, President
Fred Boardman, W5NL, Vice Pres.
Ellard Foster, W5KE, Treasurer
Joe Buswell, K5JB, Secretary

Meeting adjourned at approximately 12:15 so the QCWA could proceed with it's meeting. Joe, K5JB, Sec'y

Packet Racket at K5JB

When the Christmas season was about over, I finally got back to one of my favorite pastimes, noodling around in the one of the control programs that runs my packet equipment. It has been several months since I had done any work on them and felt a need to brush up on the programming skills. My last serious work was in July and a minor change to the TCP/IP was done in September.

I think I mentioned last month the work Mike, KA5TDA, was doing on the TCP/IP suite to make it more useful to non TCP/IP users. While Mike was working on some additions to the AX.25 mailbox code (mbox), I was working on the DRSI packet adapter card driver. I finally got the DRSI code to compile but had a heck of a time figuring out why it was crashing the machine. Finally I found out that after it was initialized and started, it created interrupts at such a rate the computer

failed from a stack overflow. (The stack is a part of memory used to store things while an interrupt is serviced. If interrupt servicing becomes too backed up, this memory is over-run, actually over-written, by new data that obliterates old. The result is total confusion when the computer tries to return to what it was doing when it returns from an interrupt.)

I got kind of tired of working on the DRSI nitnoid details so I stopped to take a look at what Mike, KA5TDA, was doing. I snapped up the code he had sent me and compiled it into my program. It added 6k to the size of the thing so I tightened it up some and reduced the added size to about 2k, and then started adding functions of my own. Since my code has to work on a Unix, as well as an MS-DOS machine, I had to do some things differently to retain portability. KB0QJ should have tested the result on his Unix computer by the time you read this.

The reason I am so pleased to see these changes is that it adds some usefulness to those who are not running TCP/IP. TCP/IP has a whole list of features but they are only available to those who are using the protocol. For those who aren't, it has been rather haughty about it's superiority and only permitted "chat" and "send mail" functions for the common folks. These additions to the code permit someone using plain AX.25 link level or Net/ROM networking protocols to connect to the mbox and receive mail addressed to him/her, examine lists of who have mail, get directory lists, and download text files.

Mike is working on gateway functions that permit connecting to another user or issuing a connect to another station. This is stretching the function of a mail box a bit, but that's all right with me. It reminds me of the time I used the TCP/IP code to move some of its mail to the CBBS when it was addressed for transport. (That added about 20k to the program but avoided spawning another process to do it in my memory-limited MS-DOS computer.) The main thing that pleases me is seeing someone do some experimenting with the thing -- homebrew isn't dead after all!

Phil, KA9Q, who wrote the original TCP/IP suite, has been working on a new version he calls, "New Operating System", or "NOS". All serious development effort by others is supposed to be done to the NOS code but there are pockets of activity by others around the country who aren't all that excited

about NOS. I took a look at it and it generates executable code that has grown enormously, without much added functionality.

I haven't kept very good track of others who are playing with the old version code but maybe I should make some contacts. For example, someone added the ability to make telephone links using the slip (serial interface - a part of the TCP/IP) protocol already contained in the code. The trick was to make the thing dial the phone with a smart modem, establish a connection or recover from failure, and send mail intended for such routing. This kind of thing would be nice for our Unix computers which have phone lines of their own anyway. It would be trivial to move mail from the Unix environment to the TCP/IP environment since they are such close cousins anyway. (Phil, KA9Q, works for Bellcore, the regional Bell companies' research lab. so the TCP/IP mail facility is very similar to the Unix mail facility.)

I am not very attracted to the "ground bound" computer networks so I have not attempted to make connection with the Unix network special interest groups that play with packet radio. Maybe I ought to work on that so I can find out what others are doing.

I had a very enjoyable meeting last Saturday with Mac, K2GKK; Monte, WB5RZX; Dave, WB5FWE; and Craig, KB5BOB; who got together to work on packet bulletin board routing matters. I don't forward anything from my bulletin boards but personal messages so I don't have to deal with the problems of bulletin forwarding -- but I am interested in how the experts deal with the issues.

Monte supplied me with a couple of days' messages from the Usenet newsgroup, hamradio.packet and I scanned them to see if there was anything of general interest for the C&E. In the past I used to get a feed on hamradio.packet and sometimes picked up a pearl or two. There is such an abundance of information available I have had to learn how to scan tons of data and pick out items of substance for a detail read. Scanning is subjective and I am sure I pass things that are of general interest. I subscribe to CompuServe's Hamnet and once a week download all the messages posted on packet radio. This subject one of maybe nine subject areas in that forum and I usually get 50 or 60 K of material which gets distilled down to maybe 8 or 10 K, which I save. I

think the Compuserve Hamnet feed is worth the little money I spend on it each month. Magazines are good sources of information but because of the lead time, I really prefer the electronic networks.

The information explosion is delightful to curious people like me! Joe, K5JB

Oklahoma Repeater Society Meeting

The ORS winter meeting is scheduled for Saturday, February 3. It will begin at 1:00 P.M. at the Edmond Public Library, 10 S. Boulevard, where it was held last winter. It is one of two meetings a year that ORS holds; the other one being held at Ham Holiday in the summer. Arrangements for the meeting place are being made by EARS, the Edmond Amateur Radio Club, a spirited and active club to which we offer our thanks. At this meeting, a board of directors will be elected. From this board, the organization's officers are selected. One of the primary functions of the ORS is performing repeater frequency coordination between FM repeaters. All VHF and UHF band users are invited to attend and have an influence in policy matters that govern repeater operation in Oklahoma.

By the way, there is a swap meet scheduled for February 3, at the Midwest City Community Center, starting at 8:00 A.M. so come to town early and do some browsing before heading to Edmond for the ORS meeting. Joe, K5JB

Commercial Digital Mobile Radio

Steve, W5VCJ, provided me with the November 28, 1989 copy of the GE Mobile Communications News, which featured an article describing Ericsson's experience with digital mobile radio. Ericsson bought 60 percent interest in GE Mobile Radio, effective January 1, 1990.

The article said that digital cellular standards developed in Europe and North America are based on technology proposed and tested by Ericsson. It briefly described the multiplexing processes used and gave examples of digital equipment produced and in use.

StarCom is a digital combat radio system, with portables, and so forth, that handles speech and digital data with frequency hopping. Mobitex is another system that is optimized for mainly data, works on a cellular concept and interacts with regular packet switched

and Telex networks. A system Ericsson simply calls "Digital Radio Links" provides relay stations for telephone circuits where metallic links would not be practical. It gives an example, in Malaysia, where telephones are made available to people in remote areas, through coin operated phones connected to the Digital Radio Link.

The article didn't go into much technical detail but I thought it might be interesting to pass along the names of these systems used in Europe and the rest of the world. With the General Electric and Ericsson alliance, we may be hearing more on them. Thanks to Steve for providing the information. Joe, K5JB

Packet BBS For Sale Messages

The following, from NZ2T, was passed along to me by K2GKK:

Listen people! For just cause, as a SysOp and as a user of packet PBBSs, I'm starting to get a bit concerned about the plethora of "FOR SALE @ USA" bulletins I keep seeing. Is it REALLY necessary to tie up HF forwarding, regional backbone forwarding, and hence local channels with this kind of material? I think not, and I think it's time local sysops, such as myself put a stop to it, before it really gets to be a bit much more than most of us would like to see.

If you want to sell a piece of your equipment, why not put it on your local PBBS first for a week or two. If that doesn't work, try local distribution, and then possibly statewide. Aside from the reason(s) stated above, there's also a time element in these bulletins. By the time some guy in New Jersey gets a bulletin from the guy in California about his rig or antenna, it might be one, two, three weeks OR MORE! The guy in New Jersey calls the guy in California, and the rig's sold....there goes a few more bucks down the drain.

So before you make a shout to "the world", how about trying your own back yard first. Make sense? By the way, I will start killing any "for sale" message that comes in "@ USA", starting one month from today to allow a fair amount of time for THIS bulletin to get to YOU (Look at the headers in verbose read to see how long it took get my point?), and I further recommend other SysOps to do the same. The odds are that if you can't sell your gear locally on all the PBBSs, and can't

get rid of it at a hamfest, it's probably not worth very much anyway, wot?

73 de Bob, NZ2T @ NZ2T (North Texas) and WA5BQX BBS.

ARRL Petition for Auto HF Packet

The following also was supplied by Mac, K2GKK:

ARRL Bulletin 91, From ARRL Headquarters. December 15, 1989

On December 12, ARRL Counsel Chris Imlay, N3AKD, filed a petition for rule making with FCC seeking the adoption of rules to permit limited HF RTTY and data communication under automatic control.

The petition seeks designation of the following band segments as being available, although not exclusively, for automatic control of RTTY and data transmissions. 3605 to 3615 KHz, 7035 to 7045 KHz, 10140 to 10150 KHz, 14090 to 14100 KHz, 18100 to 18110 KHz, 21090 to 21100 KHz, 24920 to 24930 KHz, and 28100 to 28120 KHz.

The FCC has not yet assigned an RM Number.

(End of bulletin. What follows is a letter that was sent from Dave, K1ZZ, to the stations listed on the automatic operation STA. It was typed and entered into the packet network by Joe, W2HPM, Farmingville, NY.)

THE AMERICAN RADIO RELAY LEAGUE, December 22, 1989

To: SKIPNET STATIONS

Gentlemen:

By now, you have heard that the League has filed a petition for rule making with the FCC seeking permanent provisions for automatic RTTY and packet operation within certain HF segments. Meanwhile, ARRL Counsel Imlay, N3AKD, will request the FCC to extend the SKIPNET special temporary authority for a year or until permanent rules are adopted.

Perhaps it would facilitate understanding and discussion of the issues if you have some of the background leading up to the decisions represented by this petition.

I know I'm preaching to the faithful by saying that we need automatic packet operation in the HF bands. Nevertheless, the two and a half years that the

SKIPNET STA has been in effect has shown that (a) such operation is technically feasible, (b) the network operations can be orderly without commercial encroachment, (c) the spectrum can accommodate it without undue displacement of other operations, and (d) HF automatic packet operation performs a vital public service that has proven itself in day-to-day and disaster communications. It's clear that virtually all amateurs have come to the same general conclusions, albeit reluctantly in a few cases, and have enjoyed the message-handling service provided by the packet network. It is evident that the FCC thinks amateur packet radio is a good thing, including automatic operation on HF, by virtue of their granting the STAs. Also, the FCC has made repeated requests for the amateur community to propose some permanent packet rules with safeguards against prohibited transmissions.

For nearly two years, the ARRL Committee on Amateur Radio Digital Communication has been considering proposals for permanent RTTY and data communications rules. These deliberations were not done in a vacuum but in close coordination with two other committees of the Board of Directors. While they did not work on the RTTY and data sections specifically, the board's Ad Hoc Part 97 Rewrite Committee handled everything else in a way that would permit the RTTY and data sections to drop right in. The Board's membership Services Committee (MSC) played a pivotal role in the RTTY and data petition consideration. One of the MSC's missions is band planning. While the Board has other committees advocating certain types of operation (i.e., DX, contests, repeaters, VHF-microwaves and digital), it is the job of MSC to try to strike a reasonable balance in their spectrum needs. Having weighed the competing bandwidth demands of the different users, the recommendations of the MSC still need either full Board or Executive Committee approval prior to filing a petition with the FCC. This petition was presented at the Executive Committee's October 21 meeting (but not voted on at that meeting in order to give members more time to give it careful consideration) and subsequently approved by correspondence.

Now that we've reviewed the process, let's talk about the merits.

We started with a yes/no design: Is automatic operation on HF packet a

good thing? Yes--you demonstrated that.

o Having decided that, should automatic operation be permitted within the entire parts of the HF bands where RTTY and data are allowed or just in certain segments? Certain segments--to calm fears of other CW and RTTY operators both here and abroad of unwarranted and uncontrolled proliferation of automatic operation.

o Should the petition for automatic operation include RTTY (Baudot and AMTOR)? Yes--we struggled with this but were persuaded that there have been successful RTTY mailboxes longer than HF packet, and there was an STA that demonstrated automatic AMTOR operation. Also, as you know, AMTOR has some special robust qualities and serves as links in some parts of the worldwide (mostly) packet network.

o Now for the tough part: What specific frequency segments? The ranges chosen in most bands are probably self-evident. Let's just talk about the difficult ones--20 and 40 meters. Occasionally, it helps to state the obvious to update any Van Winkles who have been asleep for twenty years... There is no virgin spectrum in these two bands. Every kilohertz is used by someone, sometime. In many respects, specific frequencies are more emotionally held than ancestral hunting grounds. (Remember: It's only a hobby?) It's hard enough to find some frequencies that won't conflict with other users within the United States. The specific frequencies used by SKIPNET stations have shown that it's possible to shoehorn in with other U.S. users. But, we live in a larger world, and we've received complaints from societies in other countries about HF packet frequencies, particularly in the 20 and 40 meter bands.

- On 20 Meters, nearly every other country operates phone in the 14.100-14.150 MHz range, and packet operations in the lower part of that range have been a continual cause of concern to them. This has been the case in all ITU/IARU Regions including Region II--the Americas. The fact that some of their own packet operators use frequencies above 14.100 has not convinced the societies in other countries that this is a good place for packet. The worldwide consensus (with some reluctance on our part) is that packet should operate below 14.100. Of course, that puts pressure on the

Baudot RTTYers and AMTOR RTTYers just below them in frequency and ultimately on the CW operations. If this can be done, however, maybe we can put one problem behind us.

- On 40 meters, most countries have a narrower band--only 7.0 to 7.1 MHz--into which they must squeeze CW, RTTY, packet, phone & image communications. Around 7.040, or even as low as 7.030, is where their phone band starts. So, you can understand why there might be contention over packet and RTTY around 7.090.

The frequency segments for each band were chosen after careful review of domestic and international implications. While we knew to begin with that there was no such thing as a "perfect fit," we nevertheless had to try for a "best fit" solution. I believe that others will come to the same conclusion after deliberate, unemotional study of domestic and international needs. Please bear in mind that we now have a viable packet network that is world-wide in scope. As such, we need to use frequencies that are compatible with the rest of the world. Even with the frequency segments chosen, there may still be the need for future adjustments, both by us and in other countries to finally arrive at common segments for automatic operation.

The League's petition is not a fait accompli. There are three points in the FCC's proceedings where individual inputs are possible. We anticipate that individuals may wish to suggest some changes in the frequency segments proposed by the League. We believe such inputs to be helpful in cases where commenters take the time to consider the domestic and international implications of their proposals.

I thought you would like to have the above background. We'll let you know as soon as possible about renewal of the STA. Meanwhile, we wish you happy holidays and best wishes for the new year.

Sincerely, (signed) David Sumner, K1ZZ, Executive Vice President

There has been criticism from K4ABT and KA5BML which I haven't read, apparently disagreeing with frequencies' selection. Mac's comment "Regardless of your feelings pro/con the ARRL, we do NOT live and operate isolated from the rest of the world. I suggest that you judge the merits of ARRL's position and comments by K4ABT and KA5BML accordingly." Joe, K5JB

BICENTENNIAL AMATEUR RADIO CLUB

"To Promote Radio Communications"

"NEW MEETING LOCATION"
OKLAHOMA DEPARTMENT OF
WILDLIFE

AT
1801 NORTH LINCOLN BLVD.
PARK AT REAR OF BUILDING
7:30 P.M., SECOND TUESDAY'S

76er MACHINE OPERATES ON
146.760 Mhz NEG. OFFSET

76er's meeting called to order at 7:45 P.M. by President Bill Skipper KB5BS. An introduction of people ensued to reacquaint new and old members.

SECRETARY 10 MEMBERS
01 GUEST PRESENT..

-by KB5GGY-
The minutes were read, corrected, and approved, as corrected.

TREASURER

-by N5AUH-
The 76er bank balance at the ending of December 31, 1989 was \$339.91, including interest of \$1.24. Expenses were \$5.00 for stamps used for notification of membership dues. The meeting brought in \$45.00 and \$30.00 in dues was received in by mail. The new bank balance was \$416.05. N5AUH advised that if Club membership dues were not paid, the C&E would be cancelled for those who haven't paid club dues. The report was accepted.

REPEATER REPORT

-by WB5TMW and KB5BS-
The repeater system is working well. A concern was that the controller does not, every so often, key the transmitter. Dick explained the location of the repeater and the other equipment used for running the system. A question was asked about the antenna being positioned to the south. The reason it was position to the south is that the majority of the members live south of the repeater. Also, there are few repeaters directed towards the repeater's coverage path.

The next topic was the purchasing of a new repeater controller. A motion was made and carried to develop a committee to decide what kind of controller board to purchase considering cost factors. The amount that decided was not to exceed \$200.00.

The repeater repair committee noted that work is to be done on Thursday, January 11, in the evening. Work is to be on sensitivity and audio adjustment

Bill Skipper had a report on the progress of the uplink projects, a new 10 meter repeater for new novices. This will be cross-linked with the 440Mhz, 6 meter down to 2 meter repeaters. The location of the equipment is being arranged to have better coverage and a low noise parameter. The purpose of this project was planned in order to keep the bands busy. We do not want to lose any bands, such as a segment of the 220 Mhz. to non-amateur interest.

A collection of equipment is being develop to have the system up and running soon. If your able to assist in this project contact Bill. More information will be available next meeting on the project.

OLD NEWS

-by KB5BS-
The upcoming Field Day preparations are developing. There is a need to find an operations area. Bill asked members to keep an eye open for an area. The club is checking on the same location used in the Field Day in years pass. The following is needed for preparation for Field Day: 3 each 10-men tents; 3 each 30-foot towers (2 each are acceptable). Antennas: 1 vertical, 2 beams and coax. This is just a portion equipment needed at this time.

The voting of by-laws that were in a holding state for some time were accepted as follows:

BICENTENNIAL AMATEUR RADIO CLUB (THE SEVENTY-SIXERS) voted to accept the Constitution and By-laws that were adopted 6 January 1976 and amended on 21 Nov 78, 11 Aug 81, and 8 Sept 81, and were Published Nov. 80 and Oct 81 as the governing law of this organization effective January 11, 1990. The vote was carried by a majority. A copy of the document was given to all present. Other members desiring a copy need to contact the secretary at a scheduled meeting.

CORA REPORT

-by N5BEO-
CORA representatives were asked to consider merging to Neon Ark amateur radio newspaper and thereby discontinuing the C&E newsletter. Comments about the newsletter were that

ACARC
Aeronautical Center

ACARC meeting for 01/04/90. Ted, NY5W called the meeting to order at 19:30. There were 23 members and guests present. Doug, W0DXA, gave the financial report. Tom, K5LDI, gave no CORA report since CORA did not meet. Ted reported that the Tri-Bander is still down on the roof. Elections were held and Ted, NY5W, and Doug, W0DXA, were re-elected as president and vice-president respectively. I was nailed to stay on as Editor for another year. So all officers will remain the same for another year. The need to have some novice classes was discussed. More on this at a later date. Jim, K5PER, talked about packet and satellite operation. Jack, WB5SVN, and Sam brought a neat 2 meter antenna (J Pole) for discussion. The theory and operation was explained by Tom, K5LDI, and Bob, WA5CJG. The meeting was adjourned at 20:30.

Bill, K5KDR

the change would cost more than the C&E and may very well not represent the Oklahoma City Area. A majority of the club members indicated that they were satisfied with the operation of the C&E newsletter. A motion was made and passed to keep the C&E news letter.

>>Meeting adjourned at 9:20 P.M.<<

THE BIG SIGNAL

OKLAHOMA CITY AUTOPATCH
ASSOCIATION, INC.

NEW CLUB MEMBER

The Oklahoma City Autopatch Club welcomes a new member into its family, Charlie Wullenburger IV. Charlie moved here recently from deep in the heart of four land from the state of Tennessee and the small town of Whiskey Holler.

Whiskey Holler is a fairly remote town located in the hills of Tennessee, and has yet to be served with modern utilities, such as phones and electricity. Communications with the outside world is by mail only, delivered once a week by the county sheriff. This trip serves two purposes for the sheriff, to check on the local moonshiners as well as to deliver the mail. Most of the mail went to Charlie, in the form of QSL cards from all his DX operations.

As a very young man, Charlie made a trip into Nashville one day and as luck would have it, he met a wealthy ham and his family who were on vacation at Opryland, a fellow by the name of George. Charlie developed an interest in electronics and soon learned the code and got his ham ticket, being assigned the call B4. His friendship with George developed and he was to become his Elmer and QSL manager.

Before you jump to any conclusions, yes, there is a One by One call in existence, in fact, Charlie has the only one, unless you tune down below 28 megs and hear one.

Before moving to Oklahoma City, Charlie was at the top of the DX Honor Roll. He had worked every country which now or had ever existed. The novelty of this is that Charlie only worked stations by schedule through his QSL manager, AD1S. His name and call are so famous throughout the world that hams fight for the chance to work him. AD1S makes all arrangements for his schedules.

Before moving to Oklahoma City, Charlie had never owned a microphone. All his contacts are on cw. He has always said that a kid could pick up a microphone and talk, but it took a real man to talk with his fingers and toes.

Before settling down in a home of their own, Charlie and his wife have rented a two-room shack down by the

stockyards. The aroma reminds him of his Tennessee home. Not being used to all the modern conveniences of life, one of the first things Charlie did was build a two-holer out back. He was amazed that he could actually plug his rigs into a wall outlet, for all electricity back in Whiskey Holler was generated by windmills to charge up batteries.

The first time we met Charlie was at the Christmas party. Charlie and his wife with six kids all helped us share in the wonderful meal provided by the club and members. The kids, all dressed in their Sunday best Roundhouse overalls with high-top brogans on, really enjoyed feasting on all the brisket and ham.

Charlie's wife, Annabelle Lee, isn't what you would call a thing of beauty. Standing about five foot two, she is almost as big around as she is tall. Poor thing, she really stood out in the crowd with her pink pedal pushers which were so tight you could see everything she was composed of. Being just a little cross-eyed, it was rather hard to tell who she was actually looking at as you talked to her. But, she was a hit with the other wives, telling them about life in Tennessee.

Charlie's operating station is something to behold. Not being one to go out and buy a new rig every time one hits the market, he still uses the same gear year after year. His station consists of two radios which he operates simultaneously. Yes,

both at the same time. Over the years, he has developed the ability to work two stations at the same time, somewhat similar to the ability which Bob Robert possesses. To do this, Charlie learned to use his left foot and operate a vibroplex bug. Having spent most of his life not wearing shoes, he could manipulate his toes in such a fashion that it was very easy to squeeze the sides of the bug and develop quite a rhythm in doing so. The other station was operated in the normal way, except American Morse was sent instead of International Morse.

For radios, Charlie uses an Eico 720 with his left foot and a Swan 350 on the operating desk. Both have some of the features of modern radios, the primary one being the scanning mode. There are no buttons to push for scanning, he just lets the VFO's do the job for him since they both have built-in drift. N5KXI has been trying to get Charlie interested in some new Kenwood equipment, but he will have nothing to do with it.

kay

We had a great turnout for the Jan. meeting. The 'Old Timer' of the year award was presented to Jay, W5TXF for all his good work on the repeater this past year. The 'Ham of the Year' was presented to Mark N5OGP for all his hard work for the club this past year. He's really done a lot since getting his ticket last spring. Speaking of 'Old Timers' we had an informal contest to see who had been licensed the longest and Fred N5GJP won, he got his first ticket in '37! Gee, I guess they had kerosene powered radios back then!

We viewed a couple of humorous videos about tower building and DXing. They were pretty good, Mark, thanks for getting them. Dues are due for 1990 and most folks paid up. After reviewing our expenses for the last year, we decided to leave the dues rate at the same it's been for the last several years. If you haven't gotten yours to Mark N5OGP, then you better give him a call soon!

Our next meeting will again be at the Vo-Tech at 7 p.m. on Feb. 16th, be there!

PUBLIC SERVICE EVENTS

All the runs and other events are over for the winter. The next one should be the Groundhog day run in February.

I'll keep it short again this month, 73 KD5FX, Dave.

Charlie always uses earphones to copy the code. He has rigged up this contraption so he can use the same set of cans on both radios with the signal from the Eico coming out of the left side and the Swan the right. This was done to keep his bearings straight.

Charlie is in a different world here in Oklahoma City. Since joining the club, he has ventured into 2 meters and for the first time owns a microphone. Mike, DDB, is trying to get Charlie interested in Packet, but, isn't having much luck.

Charlie's antenna system is what you would call wet noodles. With the help of N5IH, he was able to get a variance from the city to erect his 25 foot push-up pole on top of the outhouse. From this he has several inverted vees. His favorite one is the 10 meter KLN model.

I talked to Charlie the other day and he plans to make the next meeting, so those who haven't met him should make plans to attend. K5NK

November 21, 1989

The meeting was called to order by our Club President, Bob Shaw, WA5BQX. The meeting was held in the Oklahoma Salvation Army Headquarters, NW 50th and Penn. in Oklahoma City. The Treasurer's report and the Secretary's minutes were approved.

Our President displayed the new climbing safety belt's purchased by the club. He also announced that the club has purchased gin pole, which we will be able to use on Rohn 25 & 45 tower, will be ready for use in the near future. OCAPA members will be able to check out this gear for thier needs with a \$25 deposit.

Our President then announced that he had made an agreeemnt with Channel 9 to align with the OCAPA Weather Net and stated that this agreement had nothing to do with the present agreement with OCAPA's antennae on the Channel 9 tower.

A motion was made for approval of the OCAPA/Channel 9 Weather Net, to be known as the "STORM BUSTERS", by Jim, KA5PSF, and after a lengthy and spirited discussion was seconded by G.C., KB5HYI.

Details of the operation, which will include packet and voice modes on 2 meters, will be made at a later date. Only certified personnel will be used in the net operation. Persons wishing to be certified must attend training classes and be tested. The reason for training and certification is to eleminate the 'blue sky', 'it's getting dark', 'vertical rotation' type of reports that impede the normal operation of the net.

O.C.A.P.A. Meeting

December 19, 1989

The annual Christmas dinner was held December 19, 1989 at 7:00 PM at the Salvation Army building. The club provided the meat dishes and all attendees brought the side dishes, salads, and desserts.

This year we had the EDMOND AMATEUR RADIO CLUB as participants in our yearly dinner. A member from each club was deemed "coordinator" for the number of non-meat dishes. There was so much food and there were 198 in attendance.

The annual 'White Elephant' gift swap was well attended and almost everyone got one of those "cherished" gifts.

O.C.A.P.A. Meeting

January 16, 1990

The meeting was called to order by our president, Bob Shaw, WA5BQX. The first topic of discussion was on using packet for the up coming weather nets. Pro's and con's of operation with other nets were discussed. It was decided that the use of packet was to be limited in order to bypass useless chatter on the repeater.

WA5BQX Bob, WB5MLN Hobe, and AD1S George, were assigned as primary operators at Channel 9. W5MEL Leonard, will serve as primary net control operator, and W5JDH Jim, will serve as secondary net control operator, with WA9AFM Tom, WA5JRH Hank, and N5GQY Dave as standby net control operators.

The club approved a proposal from the Board of Directors to purchase a 440 Mhz. repeater, (receiver, transmitter, and controller) from WR5G Jerry. Jerry will provide installation and maintenance of this repeater. The estimated time of completion of the new repeater is about 45 days.

Our next meeting, for February, will be held at KWTU Channel 9 at 7:30 pm on February 20, 1990. Parking will be found on the south side of the building and entrance to the building is on the east side. SEE YOU THERE.

Leonard, W5MEL

"ANTENNA HERE IS A HOME-BREW DIPOLE"

Reprinted from ARRL Exploring Ham Radio.

You know you need an antenna for your amateur station, but you're probably confused by the bewildering array of antenna types. What kind will work best for you? Most hams start out with a dipole antenna, like the one shown in Fig 1. A dipole is easy to build, and it works just fine.

A dipole is simply two equal-length pieces of wire that are connected to a feed line from your station at a center insulator (again, refer to Fig 1). The ends of the antenna are also connected to insulators, and the whole thing is suspended between two tall supports (trees work great). The length of the dipole depends on the band you want to use. Table 1 shows the length of the dipole for each Novice band. The length of the entire antenna is just about one-half wavelength at the operating frequency.

Finding Parts

Parts for a dipole are not hard to find. Basically, you need wire, a feed line, insulators and rope. Almost any type of copper wire (insulated or not) works for a dipole. Remember, though, that the antenna needs to be sturdy enough to support the weight of the feed line at the center. Most hardware or electrical supply stores carry some kind of suitable wire. Next, you need a feed line to connect the antenna to your station. Most hams use 50-ohm coaxial cable such as RG-58. Buy enough cable to connect from where you have your station set up to the center of the dipole. You also need three insulators—one for the center and one for each end. You can purchase insulators at your local radio supply store or hardware store, or you can make your own from plastic blocks or plumbing parts. Finally, you need some rope to support your dipole. Nylon rope 1/8 inch in diameter will support just about any antenna.

Where to Put Your Dipole?

Now the big question: Where should you put your antenna? Fortunately, a dipole works well just about anywhere. There are a few points to keep in mind, however. Never put your antenna under, or over the top of, electrical power lines. If your antenna ever touched the power lines, you might be electrocuted. Try to get your antenna as high as possible, but don't worry if you can't get the antenna more than about 20 feet off the ground.

Normally, a dipole is supported at both ends. The supports can be trees, buildings, poles or anything else that's high enough. Sometimes, however, there's just no way you can support your dipole at both ends. If you're faced with this problem, you can support your dipole in the middle, as shown in Fig 2. If you do this, both ends will droop toward the ground. This antenna is known as an inverted V. Inverted-V antennas work best when the angle between the two wires is not less than 90 degrees. If you use an inverted V, make sure the ends of the antenna are high enough above ground that no one can touch them while you are transmitting.

If you don't have room to put up a dipole in the standard form, don't be afraid to experiment a little. You can get away with bending the ends to fit your property, or even making a horizontal V antenna. The standard configuration works best, but many hams have enjoyed countless hours of successful operating with antennas bent in a variety of shapes and angles.

ASSEMBLING THE PARTS

When you've decided what band you want to operate on, found the ideal spot for your antenna and gathered the parts, you're ready to start construction. A few basic hand tools such as a tape measure, pliers, wire cutters and heavy-duty soldering iron will make the job much easier. Here's what you have to do: 1) Lay the wire out on the ground and measure the length listed in Table 1 for the band of your choice. 2) Cut two equal-length pieces of wire. Make each one as long as the length shown in Table 1 for "each half", but leave about 6 inches on each piece for connections and adjustments. 3) Connect an end insulator to one end of each piece of wire (see Fig 1, parts B & C). 4) Connect the other end of each piece of wire to the center insulator as shown in Fig 1D. 5) Connect one dipole wire to the feed line's center conductor and connect the other dipole wire to the braided outer conductor of the feedline. Solder the feed-line connections and weatherproof them with black vinyl electrical tape. 6) Put the support ropes up in the trees or attach them to your poles. There are many ways to do this; if you're using poles you can run the ropes through pulleys before you put the poles up. (If you're using trees you can't climb, you can tie a small weight to some fishing line and throw the line up into the tree. REMEMBER: Keep the antenna away from power lines at all times! 7) Attach a rope to each end insulator. If you're using an inverted V, attach a third rope to the center insulator. 8) Carefully pull on the ropes until the antenna is in position. Tie off the ropes to hold the antenna, but leave enough rope so you can lower the antenna temporarily if necessary. 9) Route the feed line to your station, and attach a coaxial connector to the end of the feed line to connect it to your transmitter. (Fig 3).

TUNING YOUR ANTENNA

Now you're ready to adjust the antenna. The best way to do this is with an SWR (standing-wave ratio) meter. Connect the SWR meter between the antenna and your transmitter. Follow the instructions provided with the SWR meter, check the SWR by transmitting with low power into the antenna. (Remember, you must have an amateur license to operate a transmitter!) If the SWR is less than 2:1, you're in business! If the SWR is more than 2:1 (like 3:1 or 4:1), you have to adjust the length of the antenna. If the SWR is much more than 5:1, check to see that you don't have a short or open circuit somewhere in the antenna.

First, Check the SWR at both end of the Novice band. If the SWR is lower at the low end of the band, the antenna is too long. It's easier to shorten a dipole than it is to make it longer; this is why you left about six inches extra on the wires when you measured them. To shorten the antenna, lower it to the ground and trim about an inch off each end. Put the antenna back up and measure the SWR again. Repeat this procedure until the SWR is less than 2:1.

If the SWR is lower at the high end of the band, the antenna is too short and you have to add some wire to each end. To do this, solder two pieces about 12 inches long to two alligator clips and clip the extra wires to each end of the antenna, as shown in Fig 4. Then measure the SWR and trim the extra wire wires until you get the SWR to less than 2:1. Once you have the SWR below 2:1, you can cut some new wires to the extra length you need and solder them onto the ends of the antenna. That's it! When you've got the SWR down below 2:1 the antenna is ready to use.

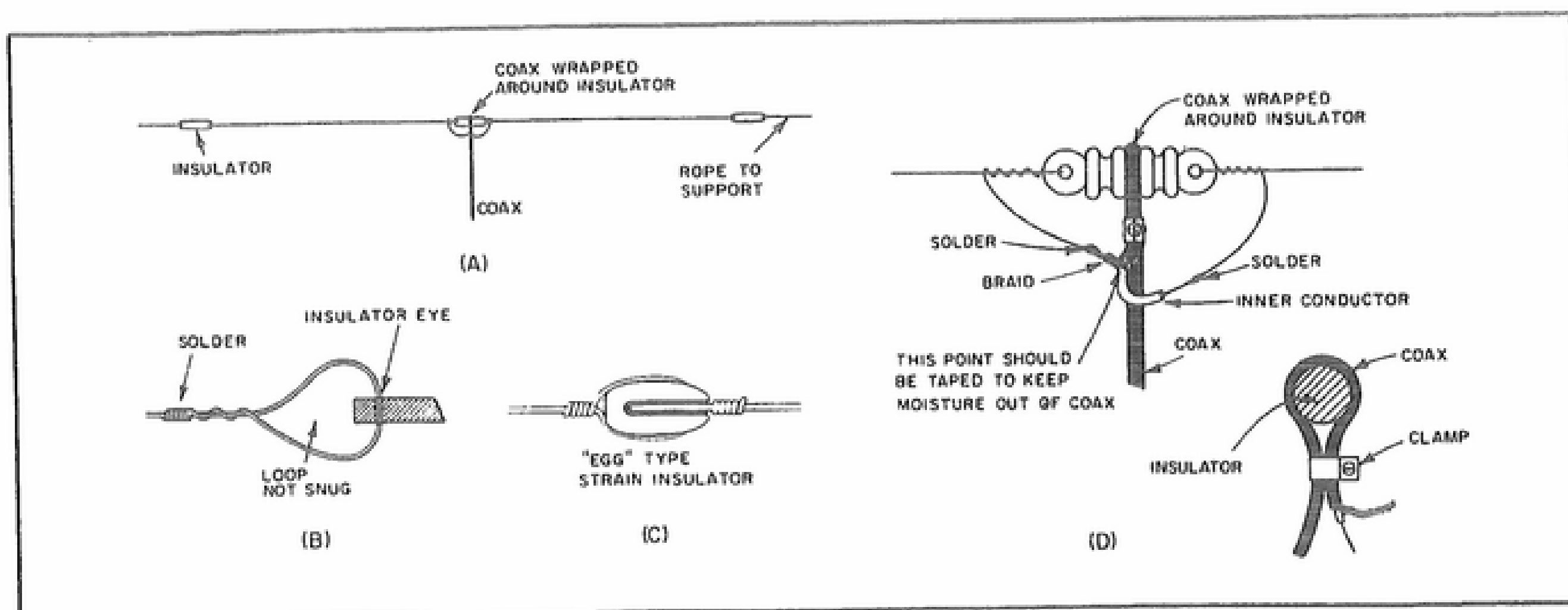


Fig 1—Construction of a simple half-wave dipole antenna. B and C show how the wire is connected to various types of insulators at the ends, and D shows the connection of the feed line at the center.

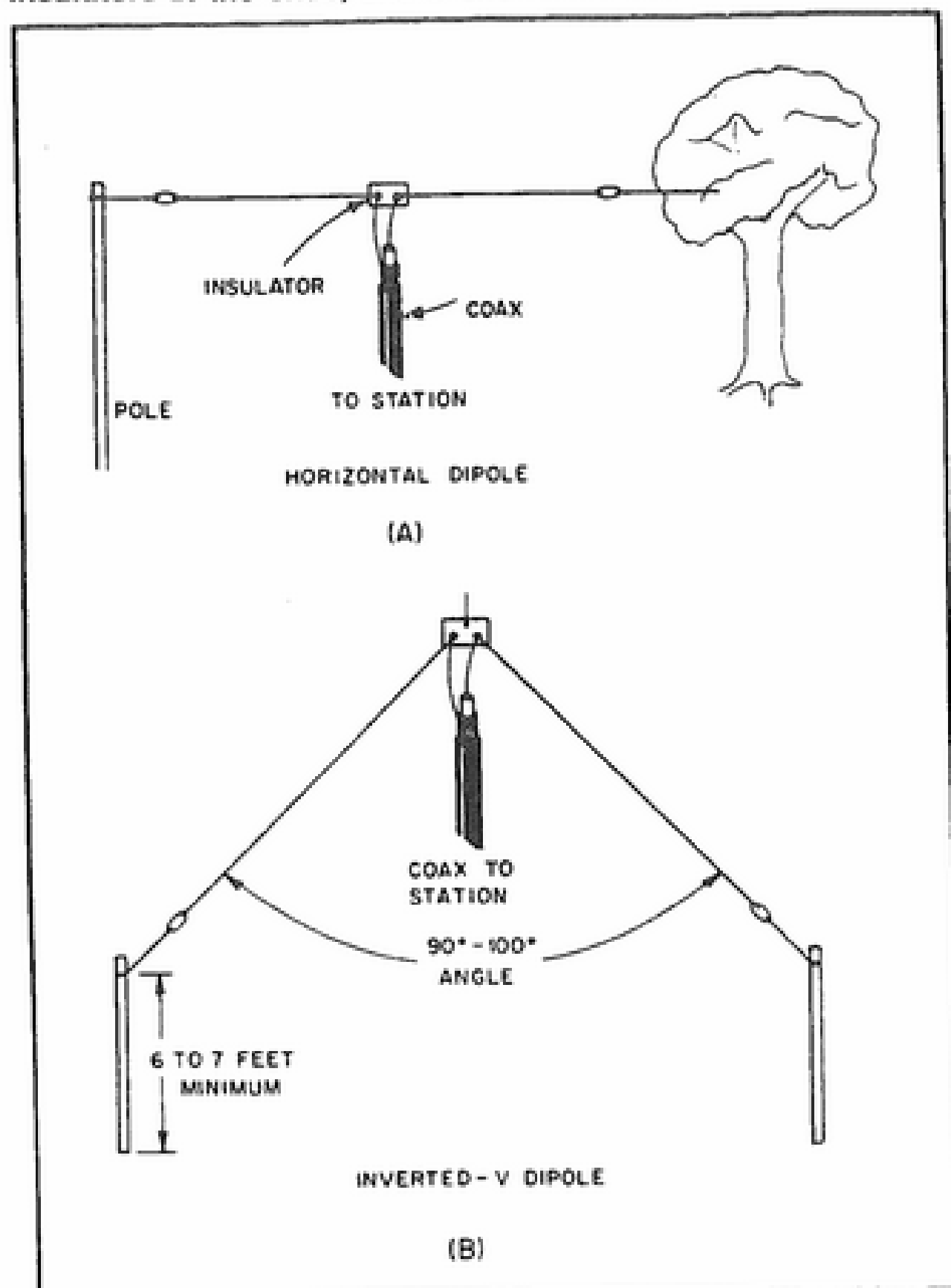


Fig 2—There are many ways to support a dipole antenna. A horizontal antenna using a tree and a pole for supports is shown at A. If you only have one tall support, you can build an "inverted V" antenna, as shown at B.

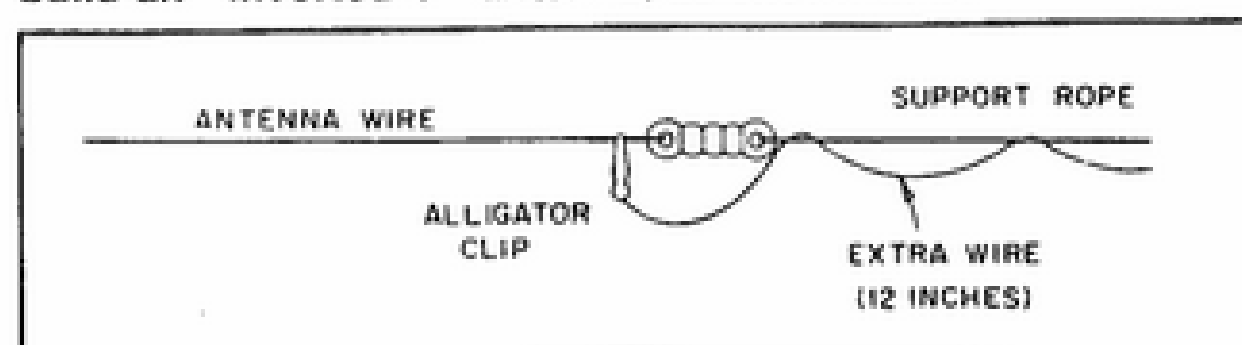


Fig 4—If your antenna is too short, attach an extra length of wire to each end with an alligator clip. Then shorten the extra length a little at a time until you find the correct length for the antenna.

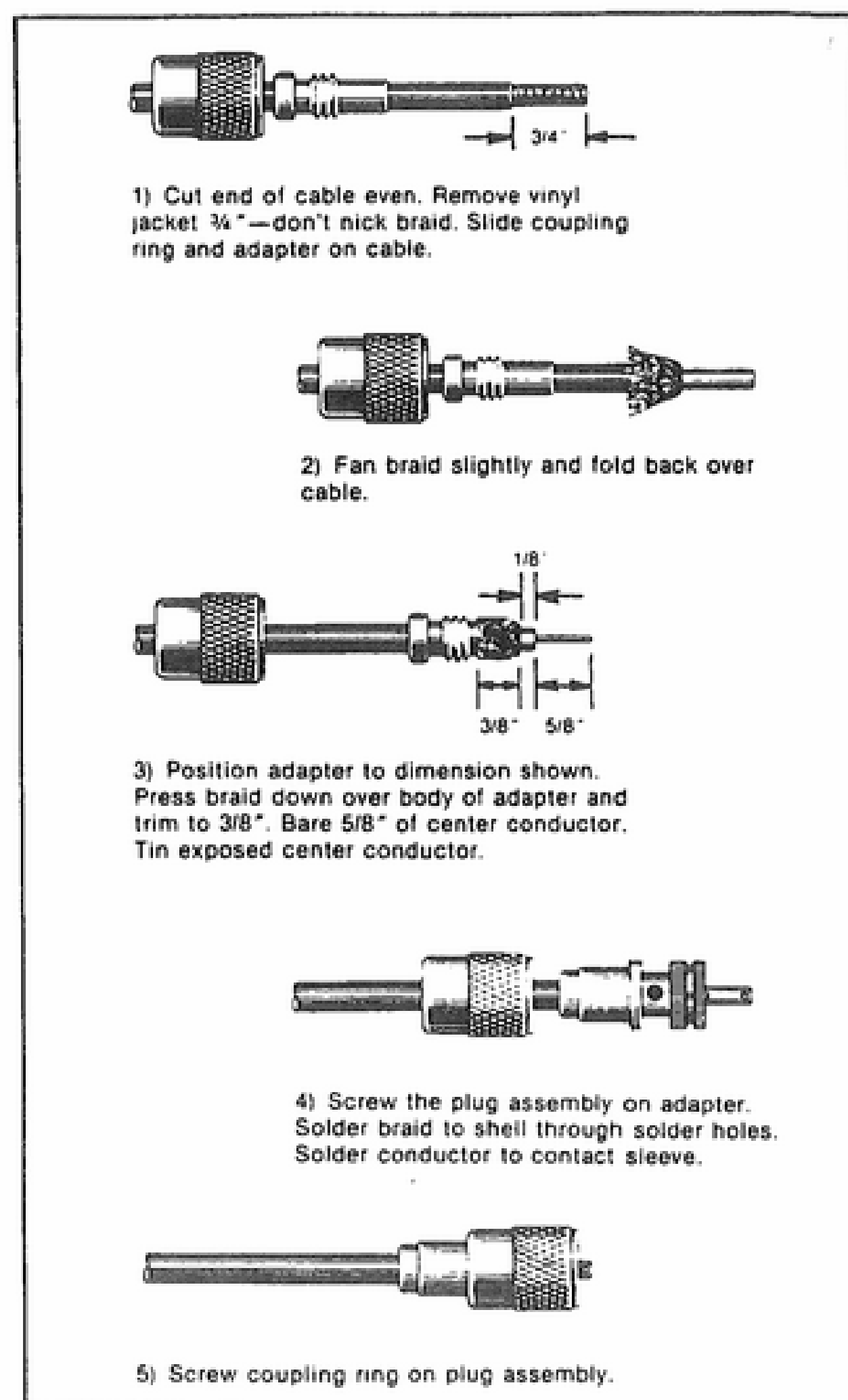


Fig 3—Follow these simple directions to connect your RG-58 feed line to the PL 259 connector. This material courtesy of Amphenol Electronic Components, RF Division, Bunker Ramo Corp.



THERE'S NO CHANCE
OF ME GETTING LOST

EVERYONE TELLS ME WHERE TO GO

YOU CAN FOOL
SOME OF THE PEOPLE
SOME OF THE TIME



"Well, it all started when he announced one night that he thought he would add a simple little memory to his electronic keyer!"

AND THAT'S USUALLY GOOD ENOUGH TO MAKE A LIVING.



Factory Authorized Dealer

ICOM
TEN-TEC

SEE YOU AT THE ELK CITY HAM FEST
MARCH 3rd

FREE SHIPPING
UPS SURFACE
(except towers/antennas)

1-800-765-4267



BENCHER, INC.

HUSTLER

NCG/COMET

Kantronics

CALL
FOR SPECIAL
OF THE
MONTH

HEIL

TELEX. *hy-gain*

Nye Viking

Palomar

C.O.D.

Astron

International Wire and Cable

Rohn Tower Distributor

Hours of Operation

M-F 9-6

Sat. 9-3

9500 Cedar Lake Ave., Suite 100

Oklahoma City, Oklahoma 73114

(405) 478-2866

FAX

(405) 478-4202

Q. R. Zedd

ZEDD ANSWERS THE CALL!

(Special to the C&E)

HOUSTON -- Q. R. Zedd, world's greatest DXer, arrived at the Johnson Spaceflight Center today in response to an urgent call from the president of the United States.

Zedd, A5A, a legend in his own mind, flew to Houston after repeated calls from the White House (on the twisted pair) urgently seeking his help.

Zedd was in the process of working everybody on all bands again when summoned. Of course he dropped everything and, without regard to his own convenience or the cries of stations on frequency who hadn't worked him yet, hurried to Houston at once.

This was not surprising. Zedd's morality and patriotism are recognized the world over. As everyone knows, he was born on a remote, snow-lashed slope in the Himalayas long ago during the DXpedition that killed his father, the renowned Zepp Zedd. The infant Zedd's momma pressed him to her bosom soon after birth (as soon as she had caught up with her logbook on 20-meter CW). But the infant Zedd refused to nurse until his momma had said grace over it.

Later, in a new-baby ward in Los Angeles, the baby Zedd further hinted at future greatness when he crawled out of his bassinet and beat up on the kid in the next crib after said kid had barfed on his American flag blanket. And more recently, who but the patriotic Zedd courageously insisted again and again that Nixon was innocent, and Pete Rose too, and even if they did it, what's the diff, everybody does it, it's a free country and every man has a right to be corrupt if he wants to?

So when Zedd dropped everything and flew to Houston, it was only the latest proof of his great devotion to his country.

And what a sight it was when Zedd disembarked from his home-made jet in Houston! First Momma Zedd got out, wearing a darling pink shorts outfit; then the even more darling Tondelayo, Zedd's nubile blond bride and QSL secretary, in her purple pants suit with a bare midriff; then Homer Klott, Zedd's protege, wearing his Roy Rogers outfit and propellor beanie, and finally the great man himself, his 725 stuck to the front of his tee shirt with velcro

tape, his VOX-operated mike fastened to his forehead with a red rubber suction cup, his Gene Autry belt buckle loaded up on 40 meters.

NASA officials greeted him, along with the vice president of the United States. The vice president noted Zedd's handi-talkie on his belt and enthusiastically grabbed it right up.

"Geel! Zowie! Shazam!" the vice president said. "I always wanted to do CBI!" He stuck the rubber duck in his ear and tried to talk through the handi's battery pack.

Off to the side, Homer Klott brightened visibly. "Gollee!" he giggled. "He are like me! I bet I can get him to study the Morris code with me!"

The welcoming ceremonies were brief. Zedd was whisked inside the main building at the Johnson Center, and a lengthy confab was held with top government scientists.

When Zedd finally held a press conference a few hours later, the stuff he told us was astounding. Much of it was too technical for you guys out there to understand, but I will try to give you the gist of it.

For a long time, Zedd told us, current theory about the Earth's magnetic field related to the planet's rotation and the effect of that rotation on the planetary core. The result, he said, was that we figured an east-west or west-east rotating planet always developed a magnetic field with north and south poles.

When Voyager reached Neptune a few months ago, a lot of the current theory went down the drain. What Voyager found was not the anticipated bipolar magnetic field, but a field that was quadrupolar or maybe even octopolar. Which couldn't be explained by Neptune's orbit or rotation, whacky as both of those are.

"What we have got here," Zedd told the world press, "is what us smart guys call an anomaly. The United States wants to know what's going on out there. As a patriotic American, I am answering the call and offering my help."

Zedd went on, "This is also real significant in terms of how an electromagnetic field gets itself generated. This discovery out there at Neptune could revolutionize magnetic theory, and electronic theory too."

Well, as you can imagine, at that point some ham radio operators in the room sat up straighter. It began to become apparent why Zedd had been summoned. Voyager's close encounter with Neptune had just trashed a lot of antenna theory!

"I am going to go from here to the Jet Propulsion Laboratory out in Pasadena and study the data for my own self," Zedd told us. "Probably with my brilliance I can figure out a new theory that will stand up to the

data, and give every amateur radio operator an idea of how to improve his antennas so they don't just throw bipolar lobes, but four or even eight of them so he can work everybody forty over nine any time he keys his mike.

"This is obviously real serious," Zedd went on, puffing on his oom-Paul, which he stuffs with custom latakia pipe tobacco, specially roasted over select camel dung in waterproof tents in Saudi Arabia. "My country is bothered by this mystery, and so am I. I am determined to get to the bottom of this. Or maybe with a crazy planet like Neptune, to the side, how do I know?"

Clearly Zedd was highly motivated, not only by patriotism but by the laudable desire to add 25 db to his antennas back at Honor Roll ranch, just a hoot and a holler south of town. But it was not until he spoke his next words that we realized just how serious he really was.

"As I said," he said, "I expect us to work this out at JPL. But if we can't, more on-site inspection and readings of those Neptunian magnetic fields is required; nothing else will provide the answer. And this time we have got to send a manned mission, to make sure we collect all the data we need. Naturally such a manned flight will require just about the most intelligent and courageous sucker you ever heard about."

"So I have already started the ball rolling with NASA," the great man went on, "to have us a backup contingency plan online in case of failure at JPL."

"As you all have seen, the Johnson Spaceflight Center has an old Saturn rocket configuration set up as a museum piece out here on the field. It's been there a long time, but it has most of its guts in it, and it can still be put in flying order."

"Starting tonight, NASA is going to be busy fixing up that monument Saturn out there and getting ready to ship it to Cape Canaveral. A spare Apollo command module and Lunar Excursion Module can be had from the Smithsonian, and with me helping they can be fixed up too."


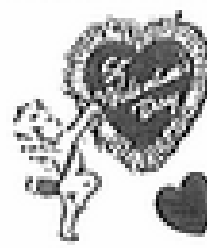

"Zedd!" screamed a woman from the London Times. "What are you telling us, old bean!"

Zedd's handsome visage hardened, sort of like Nathan Hale's probably did once.

"If we can't solve this mystery here on Earth," he told us, "they's only one other way I can discharge my duty to my country to clear the matter up."

Zedd turned to some of the pale NASA authorities on the dais behind him.

"Get that baby ready, boys," he told them. "If we can't solve 'er here, I'm going to Neptune." -- KU5B

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
				AERONAUTICAL 1	GROUNDHOG DAY 2	OKLA. REPEATER SOCIETY 1PM SWAP MEET MIDWEST CITY COMMUNITY CENTER 3
USO founded, 1941 GREAT PLAINS 4	5	MORI 6	7	ALTUS AREA 8	9	SCARS 10
WHEATSTRAW ARC 11	LINCOLN'S BIRTHDAY  EDMOND CLUB 12	CIMARRON O U 76'ERS OIDAR 13	VALENTINE'S DAY  14	KAY COUNTY 15	EDMOND SOCIETY 16	VHF CLUB 17
18	WASHINGTON BIRTHDAY  YE EXAM 6 PM RED CROSS BLDG 10TH & HUDSON 19	OK CITY AUTOPATCH 20	21	22	23	24
25	26	CORA CORA 27	EDIT NIGHT FOR C & E 28		 FEBRUARY	

GREAT PLAINS A.R.C.

WSHGK Repeater 146.13/73

Our club meeting was held in the conference room of the public library in Woodward 07Jan90. This proved to be an excellent site for the club meeting. Arrangements were made by WBØGAX and his XYL, who works in the library. Members and others present were:
KB5CZU-Tammy, N5EOX-Frieda, N5-JGQ-Lois, N5LEP-Lorene, WA5PLW-Windle, WG5Z-Gerald, W5KFK-Lewis WBØGAX-Bob, NZ5T-Bart, K5NUT-W.B. and XYL-Opal, N5HID-Kent, WB5OVT-Rod, N5OKE-Leon, and son, Clayton, N500-Willis, WB5EDD-Oren, and Phillip who recently passed his novice exam-congratulations and welcome to the club! We were honored to have two new hams attend and subsequently join the club: Pat Sanders-KA5JGL, and Bill Sanders-KA5JGF. They recently moved here from California-welcome aboard! Following is a list of newly elected GPARG officers:

President: WBØGAX-Bob
Vice President: N5OKE-Leon
Secretary: WB5OVT-Rod
Treasurer: N5EOX-Frieda
Activities Chm: WA5PLW-Windle
New Board Member: WB5NTH-Estel
The Hamfest at Mooreland, Ok. will be held April 7 and 8, 1990. The format remains essentially the same--if you liked it before you'll like it in 1990! We expect several dealers this year--Mr. Miley from Florence, Colo., Oklahoma Comm. Center from OKC and others. We have been fortunate to have extensive displays of new gear in the past, and sales were brisk. There will be plenty of swap tables, so bring that excess junk (oops) gear.

N5LRR-Andy, net manager for the Northwest Oklahoma Service Net, reports total check-ins for December 1989 were: 116 with 6 pieces of traffic in 10 sessions on the 13/73 WA5PLW repeater. N5LRR-Andy and XYL N5OKF-Sandra have settled into their new residence now coax has been strung through the attic, the tower is up and an antenna party is in order when the Wx permits. We have been advised that Elk

City plans to have a Hamfest March 3, 1990, and a number of GPARG members are making plans to attend. Seems like just about the time you think you've built every thing you want to build, along comes something like the transmatch "A balanced balanced Antenna Tuner", p.28 in the Feb. 1990 issue of QST. May have to give it a try. See you next month. 73's.
N500 --- Willis

CYNOAK PRINTING

9105 N. COUNCIL RD.
OKLAHOMA CITY, OK 73132
728-3610

 RUBBER STAMPS 
QSL CARDS !