

SECOND CLASS MAIL
Postmaster, see page 2

Volume 18
FEBRUARY 1992
Number 204

Oklahoma City Autopatch Association

Howdy! This is NJ1V. Happy New Year! Hope everybody had a terrific season and that Santa brought alot of neat ham radio stuff! It sure seemed that the season just rushed upon us and was over in a flash!

It would appear that the "Battle of the Bulge" has been resumed! It must have been a very FOOD-FULL season, as there has been alot of discussion on the repeater of various and sundry weight loss schemes being activated, including yours truly! I'll bet that the salad consumption has increased considerably since January 1. Wonder how long it will last?

OCAPA got the season off to a great start with our annual Christmas Dinner that was held December 17 at the Salvation Army Headquarters. It was a Grand Feast! About 83 folks broke bread, and everybody seemed to have a great time! Those of you that didn't make it should mark your calendars now for next year.

The food was plentiful and delicious, right down to all the gooey dessert! Thanks to all that brought the great covered dishes. And especially Tnx to all that helped organize and work so hard to make the affair a big success - W5MEL Leonard and his wife Cion, WD5CSM Dennis and his wife Janet, KA5PSF Jim and his wife Sharon, N5PVM Bob and his wife Dee N5RQU, and N5RJM Ruthie.

We also had our first Raffle which was free this time, and the White Elephant Gift Exchange. Several pretty nice things were given away, along with some not so terrific junkbox dregs, which were alot of fun to watch the winners open. W5MEL must have stuffed the ticket bowl, as Leonard and his family all walked away with something!

Some of the new prizes included an International Call Book and the ARRL Handbook and the ARRL Operating Manual. Ruthie N5RJM donated a hand crafted Christmas Angel.

Don't forget that the regular monthly raffles and raffle ticket sales will begin at the January meeting. We need your donations of equipment, books, and other ham or computer related surplus. We are also planning to raffle some new equipment, such as an Alinco DR 112T 2M Mobile - 45 Watts - 14 Memories. This winner of this radio will be drawn at the April meeting. You can purchase raffle tickets at our regular monthly meetings for \$1.00 each.

Membership News

I would like to encourage everyone to make a special effort to attend the monthly meetings, and especially to participate in the activities your club sponsors throughout the year.

If we can spread the responsibility for our activities among more of the members, we can expect to increase the club's involvement in many other areas of interest. We will also avoid "burning out" those members who typically seem to always be the ones to carry the load. PSE help!

Health and Welfare

Russ Cook, N5RMR, who was severely banged up by a hit-and-run driver several weeks ago, has returned home from Wilford Hall USAF Medical Center in San Antonio, Texas. Russ lost part of his leg from the mid-point of the shin downward. He was released Christmas Eve and got home to OKC approximately 0430 on Christmas morning. Russ has been back on the air on 146.82 and thanking everybody for all the gestures of thoughtfulness and offers of help.

Let's all make sure we listen for Russ,

as he is frequently monitoring the repeater. We can provide him with alot of company through the day during his recovery period.

Welcome Back Russ!!!!!!!

Ed Brown WA5YDF is home recovering from a successful kidney transplant. Ed has been heard frequently on .82, and appears to be regaining his strength. I guess spare parts are really important - right Ed??

Nice to have you back Ed!!!!!!

It is very sad to report that Ed King WM3T recently lost his Mother. Our regrets and condolences Ed.

Technical Tips

I hear so many discussions on the repeater about all of the various projects that our fellow members are undertaking, that I thought it would be appropriate to include some handy common tips that might be of benefit. If any of you have anything you might want to include in subsequent issues, please let me know and I will be glad to make arrangements to get the material published.

I very often hear about problems relating to TVI, or what appears to be TVI. Since one of the basic TVI avoidance measures is grounding, I submit the following article from the January 1992 Issue of the North Texas Contest Club Newsletter, by Gary Manly AA5OR.

An effective ground system is a must for every home and Ham Radio operator. The purpose of the ground system is twofold. First, it reduces the possibility of electrical shock if something in a piece of equipment should fail and the chassis or cabinet becomes "hot". If connected properly, three wire electrical systems ground

Continued Elsewhere

the chassis; however, the majority of electrical equipment still uses the ungrounded two wire system.

A ground system that prevents shock hazards is generally referred to as "DC ground." Second, it will serve as a path to bleed off static electricity and stray RF.

Copper pipe makes the best ground rod; however, it is expensive and too soft to be driven into the ground. The best practical rods are made of steel which is plated with copper to decrease resistance. Keep in mind that the length of a ground rod is more important than its diameter. Doubling its length will reduce resistance by 40% while doubling the diameter will only result in a 10% reduction.

Spaced rods provide large reductions in the resistance of your earth ground system. Ground rods should be separated from each other by a distance equal to their length. This reduction of resistance is not proportional to the number of rods in the system. Three rods spaced 15 to 25 feet apart will provide an optimal ground system for most home installations.

Chemical treatment of the soil around a ground rod will increase the effectiveness of your ground system. Rock salt, copper sulfate, or magnesium sulfate will inject large quantities of ions into the soil, resulting in an increase of the soil's conductivity. **CAUTION:** Be extremely careful when you apply chemicals that may pollute ground water, wells, or soil.

Repeater Tips

As I am sure you are aware, our 146.82/22 repeater is usually extremely busy. The repeater is there for everyone's use, but please exercise accepted operating practices, courtesy, and common sense when using the facility.

Be aware of the shorter time out periods (40 seconds) during weekday morning and afternoon commute times, and that transmissions times are cumulative if you do not allow time between transmissions for the repeater

to turn around (courtesy tone). Also, being not so "quick on the trigger" will help to avoid doubling, which is quite common on our machine.

Other OCAPA News

One of our members, Craig Boyer ex-WESL, is sporting a new callsign! While at Wake Island during his recent DX-pedition with George AD1S, Craig established a mailing address there, and has since decided to change his call. Craig's new call is AH9B. CONGRATS Craig! Nice callsign! But now I won't be able to call you "W-dits" anymore!!

Ham Trivia

Here is some interesting trivia from Mac K2GKK:

I recently ran across a message on a packet BBS from a fairly new amateur. He asked about several terms of ham lingo such as "73's" (ARGHH!), "ham", "lid", and "Elmer"

After I composed and sent him a reply to his query, I thought the info might be of interest to readers of C&E. Here is my note to "Tom".

First, Tom, there is no such REAL thing as "73's", nor "73s" nor "best 73s". The translation of "73" is simply "best regards". Nobody knows its precise origin for sure, but supposedly the expression was first used by landline commercial or railroad telegraphers as shorthand to save time. There is one story/rumor that in the early days of telegraph, a Winchester Model 73 rifle was the "best" and that is why "73" was picked as the shorthand sign-off. It is a bit similar to the expression "30" by print media people to show "end of text".

The BIG thing is that "73" is already plural and putting an "s" on it is pretty ridiculous.

Using an apostrophe ['] is even more ludicrous. An apostrophe is used to signify several things.

- 1) Missing letter(s) in contractions (can't for cannot, we're for we are);
- 2) Possessives (John's rig).

It is NOT used for pronouns that are already possessive (hers, its, theirs). An apostrophe should NOT be used to show plurals either (NOT the Johnson's).

You will probably receive several different versions of the origins of "ham" also. To me, the most reasonable explanation again stems from the days of the landline telegrapher. "Fist" is the word used to describe an operator's sending; good fist/bad fist. The term ham-fisted still denotes clumsiness or ineptitude at physical tasks. Ergo, "amateur" (supposedly poor quality) equals "ham". I've heard some other supposed explanations but some people believe Elvis is pumping gas in Milwaukee!

One other word is "lid" to denote a poor operator. This one is also reputed to have come from landline telegraphy. There were many operators in Western Union telegraph offices. Each sounder had a slightly different sound but some operators could not detect the slight difference in sound and had "QRM" from the other positions. These "poor" operators would attach a lid from a tobacco can to their sounders and it would make a radically different sound and make copy much easier. Therefore, to this day, a poor operator is called a "lid".

Elmer? I would guess that somebody's ham tutor a long time ago was named Elmer and it showed up in a printed article and somehow it stuck.

73 and welcome to the wonderful, wacky world of amateur/ham radio.

Mac, K2GKK

Tnx for the info Mac! If anyone is interested in submitting tips, trivia, or anything else you may feel is of interest to the club and readers of the C&E, let me know. If you are on packet, I would appreciate that you forward material to me through the WA5BQX-2 BBS on 145.05. Saves me from having to re-type the material.

That does it for this edition! CU down the log!

73 de NJ1V "victor"

<p>1. AERONAUTICAL CENTER ARC Meets: First Thursday, Flight Standards Building, FAA, South MacArthur 7:30 pm.</p> <p>PR Doug Teachman, W0DXA 392-5458 S/T Ted Anderson, NY5W 685-4016 AsVP Harold Todd, WA5VAQ 685-3685 Asvp Charlie Greene, WA5JGU 943-5631 Editor: Jack WB5SUN</p>	<p>11. EDMOND AR SOCIETY Meets: Odd Months, 3rd Sunday, 2:00 pm, Edmond EOC; Dinner, Even Months, 3rd Friday</p> <p>PR Aldon Sage, KB5LIC 341-6978 VP Jim Richardson, N5OHL 524-0456 SE Lynice Hamlin, KB5FOH ----- TR Ed Granger, KB5DZU 348-3454 Editor: Jim Richardson, N5OHL 524-0456</p>
<p>2. CENTRAL OKLAHOMA VHF Meets: 11:00 am, 3rd Sat., Favorite's Cafe, 3701 S. Western, OKC</p> <p>PR Jack Muse, WB5ZKZ 691-1152 VP Fred Boardman, W5NL 427-2505 SE Joe Buswell, K5JB 732-0676 TR Ellard Foster, W5KE 789-6702 Editor: Joe Buswell, K5JB 732-0676</p>	
<p>3. MID-OKLAHOMA REPEATOR, INC. Meets: First Tuesday, 6:00 pm social, 6:30 meeting, Favorite Cafe, 36th & S. Western, OKC</p> <p>PR Steve Corman, KB5CDF VP Robin Graham, N55PA 632-0225 SE Marvin Phelps, WB5DXZ 672-6702 TR Toy Graham, K15TZ 632-0225 Editor:</p>	<p>14. CIMMARON ARS Meets: 7:30 pm, second Thurs., WX5Y Playhouse 827 S. 13, Fairview</p> <p>PR Ray Barnes, AB5F (405) 274-3334 VP Terry McCall, N5MLT (405) 227-3672 SE Dennis Painton, WK5V (405) 764-3599 TR Nadine Painton, N5FMH (405) 764-3599 Editor: John Medley, N5WVU (405) 227-3534</p>
<p>4. OK CITY AUTOPATCH Meets: 7:30 pm, third Tuesday, Salvation Army, N.W. 50th & Penn.</p> <p>PR Jim Bartlett, KA5PSF 359-1299 VP John Guida, NJ1V 722-1103 SE Ken Goddard, WA5DTL 946-4973 TR Mac Macdonald, K2GKK 672-4947 Editor: John Guida, NJ1V 722-1103</p>	<p>15. SOUTH CANADIAN ARS Meets: 9:30 am, Second Saturday, Red Cross Bldg., North OU Campus, Norman</p> <p>PR Don Schader, K15TP 321-9649 VP Mike Winkel, N5SOF 366-8639 TR David Gates, N5LCL 392-5677 SE Gary Skaggs, WB5ULK 799-5363 Editor: Ken Brown, N5KUK & Gary Skaggs, WB5ULK</p>
<p>5. OKLA. UNIVERSITY ARC Meets: 7:30 pm, Second Tuesday (Sep-May) 119 Wilson Center, 1334 S. Jenkins</p> <p>PR Frank Donaldson, N5IQJ 329-4172 VP John Wustenberg, KE5N 325-2382 S/T Jim Greenshields, WD5HPU 321-9981 Editor:</p>	<p>16. EDMOND AR CLUB Meets: 7:00 pm, Second Monday, Various locations.</p> <p>PR Mark Northcutt, WD5DYI 755-4672 VP Wendell Cochran, WB5ISO 943-4308 S/T Kay Northcutt, WD5DYJ 755-4672</p> <p>Trustee: Dennis Orcut, WB5ISN 340-0034</p>
<p>6. ALTUS ASSOCIATION Meets: 7:30 pm, Second Thursday, North Main Fire Station, (CD) Altus</p> <p>PR Loren Simms, WA5CBF 477-0921 VP None S/T Jim Molledahl, KB5LS 482-5308 Editor: Jim Molledahl, KB5LS 482-5308</p>	<p>18. GREAT PLAINS ARC Meets: 2:15 pm, First Sunday, Home of N5LRR, 2914 Osage Drive, Woodward</p> <p>PR Bob Bayles, WB0GAX, Woodward 254-3561 VP Andy Taylor, N5LRR, Woodward 256-4017 SE Rod Ford, WB5OVT, Gage 923-7683 TR Freida Patterson, N5EOX, Woodward 256-2111 Editor: Phillip Perry, N5QCN 938-2453</p>
<p>7. BICENTENNIAL (76er) ARC Meets: 7:30 pm Second Tues., 1801 N. Lincoln Blvd., Parking in Rear</p> <p>PR Hank Stokes, KB5XM 376-1067 VP Chad Drewery, N5QIQ TR Bill Skipper, KB5BS 392-4612 SE Jack Conley, AA5VU Editor: Not Filled</p>	
<p>9. WHEATSTRAW ARC Meets: 2:30 pm Second Sunday, Location Varies, see Club Section for Details</p> <p>PR Leo Peil, WZ5H, Canton 886-2998 VP Ray Barnes, AB5Z, Longdale 274-3334 S/T Joe Garland, WA5FLT, Calumet 893-2660 Editor: Ralph Wilder, WA5PFK, Watonga 623-5421</p>	<p>CENTRAL OKLA RADIO AMATEURS Meets: 7:30 pm, Fourth Tuesday, Salvation Army, Penn & NW Highway, OKC, (Back Door)</p> <p>PR Frank Tassone, AA5GI 341-1124 VP Jack, AA5VU 392-5072 SE Jim Buswell, N5BEQ TR Tom Mangham, K5LDI 677-5291 Editor:</p>
<p>10. OKlahoma DX Association Meets: Quarterly - Hamfests, DX Net Saturdays 1600 UTC-7.195 MHZ, Box 88, Wellston, 74881</p> <p>PR George W. Adkins, AD1S VP Darrell Reed, KF5DA SE Paul Harrop, WB5NDN TR Paul Wardell, N5PYD Editor: George W. Adkins, AD1S 356-4101</p>	

PLEASE help us keep your information up to date. What time, where, when, who are your officers, editors, and their phone #. Check YOUR entry, it can be changed.

If there appears to be a mistake - check with your club official. We can't do anything about it. Below is a sample label.

4	90/01	2
WILSON, MIKE WA5RTY		
1234 W 49		
McCLOUD OK 74851		

The "4" means Autopatch Club, 90/01 means he is overdue. The "2" is for postal rates.

Dear Subscriber:

If your address label has a SAD FACE it means that you are due to renew your subscription or your club dues and you will continue to get the C&E for three months then, sorry but post office rules say that we must cancel you until you pay up.

Likewise
if
you
see
a
RED X here

this will be your last C&E until you renew.

Dear Secretary/Treasurer:

When you want a change of any sort to your membership just remember...fill out a slip (COMPLETELY). Watch for the DATE you received their money and the date subscription expires. Have your slips, or list of deletions, to me by the 22 of each month. If there is anything about C&E subscriptions that you need to know, get in contact with:

Joe Harding, 9211 N. Council #216, OKC, OK 73132, Telephone 720-1019

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Elk City Hamfest

March 7, 1992.

Elk City Civic Center

8 a. m. - 5 p. m.

Pre-Registration Prize

Icom 229H

50 Watt 2m Mobile

Do Not Have To Be Present To Win



70 free RV hookups, first come first serve!

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.

**Must Have Valid Amateur License In Household To Be Eligible For
Pre-Registration Prize**

Name _____ Call _____

Address _____ Phone _____

City _____ State/Zip _____

Please reserve _____ Swap Meet tables at \$5 per table.
Make checks payable to WCOARC.

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

Swap Meet

\$5 table

Unloading Begins at 7 a.m.

Testing Session

1:00 P. M.

Pre-Registration

\$5

Pre-registration deadline 2/20/92

Postmark determines date

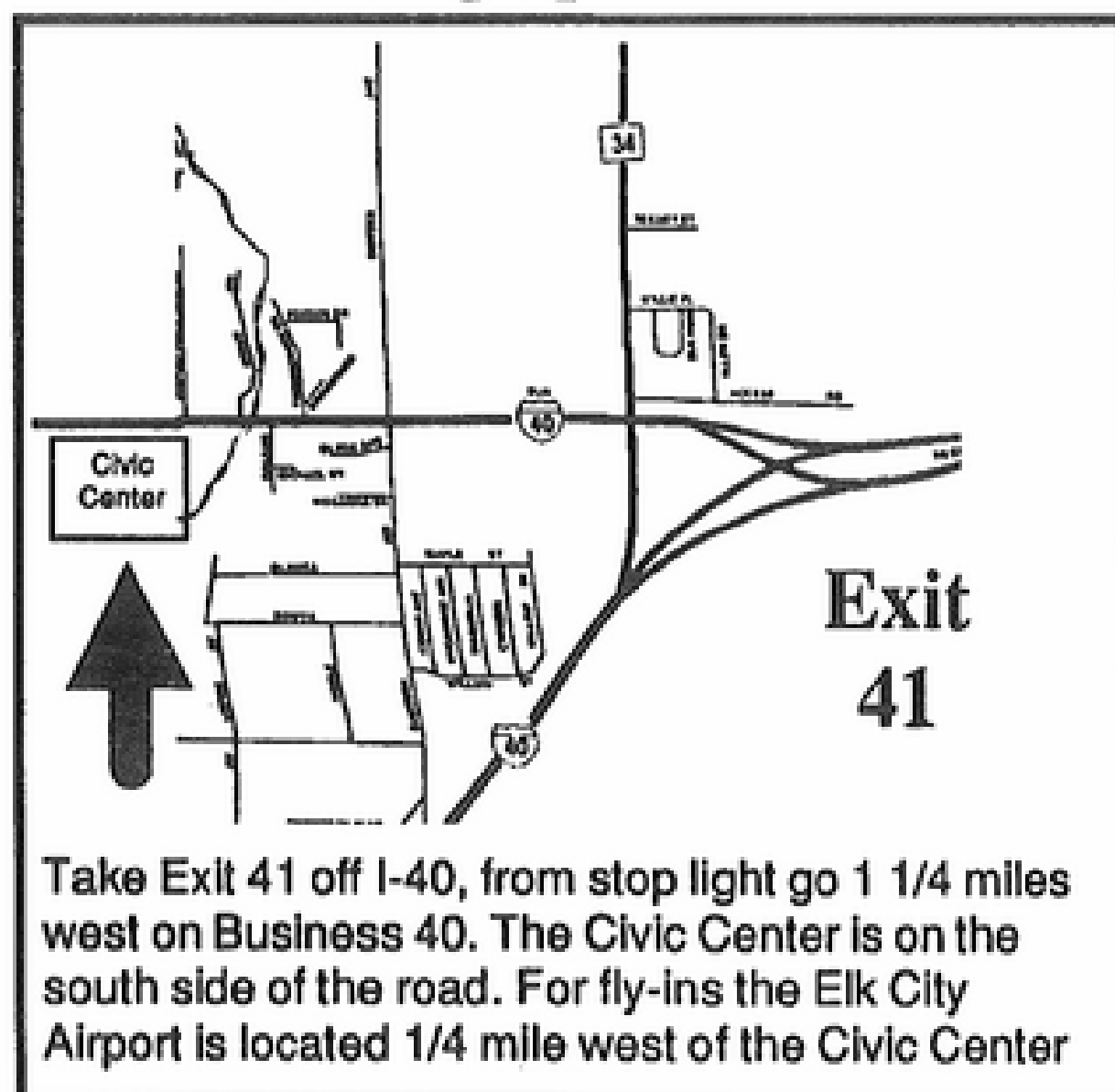
Day Of Hamfest

\$8

Talk In: 146.16\76

OK Comm Center

New Equipment Dealer



Take Exit 41 off I-40, from stop light go 1 1/4 miles west on Business 40. The Civic Center is on the south side of the road. For fly-ins the Elk City Airport is located 1/4 mile west of the Civic Center

The South Canadian Amateur Radio Society

SCARS met on January 11, 1992 at the Cleveland County Red Cross in Norman (to the surprise of some). The meeting was called to order by new club President, Don Schader, KI5TP at 15:48 UTC. After much discussion regarding what phonetics the President was using with his new call, the President asked that each person introduce him or herself. There were a number of visitors, including: K5FLL, AA5TU, N5UMH, and John and Annette Preston (awaiting calls - congrats!). There were also numerous folks that had not been to a meeting in quite awhile for a total of 29 members and guests. W5UZD, upon discovering that this was an official club meeting day, scurried away after paying his dues, which were due. More about that later.

By way of announcement, the President announced that door prizes will once again be awarded starting in February.

On a sad note, the President informed the club that Clay Ford, KA5ZVM, became a silent key a few days before Christmas. Clay meant a lot to SCARS and the Norman amateur community. He will be sorely missed. The President made arrangements for flowers to be sent to the funeral.

SCARS didn't have an official club meeting in October due to lack of quorum (OU/TEXAS weekend), but we did note that new officers, elected by railroad in November, are: President - Don Schader, KI5TP, VP - Mike Winkel, N5SOF, Treasurer - David Gates, N5LCL, and Secretary - Gary Skaggs, WB5ULK.

We heard reports from the Treasurer, about CORA, and about the repeater antenna, in-town link system, and the upcoming novice/tech class. The Treasurer, N5LCL, reported that all bills were paid leaving a balance of \$544.85 in the coffers. KI5TP reported that CORA was well down the road to another successful Ham Holiday this year, but as always, help is appreciated. SCARS is allowed 3 representatives on the CORA board and there is currently a vacancy. Anyone interested, see the Prez. N5BEW reported that the Prez's nephew (a certified climber) did some work on our antenna harness in December and reported that the antenna was in good shape. However, some work was done on the harness and the top end of the feedline, but a connector needs to be replaced to keep the repeater from having the 'yoyos' during windy conditions. Those that use the repeater from a distance may note that on windy days, the signal will vary greatly. It is from this bad connection. We are looking into getting it replaced. N5KUK reported that work was progressing on the in-town link, but more problems have surfaced slowing the project. However, the temporary in-town has decent coverage in

the mean time. WB5ULK reported that a site had been secured (mostly) to have the classes, but that date and time would be announced after final approval of the local management of the site (Late word: The SCARS Novice/Tech class will be held at the National Severe Storms Laboratory conference room, North Campus, Monday nights, 7 pm, beginning March 23).

In the way of new business, the President read a letter, with regret, from Gordon Jones, W5OU, longtime trustee of the repeater. Gordon requests that we find a new trustee for the repeater. He emphasized that he was not angry nor had he been insulted, but that his job was just not allowing him to fulfill the duties that a trustee has to fulfill. He noted that some trustees were being cited and fined for events taking place on their namesakes and that he just could not feel that he could live up to the duties as trustee as he saw them. The President expressed deep regret and understanding regarding this situation and after much discussion, stated that he would attempt to locate another trustee for the repeater.

We discussed how the new meeting place for non-official-club-meeting days was working out. Recently, Piccadilly's in the mall has been gracious in hosting us and most said that was a good place. It was noted that the Westheimer Airport coffee shop is now open on Saturdays and that it might be worth a look. The club decided to give it a whirl on Saturday the 18th.

In other business, Barney, N5IUB, had received a letter from Senator Boren regarding HR73 stating his position (or lack thereof... WB5ULK). There was some discussion that it probably would die in committee.

There being no further business, a motion to adjourn was entertained and we adjourned to the donuts at 16:25 UTC.

The yearly dues envelopes were distributed to those in attendance and mailed to those not. If you have not received your renewal notice by now, please contact an officer or mail your \$16 dues to:

Treasurer
South Canadian Amateur Radio Society
P.O. Box 720993
Norman, OK 73070

As always, any amount above dues will be put into the repeater upgrade fund.

73 de WB5ULK

National Weather Service Severe Weather Network

For the past several years the National Weather Service office in Norman has made available to the amateur radio community various computer generated products which could be distributed via packet radio. The products consists of severe weather watches and warnings, alpha-numeric radar depictions, and special weather statements such as the Oklahoma Thunderstorm Outlook. The computer used to drive the packet radio system was furnished by OPRA, the Oklahoma Packet

Radio Association. Special software written by David Medders, K5PL, was used run a BBS type of program that gathered the data from several NWS computer sources, create database files of the data, and interface with the packet radio TNC. Unlike the normal packet BBS systems, up to ten users could check in on the NWS system at the same time although the radio communication channel could not support this many users at once.

Due to the specialized multi data source nature of the operation, a computer capable of simultaneous receipt of data on a number of input lines was necessary. The software was written in the "C" programming language running under the UNIX computer operating system on a computer designed for just this type of use.

After several years of use most of the bugs in the computer system and software had been found and eradicated. However, the use of a BBS type system for dissemination of the weather watches and warnings has proven to not be the most efficient way to go. Mainly, a remote user had to make a request to the system to find out if a warning or watch was in effect at his location. Also, the frequency in use is also being used by the DX cluster operation leading to some complaints of channel congestion. Some of the owners of NetROM nodes across the state complained about weather radar depictions being passed across their nodes.

Last fall OPRA withdrew the computer used to support the NWS operation. For this reason, and the reasons identified in the previous paragraph, it does not look like the packet radio system will be available during the coming severe storm season.

We are looking into other packet methods to distribute severe weather information via packet radio. It is unlikely that a mature system could be in place by this coming spring due to the amount of time necessary to develop the software and hardware and the amount of volunteer time and donated money available. We have seen that 1200 bps packet modems are painfully slow for anything other than keyboard to keyboard chatting. Since higher speed modems are available to make better use of the channel bandwidth available the follow-on NWS system will probably use 2400 or 9600 bps. Due to the lack of available frequencies in 2 meters and the problem of adjacent channel interference to the 2 meter voice radios at the NWS office we will most likely move the packet system to one of the packet channels in the 70 cm band.

As plans progress we will try to present them here in the C&E. Suggestions for the type of system to be used are welcomed.

de N5KUK, SYSOP NWS packet system

Knock, Knock
Who's there?
Chester.
Chester, who?
Chester minute and I'll see.



VHF Club NEWS

WSLOW

Elmer Goekler Memorial
Station

Minutes of December Meeting

Meeting was called to order at 12:00 p.m. by President Jack, WB5ZKZ, with 22 members and guests present. Right after the Treasurer's report by Ellard, W5KE, was accepted, a motion passed that the VHF Club annual dues be raised to \$5.99 to cover the anticipated increased costs of producing the Collector and Emitter.

President Jack appointed a nominating committee to recommend candidates for club officers for 1992. The committee consists of Charlie, WA5JGU, and Ken, K5VFN.

Bob, W5HXL, was voted "Turkey of the Month", (for why, I don't know -- maybe because he wasn't there). Then a motion passed that wall clocks and Volt-Ohmmeter that are club property be given away as door prizes. Meeting adjourned at 12:17 p.m. Joe, K5JB, Secretary

Minutes of January Meeting

Meeting was called to order at 12:00 p.m. by President Jack, WB5ZKZ, with 17 members and guests present. In his Treasurer's report, Ellard, W5KE, advised that there are now 38 paid-up members with more renewals coming in. Election was held and the new officers are: Jack, WB5ZKZ, president; Fred, W5NL, Vice President; Ellard, W5KE, Treasurer; and Joe, K5JB, Secretary (any surprises there?)

Joe, WA5ZNF, was voted "Turkey of the Month", for being so loveable.

The wall clocks and Volt-Ohmmeter door prizes were given away but I forgot who got them. (Must have been the extra helping of cobbler!)

Jack reminded the group that several of them were making a habit of meeting for coffee and fellowship on Saturday mornings, around 9:00 a.m. at Ingrid's Kitchen, NW 36th and Youngs. Meeting adjourned at 12:35 p.m. Joe, K5JB, Secretary

Packet Network Meeting

On January 11, 1992 a meeting of approximately 35 Oklahoma packet node and BBS control operators was held at Don's Alley Restaurant in Del City. The purpose of the meeting was

to discuss the upgrading of the statewide packet network. It was agreed that the time has come to try to secure support for the network in much the same way as voice repeaters are maintained by local repeater clubs. This however will have to be done on a statewide level since the network extends throughout the state and requires some coordination to develop an effective system.

It was decided to revive the Oklahoma Packet Radio Association since it is already an existing corporation with non-profit status with the IRS. This association will also become affiliated with CORA in order to distribute newsletters and become more visible to the general ham community.

The purposes of the Association will be as follows:

1. Provide equipment to upgrade and expand the statewide packet network, be it ROSE, NET/ROM, TEXNET or what have you.
2. Provide technical support to node operators for upgrade implementations.
3. Provide technical support to the packet users (Operating manual with up-to-date map and clear instructions of how to use the various services available on packet, including a directory of all members).
4. Have regular articles in the C&E to keep everybody up to speed on the activities of the club.
5. Have meetings and packet forums at the major Hamfests in the state.

A very interesting show and tell presentation was provided at the meeting by Bob Morgan, WB5AOH. He brought an example of the equipment needed to construct a TEXNET node. It was of particular interest to some of us who were unfamiliar with what the requirements were. Also along this same vein, Joe Borovetz, WA5VMS, reported on some of the pitfalls on operating 9600 baud at remote sites where temperature is not stable and RF interference is very high.

Larry Brewer, K5VVD, reported on the progress of the new TEXNET node coming to Choctaw. Also, he provided ARRL surveys for the Unattended Automatic HF operation questions.

Dan Puckett, K5FXB, gave us some input on how HOGNET, the packet radio association in Arkansas, is operating. It will be most helpful to have some ideas from someone who has been down that road before.

Larry Story, WB5CQU, reported on his experiments on 9600 baud in preparation to upgrade his ROSE network from Pauls Valley to Denton, TX.

Lee Allen, N5KXI, and Hank Blackstock, WA5JRH, reported that they were beginning test of Kantronics Data Engines at 9600 bps, and testing various radios at that baud rate.

In closing, I would like to encourage all packet users to get in touch with me and join up. We plan to have a dynamic organization that will benefit ALL packet users regardless of their interests be they BBS, Cluster, Keyboard or what have you. We have just scratched the surface of the potential of packet radio.

Everyone who is on packet will benefit from the activities of this club, so you are encouraged to join today. For further information contact me at 405-722-0640 (H), 405-755-5622 (W), or send a note to WA5JRH @ WB5FWE.OK or PO BOX 20081, Okla. City 73156. The next meeting is planned for the Green Country Hamfest in Tulsa. 73, Hank, WA5JRH

ORSI Meeting Planned

Plans are being made for the winter Oklahoma Repeater Society Inc. (ORSI) meeting. It is scheduled to be on Saturday, February 29, at the Edmond Public Library, and will start at 1:00 p.m. The Edmond Public Library is located at 10 S. Boulevard.

ORSI is a group of people from throughout Oklahoma who are interested in VHF and UHF repeater operating. Meetings generally involve coordination discussions and reports on legal and technical issues of interest to repeater operators. All interested in VHF and UHF phone (voice) operation are invited. Joe, K5JB

9600 BPS Experiments

As Hank, WA5JRH, mentioned, he and Lee, N5KXI, have been running experiments with Kantronics Data Engines running 9600 bps packet data rates. The only other local 9600 bps operation I am aware of is the experiments J, KB0QJ, and Steve, N5OWK, are running with Gracilis circuit board that plugs into an MS-DOS computer and acts like a smart TNC with a high speed modem.

In my perspective, there are three situations where 9600 bps packet operation would be useful. The first is the trunking used in inter-local area network (Inter-LAN) circuits, or trunks, de-

scribed by Hank and the OPRA objectives. The next is where a user would like to be able to handle large amounts of data (transferring files with TCP/IP is a good example. Packet bulletin board browsing is another case where large amount of data gets transferred in a short period of time). The third possible application is for the user who wants to make up for the main deficiency of the Aloha protocol -- maximum throughput is 18% when a frequency becomes fairly well utilized. (For a discussion of this, see the proceedings of the Second Annual ARRL Computer Networking Conference, Modulation and Access Techniques for PACSAT, by Phil Karn, KA9Q, page 2.33. Note that this was in 1983!)

As in the satellite application, as long as there are going to be interference from "hidden transmitters" you can compensate for the six retry average of a given packet by sending six times as many of them, in other words send each packet six times as fast. At 9600 bps, your throughput would have a maximum theoretical value of 1728 bps, well above the value of 216 bps we get when operating at 1200 bps modem rate.

(This is a theoretical maximum -- it is actually worse than this. See my column in the September 1986 C&E for values calculated with packet length and digipeating problems taken into consideration.)

One thing to remember when considering 9600 bps modems is that they are incompatible with the current 1200 bps modems used for packet. Neither one can tell that the other one is transmitting so they step on each other. We have to keep them on separate frequencies or we are consciously committing the error that others unconsciously commit by using magnetic mount antennas on their refrigerators. The "hidden transmitter" syndrome is a serious flaw caused the balanced nature of the AX.25 protocol. (There is no "master-slave" arrangement, or a token passing, or some such control over when a transmitter launches a packet. In line with current thinking of our "class-less society", all amateurs are intrinsically equal!)

To preface to J's note, you should know that the Gracilis comes with the TCP/IP suite of programs. Main networking program is called NOS, for "New Operating System". It is the current development in TCP/IP software and the Gracilis circuit board drivers were developed for it rather than the older TCP/IP program (called NET) that I run. J also runs NET on his Unix

computer, so when he refers to a SLIP link it is the connection between NOS running with Gracilis on his XT, and NET running on his Unix computer. Keep in mind that TCP/IP is a multi-tasking program that can send and receive mail (SMTP), transfer files (FTP), and do keyboard to keyboard sessions (TELNET) simultaneously. Some of the things that J describe are these different sessions by the names they are called in TCP/IP.

Here is part of a note that J sent to me about his and Steve's experience around the first of the year:

For the large part the plug 'n play Gracilis card, cable and radio seem to work rather well. The problems that we had are more related to A) hardware and RF links and B) software problems than with the equipment itself (discounting the problems I had with the XT initially).

I have the TEKK, Inc. KS-900 Data Radio (two watts output) connected directly to about 80 feet of half-inch hardline and a Cushcraft Four Pole AFM-44DA array at about fifty feet.

My station may have a more balanced (RX to TX) signal than N5OWK as I could receive his station from the outset because he is running 80 watts compared to my less than two watts. He had to install a small beam to receive my signal. N5OWK still has a small amount of intermod when someone uses the Moore UHF repeater.

One problem he has is the best reception for him is pointing almost due west from Moore whereas I am about 325 degrees from north. There must be a reflection off some structure south of me which enhances the signal in his direction. At any rate, we have a reasonably decent RF link now.

As far as the software problems go, I had problems using the Gracilis PCN v3.0 even after getting the bugs out of the autoexec.net and domain.txt files. (One problem was getting the program to find its configuration files.) We also discovered that PCN and PA0GRI NOS are incompatible when attempting FTP and TELNET sessions from PCN to NOS. PCN generates all of the proper sequences (SYN, etc.) but NOS ignores them and just fails to respond. However, when N5OWK re-started with PCN at his station, all went well. On 1 Jan 1992, he transferred almost 300 KB of data to my XT with little or no problems.

Another hardware problem we uncovered had to do with the SCC (Serial

Communications Controller) chip 85C30 on both our cards and the 4.77 clock on the XTs. N5OWK was using his XT for many other tasks whereas I was making minimal demands on CPU time. When N5OWK initiated an AX25 connect, I would receive truncated frames. It was much later that N5OWK learned that the buffered 16551A SCC was the proper choice when this problem occurs and he was offered a free replacement by Gracilis. He chose to put his card into his AT instead. I have not had any problems with what NOS terms Underruns probably because I am only using the one port and have NOS doing a minimal number of chores. I did see the Underrun count go from 0 to 3 during the heavy traffic of New Years Day.

I do have the SLIP link working quite well at 4800 baud (NET works well at 9600 baud, but NOS has too many checksum errors at 9600) and have moved large amounts of data to and fro. In fact, when we were having problems with N5OWK receiving my signal on 440.975 MHz, I received his frames and responded via the SLIP link and the 1200 baud UHF route as opposed to a direct response via 440.975 MHz. Torturous, but successful.

Thus was the gist of J's message. Since I have an extra Pac-Comm TNC available, I contacted that company to see what the current offerings were for 9600 bps operation. I'll likely put a 9600 port on the TCP/IP computer and see if I can link up with J, KB0QJ, and Steve, N5OWK. I know I can hit J, but hitting Steve down in Moore might be iffy. Not only does long distance affect signal strength, it causes phase shifts that have a worse effect on higher bit rates. The Texnet folks, who have had a lot of experience with 9600 over long paths, found that multipath phase distortion is a real serious problem with data transmissions. We will get some first hand experience when OPRA's networking activities take off.

For further reading on 9600 bps operation you should check out the ARRL Computer Networking Conference papers. The Fourth one has K9NG's paper. The Sixth one has some Digital Signal Processing (DSP) articles and WA5DSY's 56 Kbps design. The Seventh contains G3RUH's design, more on DSP, and N3EUA's thoughts on 10 Mbps trunking.

There is a paper on 9600 bps operation by Mike Curtis, WD6EHR, floating around. It contains a fairly comprehensive extraction of 9600 bps related things including modification instructions for the more common radios.

(It is too long to put on the packet BBSs (30930 characters) so I put it on my Unix machine at home, which is reachable by telephone. If you want it, contact me by phone for instructions.)

The following snippets are examples of the advice it offers:

"9600 baud packet requires a modem. The 2 most common varieties are the K9NG and G3RUH, but DSP modems will also do K9NG-protocol 9600 baud. Due to the high cost of DSP modems, we will limit our discussion here to G3RUH and K9NG modems."

"The G3RUH is a very nice 9600 modem. It works with all radios we've tried so far. It's full-duplex capable, and has a lot of test points."

"The K9NG is a low cost means of getting into 9600 baud. It works with a lot of radios, but is a little less forgiving of group delay, a form of phase distortion inherent in filters when approaching passband edges."

"Most TNCs are capable of 9600 baud. Notable exceptions are the Kantronics KAM/KPC line. (The Data Engine will do 9600 baud, and much higher.)..."

"You can NOT use the radio's microphone and speaker jacks for K9NG or G3RUH format 9600 baud packet."

(You have to bypass the audio frequency shaping circuits and tie directly to the modulator and de-modulator of the radio. This is FSK, not AFSK. Modifications are simple to do.)

If you are interested in getting up to speed (excuse me) on 9600, you need this file.

I am pretty frequency agile at my house and will initially try the TCP/IP on UHF, where the action is. If some interest develops, I can put it on 2 Meters, maybe on 146.415, where there is no other packet operation except for the Apple BBS. There is so little activity on 146.415 that the two modes should co-exist, and if not, I can put a data carrier detect inhibit circuit between the 1200 bps and 9600 bps modems. Joe, K5JB

Kansas Packet Group

At the Packet Network meeting, Dave, KD5FX, from Ponca City, loaned me his copy of the four page Kansas Packet Group (KSPG) Newsletter and pointed out an article about inexpensive portable packet operation, suggesting that it may be of interest to C&E readers. I agreed, and that article follows this.

There were several interesting articles in the KSPG Newsletter, Vol. 2, No. 5, that he loaned me so I sent the annual \$15.00 dues to the group to get on the mailing list. If you are interested in general packet discussion (such as how to deal with 145.01 being used as an InterLAN frequency, how LANs are set up, etc.) and specifically how our neighbors to the north are dealing with network issues, you may want to look into this newsletter also. Address of Kansas Packet Group is PO BOX 771218, Wichita KS 67277-1218.

Our neighbors to the south are dealing with the network a little differently where they are applying the TEXNET hardware and software protocol. TEXNET forces the InterLAN and user frequencies to be different by design. There is no contention for time on a single frequency as there is when Netrom, ROSE, Kanode, or other device is used as a router on a single input-output frequency. If you want to keep up with Texnet happenings, you should contact Bob, WB5AOH, Joe, WA5VMS, or Larry, K5VVD.

In the context of packet radio, a switch is a device that operates on two or more frequencies. A router operates on a single frequency and its input-output compete with each other for frequency resources. We will never get a performance improvement until we begin to understand the difference and begin depending more on switches. Joe, K5JB

Inexpensive Packet

(Reprinted from Kansas Packet Group Newsletter, Vol. 2, No. 5)

Several years ago, a couple of German hams created a program called DigiCom64 for the Commodore 64 computer. All you needed was a Commodore 64, an easily constructed modem that used two or three chips and a few other components, and their program which was placed in the public domain so could be obtained either free or for a very modest copying fee.

(Ed note: These "two German hams" are DG3RBU and DL8MBT.)

Now, the same two Germans have written a program called "BayCom" for the PC. It operates in a manner similar to the DigiCom64 program in that it uses an external modem interfaced through the serial port of any PC, and the PC becomes the TNC.

There is also a program called "Poor Man's Packet" written by Andy Payne, N8KEI, that uses a simple modem designed by F. Kevin Feeney,

WB2EMS. This program and its modem were the subject of an article in the August 1991 issue of "73 Amateur Radio Today" magazine

Both of these programs are either public domain or "Shareware. The BayCom modem operates through the RS-232 serial port of any PC that fully implements this port. The RTS, CTS and DTR lines are the only ones that are used, not TXD and RXD. The Poor Man's Packet program operates through the parallel printer port, and uses the DATA 0, DATA1, ERROR and BUSY lines for its operation.

An ideal modem for the BayCom program is available as a complete kit from A & A Engineering, 2521 W. LaPalma, Unit K, Anaheim CA 92801 (714) 952-2114.

Parts and PC board for the Poor Man's Packet modem are available from F. Kevin Feeney, WB2EMS, 468 Hines Road, Newfield, NY 14867. SASE required for information.

I have the A & A Engineering hardware. It uses the AMD 7910 "World Modem" chip, and is capable of both 300 baud and 1200 baud operation.

BayCom will allow both 300 baud HF and 1200 baud VHF operation. On HF it is limited in that there is no tuning indicator and no pre-filter so good QRM/QRN free signals are necessary for copy. On VHF it worked very well.

The BayCom program seems to have a problem with some laptops and any computer using a 9 pin serial interface that doesn't bring out the DTR, RTS and/or CTS lines, mine included. On the XT that I use at work, it operates as it is supposed to, but I needed a way to operate the laptop on packet for portable operation.

In examining the circuitry of the A & A Engineering board, I discovered that by bypassing the RS-232 level conversion circuitry, I could connect it to the parallel printer port and use the "Poor Man's Packet" program with the A & A Engineering modem. Now I can use my laptop for portable operation, and I can use the "BayCom" program on the main computer at work when the laptop is being used for other things.

In comparing the software, they both are functional and have some neat features. They both also have some drawbacks, so anyone wishing further information on this system may contact me at 507 West 4th St., Pratt, KS 67124 (SASE please), or call in the evening at (316) 672-7267. Jim Sheldon, W0EB

EDMOND AMATEUR RADIO SOCIETY

Several years ago it became the custom for the President of the club to surmise the events of the past year. This is the second year for me to try to remember all the events and fond memories from the year 1991. In January we were all listening and watching the television for the latest news from Iraq. We were all worried about our men and women overseas and also what effect it might have on our hobby. I am sure we all knew someone from work or a friend who was more involved in the war. Mike Delaney KB5HXT, our elected Vice President, was recalled to active duty but fortunately only had to serve at Tinker AFB. The board decided not to replace Mike because he was only to be gone for a short time however he kept getting extended and ended up missing the whole year. Whenever possible, he would try to help with club functions such as contact Oak Cliff VFD for our field day site and setting up several dinner meeting places, even though he never got to attend those events. Thanks Mike and XYL Debbie for your efforts during a personal trying time.

The board voted to give Phil Wolfenbarger a plaque for many years of leadership and support for the club. Due to personal reasons Phil decided to resign from the Board before we got to deliver it to him. Thanks for all your efforts Phil. The board appointed Bob Long to replace Phil on the Board and Bob fulfilled the rest of the year.

In February, the club sponsored the ORSI meeting at the Edmond Library on Feb.16,1991. We also finalized a deal for Iron On patches for club members anyone interested in their purchase, please contact Ed Granger. In March, SCARS and National Weather Service sponsored a weather spotters training seminar getting us ready for the storm season that was ahead. For the most part 1991 in OK county was uneventful. We also put copies of the CALL BOOK at the Edmond Library for club members as a reference source. Even though we were just finishing up a novice class from 1991, we discussed the possibility of a class for the Explorer Scout at the EOC and decided to have one. Due to the timing of the year very few people got their license as vacations took priority for most of the class members.

In April, the Technical Committee proposed to replace our Motorola repeater with a different repeater, so we started looking into several type of equipment and after many phone calls and letters, and much discussion we decided to purchase a GE Master II repeater. Unlike our Motorola system, this was a completely self contained repeater. After several weeks of testing

and refinements, we finally installed it into the repeater site. As with any new system there was time for testing and fine tuning. As a member of the Technical Committee, I would like to express our appreciation and patience while we learned this new system. I think we will have many years of service from this repeater just as we did from our other system. Kay Sage KB5LDO became our Scholarship Committee Chairperson for 1991 and began taking applications for our Scholarship. In May Kay went to Edmond High School and presented Jamie Guinn the Scholarship in front of the High School student body while I was out weather spotting, one of the few storms that came close to the Edmond area.

In June we were preparing for field day at Oak Cliff, Ham Holiday.

One of our Club members, Kathlean Sterns a teacher at Bethany Middle School, went to Washington D. C. to be part of the Young Astronauts Program world wide conference. Her part of the program was how to teach kids to get their license and ways to include radio into their organization. Kathlean also included her class of kids at Bethany in her interest in Amateur radio and helped 13 of her class members get their novice licenses.

What a Field Day. No storms this year but plenty of qrm until we moved the dipole antenna's from over the station. Dinner was catered by Gary Dales and was just the thing to keep us going until late in the morning. Jim Harlow brought the Red Cross van out and set up the Novice station and brought along one of the scouts. They all seemed to have a real good time since they worked several different states. Tim (the scout) worked all around the US. East and West coasts, Canada and Mexico all within several minutes. Lee (KA5WIS), Jim(N5OHL) and Larry(N5IXV) are trying to develop more interest for 1992 and just maybe we'll finish in the first half of our class instead of the DEEP SOUTH.

I didn't get to attend Ham Holiday this year but I heard that everything went really well and everyone had a good time. In July, we helped with the 4th of July parade and the fireworks in Edmond. We began discussing several additions to the EOC such as a tower for vhf and the hf radios to help better serve central Oklahoma During an emergency. As of yet, we have yet to get a tower to put up or the time to do so.

August and September went by fast for me as around meeting times I was on vacation. Although things didn't stop while I was away I didn't really get all that involved in things. In October several of us went to the last Hamfest of 1991, Texhoma. Everything went as usual, the rain and cold weather. Those that went had a real good time. On the way back my catalytic converter got clogged and although

I don't think Oldsmobile really wants to know Dee and Shelby (WD5FHR, KA5Y-PE) had a real good commercial for Honda as they pulled me over the Arbuckles.

In November we had our elections for Club Officers.

In December we had the Christmas/Scholarship Dinner at the Church. Kay Sage (KB5LDO) Chairperson of the Scholarship Committee decided since the church was booked we should cater a dinner. After much discussion, she contacted Freds Bar-b-que. Although it wasn't a "Christmas Dinner" about 60 club members had a real good time with dinner and caroling. Many members stayed around and talked for a long while as others were singing. Lee Vaughn missed out as Santa came and handed out HT's to all present; too bad Lee. Lee and Frank (KA5WIS, and AA5-GI) were presented plaques from the club as a thank you. Clara Granger went into the hospital during the Christmas season and at last report was getting ready to knit a tower from a transformer she had around the house. Some people would do anything to keep from hearing me give a speech.

When you do an article for the whole year you forget a lot of things, but the more you think and remember they bring a grin and a warm feeling in my hearts.

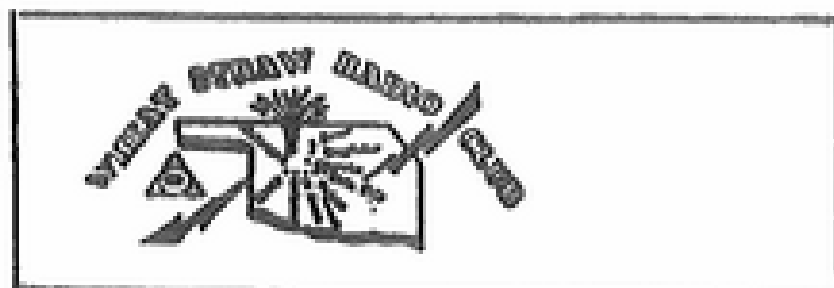
Amateur Radio has given me the opportunity to meet and work with people whom I would have otherwise not known. After two years as President, I would like to say thanks again to the 1990 board and also Mike Delaney, Alton Sage, Jim Richardson, Bob Long, A.C. Adams and Larry Traub (1991 board) for their support and inspiration. I don't know how to say anything else but just thanks guys, it meant a lot just knowing you would discuss any issue and be able to reach a discussion when all the facts were in.

By the time you read this Alton Sage will be beginning his term in office with his board. I know you will support him as much as you have me. Several items that I would like to mention are the Clubs blood account as we have not talked about it for while. If you go to the Blood Bank on Memorial just mention E.A.R.S. to have it credited to our account. You get your iron level, blood pressure and cholesterol checked all for laying on your back for a few minutes.

Alton needs to know how many members of EARS are members of the ARRL for recertification as an Affiliated/Special Service Club for 1992. If you need to renew with the ARRL let Ed Granger or Alton know.

Alton wants to know what the club wants to do for the year. More parades, classes, campouts or whatever, just let him know, we really want to know. Any input would be appreciated & discussed at the meetings.

Tommie Guinn KA5WAV, Pres. 90/91



At the January 12 meeting there were 29 present including three visitors. They were Debbie Gahman, a cousin of KB5MPM Venus, K7UAN Jim of Hennessey. Jim's wife WB7NLC Gina was not at the meeting. Gina holds a Technician license. They live on a farm about seven miles west of town, owned by Jim's uncle. Jim Guy's occupation is a heavy equipment operator, here and in Arizona. He will be here most of the time now. He also farms the land they live on. Then we all met Wanda N5MPH Robert's wife.

Best wishes go to Wanda and Sue Barnes, AB5Z Rays wife., the two of them are in WZ5H Leo's Amateur radio school. We all will be thrilled when they get their ticket.

The meeting lasted longer than usual causing us to run short of time. Between committee reports and lengthy discussions concerning the club.

WA5GHK Joe Hyatt reported that the 146.64 repeater is back on the air. It was good to see Joe and WA5VNF Mary Ann at the meeting.

Good news by WZ5H Leo. WB0PGD Ron Tice is out of the hospital where he had bypass surgery. Ron lives in the Mooreland area and is a member of the Great Plains ARC. We wish him a quick and permanent recovery. The other news was that N5IXN Olive at Canton is off the antibiotics and is doing better after a long siege with her ankle.

I think that all amateur radio operators should learn, practice, and use radiograms.

I will try to think each month to list members birthdays. In order to list all I will print two months at a time due to the time the C & E is received.

Feb 2 W5JEB Father Joseph Kolb

Feb 8 N5MOL Jon Lellman

Feb 24 W5VVU (Bus) Blum

Feb 25 AB5Z Ray Barnes

Mar 6 Ann Peil

Mar 21 K5LLX Ray Selby

Mar 27 WD5JNT Ted Van Langingham

Congratulations go to Morgan KB5PXI for upgrading to Technician. It was a pleasure for me to talk to her Wednesday evening. We wish her much fun and joy on the air. Morgan is proud of her little sister knowing over half of the code, and being too young to read. It sounds like it won't be long before they have another ham in the family.

Kenneth West noticed some hogs coming up at night eating wheat seed that was spilled on the ground. Late one evening he waited for them. At dusk here they came. One of them was head on, facing him. He shot it with his rifle, killing it. He thought, along with the other farmers, that the hogs were

I know that I speak for myself and everyone in the club when I say that it has been a pleasure to have Tommie Guinn KA5WAV as the EARS president for the past two years. Tom got his start into amateur radio a few years ago and has continued to help others get into the hobby also. Each Fall our club has a novice/tech class and he has played a major part in the class now for about five years. If there is a club event, such as a parade or bike race, you can be sure that Tommie is always there with his vintage Icom talkie. And when weather erupts in the Spring, Tommie is out there chasing those storms. Tommie upgraded to Advanced class last year, but he will tell you that he is not into HF radio much except on Field Day. Two meter FM is what he enjoys the most. As a member of the repeater/technical committee, Tommie has worked on the new equipment recently installed at the repeater site. (Lee says next time to keep one hand in your pocket when you test for current!)

Tom has a whole family of licensed hams. His wife Gloria is KB5BGM (bring green money). Steven is N5OLX and Stefanie goes by the call KB5HWI.

Thanks again Tommie for all the hard work done for the club and we will see you at the next club event. Jim N5OHL

domestic hogs that had gone wild. It had a thick armor, something like an armadillo with hair on its back. It was a boar weighing 400 pounds. Kenneth chiseled one of the tusks out and it measured 5 inches. He gave it to one of his grandsons. NO, he did not try to eat it. A friend told me that it could be a wild Havolena or a cross of one with some of the Russian boars that was turned loose or got away down in the river bottom. Any way it was a weird looking hog. They had a very hard time getting the skin off.

The next meeting will be at Canton at the Community Building. - For those of you who have not been there - Go west of the stop light at the center of town and at the railroad track turn north. It is about four blocks on the west side of the street. You can't miss it. I am sure there will be some of the members there. See you there.

73 WA5PFK Ralph

The January meeting of the Cimarron Amateur Radio Association met at the WX5Y Playhouse on January 9th at 7:30 pm.

Newly elected President, Ray Barnes chaired the meeting of Denny Painton WK5V Nadine Painton N5FMH Curt Briggs N5RHO Steve Schoonmaker KF5SW, and his wife Karen, Terry McColl N5MLT, Ruth Simpson WX5Y, and John Medley N5WVU.

Congratulations to Morgan Briggs on upgrading to Tech, and dad says she can rest a little while.

Leo has started another class in Canton with 10 people working toward a Novice rating.

Denny reported 145.45 and 147.075 are back in operation after being demolished by lightning. Our \$12.00 a year dues now include repeater privileges. Now that the repeater is fixed let's join N5MLT on the net at 0200 Zulu each Thursday.

Don't forget....the WX5Y Playhouse on Valentines Day, February 14th.

BE THERE OR BE SQUARE

73 N5WVU

OKLAHOMA NITE OWL NET

Become a part of an Oklahoma Tradition by joining the Oklahoma Nite Owl Net. This net dates back to the days when 6 meter AM was very popular. It was fun for net control had to keep moving his beam around to try to copy everyone. When FM repeaters became popular, the net naturally made the switch to 2 meters and has been there since. As a member of the NTS (National Traffic System), the net can handle formal traffic from HF either into or out of the OKC area. However, on most nights the net it is a place to give bulletins and announcements about local amateur club events. Not associated with any single club, the Nite Owl Net welcomes any information pertaining to any club event. After announcements are made, stations are asked to make any comments they might have or may contact other stations on the net also. This net meets every night at 10:30 PM local time on the 147.135 (+offset) repeater which is sponsored by the Edmond Amateur Radio Society. This repeater has good coverage for the entire OKC area and stations from as far away as Choctaw, Tuttle, Ripley, Canton, Chandler, Stillwater, and Bristow have checked into the net. 73 de JIM N5OHL

FCC TWEAKS AMATEUR RULES

The Federal Communications Commission has addressed a number of proposals for changes to its Part 97 Rules for the Amateur Service, in response to petitions by the ARRL as well as several individuals. The Commission's Notice of Proposed Rule Making in Docket 90-561 was released Nov. 16. Here are the highlights:

- The ARRL asked that the terms "telecommand," "telemetry," and "space telemetry" be defined in the Rules; FCC agreed. The terms "tactical call sign" and "digipeater" will not be codified.

- ARRL sought an increase in the minimum number of club members necessary to apply for a club station license, from two to four. But the Commission noted that no new club station licenses have been issued for some 13 years and "we do not foresee that we will resume doing so," so the point was moot. The League continues to urge the Commission to resume the issuance of new club station licenses.

- FCC declined a request to amend its Rule that states an Amateur station must be independent of all other radio apparatus installed on a ship or aircraft. The League's argument in this case was that a regulation already is in place prohibiting an Amateur signal from interfering with other apparatus aboard.

- In the matter of prohibition of automatic control of Amateur stations when third party traffic is being handled, the League sought a rules revision to put the responsibility for the content of such traffic on the originating Amateur station. The Commission, however, maintained that traffic content is the responsibility of every station, including those who retransmit communications, and proposed no change.

In a related matter, ARRL sought a clarification of Section 97.109(d), to emphasize that a Commission representative may order an automatically controlled station to shut down because of improper operation or harmful interference *only after the alleged offending station has been given the opportunity for a hearing.*

FCC denied this, saying that "the control operator must cease automatic control of the station upon notification by an Engineer in Charge that the station is transmitting improperly or causing interference to other stations, and the licensee is not entitled to a hearing before such notification."

- The FCC declined to amend its Rules to permit retransmissions of other services — NOAA weather and DOC propagation broadcasts — saying such transmissions are "routinely available over the air with inexpensive receivers."

- The FCC agreed to amend its Rule regarding compensation of club station operators, lowering the number of simultaneous bands on which bulletins and code practice must be transmitted from ten to six.

- A request to ease the FCC Rules regarding third party communications on behalf of someone holding an Amateur Radio license but not eligible to be a control operator of an FCC-licensed station was denied. The Commission said this had already been considered (in the most recent Rules rewrite) and denied at that time.

- A request by an individual Amateur to require stations to identify at the beginning of communications through a repeater was not included in the proposals, but FCC asked for comments in the matter.

- FCC declined to entertain a change in its Rules to incorporate due-process procedures in cases involving "quiet hours," saying that it was unnecessary.

- In the area of Special Operations, FCC agreed to:

1. Amend its Rules to delete the condition that an auxiliary station can be automatically controlled only when it is part of a repeater system, so that Amateur operators can experiment with new system configurations that use auxiliary links;

FOUND ON THE LETTERHEAD OF AN INVESTMENT CONSULTING FIRM

Dear Client:

Our firm is offering to a very select group of individuals an opportunity to participate in a unique profit-making venture. A number of Oregon professionals are considering investing in a cat ranch near Karmissillo, Mexico. It is our intention to start rather small, with about one million cats. Each cat averages about twelve kittens a year, and skins can be sold for about \$1.24 for the white ones and up to \$1.68 for the black. This will give us twelve million cat skins a year to sell at an average price of \$1.46, making our gross income about \$17,520,000 a year. This averages out to about \$58,098 per day, excluding Sundays and holidays. A good Mexican cat man can skin about 50 cats per day at an average wage of \$3.15 per day. It will take only 663 men to operate the ranch so the net profit will be over \$57,000 per day. The cats will be fed on rats exclusively. Rats multiply four times as fast as cats. We would start a rat ranch adjacent to our cat farm. If we start with a million rats, we would have four rats per cat per day. The rats will be fed on the carcasses of the cats we skin. This will give each rat one quarter of a cat per day. You can see by this that the business is a clean operation, self supporting and automatic throughout. Now get this ... the cats will eat the rats and the rats will eat the cats and we will get the skins for nothing! Let me know if you are interested. As you can imagine, we are rather particular about who we want into this, and we want the fewest investors possible. Eventually it is our hope to cross the cats with snakes, for they will skin themselves twice a year! This would save the labor cost of skinning, as well as giving us two skins for one cat. Please let me hear from you on this exciting opportunity.

Sincerely,

Kun Do

From Ham News Outlet via Enid A.R.C. Light

2. Expand the permissible types of space telemetry transmissions as requested by the ARRL;

3. Make minor changes in wording, including changing "remote control" to "telecommand."

- The FCC once again refused to change its Rules banning 10-meter power amplifiers, saying the ban "makes our enforcement procedures more efficient and effective."

- A request that persons whose Amateur station or operator license has been revoked or suspended be allowed to qualify as a volunteer examiner after a 10-year period was turned down.

Interested parties may file comments on or before Jan. 31, 1991; reply comments are due by March 4, 1991. Extensions of time are not contemplated, according to the FCC.

THE NATIONAL RESPONSE CENTER

Who can you call to report oil spills, chemical spills, train derailments, earthquakes, toxic or biological waste hazards, or any other wide area hazard?

National Response Center

1-800-424-8822

This agency is open 24 hours a day with personnel qualified to accept reporting of local, regional, or national threats. These personnel will contact the agency or agencies which are tasked to respond to that particular type of hazard. Be prepared to provide the following information:

1. Your name and amateur call sign.
2. Location of hazard, state and city, closest road, well-known landmark.
3. Type of hazard, chemical, biological, electrical or natural.
4. Any "IMMEDIATE" threat to life or property?

You may be asked for suspected source of the threat. This information is used to locate the site, not for prosecution. However, you will be attributed with providing the report.

P.S. The center will respond to terrorist threats as well.

Who ya gonna call?

K2GKK

Joe: Mom, I'm very glad you named me Joe.

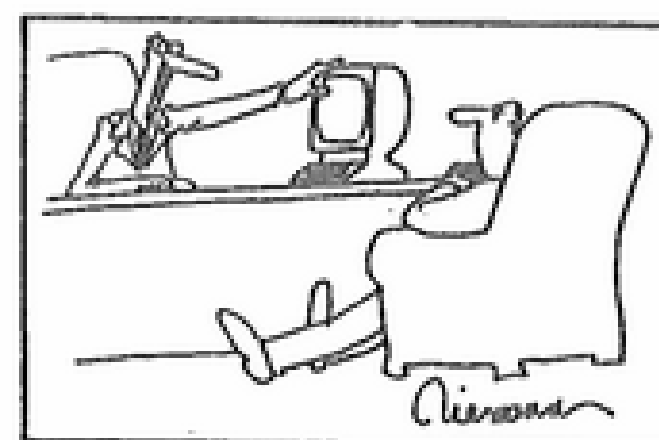
Mom: Why is that?

Joe: Because that's what all the kids at school call me.

PRO is the opposite of CON

For example

PROGRESS and CONGRESS



'It's Fantastic, Gives Me a Straight Yes or No Answer to Eight Decimal Places.'



The man who can smile
when things go wrong
has thought of someone he can
blame it on

