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Number 192

NATIONAL EMERGENCY RULE CHANGE

A FUNNY THING HAPPENED ON THE WAY TO MY MAILBOX last month...Much to my delight, as it has usually been, it found me this time with sheer HORROR chilling down my spine when I immediately realized that your's truly had failed to provide for publication the monthly ragchew for our prestigious and elite organization. OHHH, my gosh!!! Woe is me. (If you think that I'm really choked up over this, the infamous knucklehead AND fellow ham, Alfred E. Neuman's DØPE, most timeless statement should come to mind... "What, Me Worry!") But, be that as it may, I do hope that you will be able to dig deep, deep, way, WAY deep, into your most kind hearts (Women sometimes say we haven't got 'em...just some kinda cold-TV with remote control-386/PC Microcomputer-Cars and motorcycles-Ham Radio-CW-KAM-kind a thing), and find justice with me with the many splendiferous offerings available for you this month, all right here for your hard-working entertainment dollar. Yes, sir-ree, Bob!!

So let's start the show with the previews, notably the January meeting. Called to order at 7:31 p.m. by Jim Bartlett KA5PSF, the membership stood and recited the Pledge of Alligence, led by Chuck Wilhite K5NK. After everyone introduced themselves, minutes for the November meeting were read for the absent-in-attendance Ken Goddard WA5DTL, by myself, Baron Bieber N5PQK. Treasurer's report was submitted by Mac Macdonald K2GKK.

Frank McCollum N5FM, submitted to the membership for consideration an application from the state of Oklahoma Civil Defense, which asks amateur club stations and repeaters to become registered as a RACES station in order to stay on the air in case of emergencies. Discussion was opened, and a motion was accepted to register the club repeaters.

George Adkins AD1S, passed around photographs to the membership of the club's inventory of antennas on the KWTU Channel 9 tower.

Jerry Boyd WR5G, submitted a favorable technical committee report. In it he stated that the link frequency for the planned 146.82 plus offset link has been coordinated, as well as the crystals being ordered. The ACC-850 controller was returned without service problems, and the committee will wait for favorable weather conditions to have it reinstalled. The interference on 81/21 is being investigated; and a faulty meter was discovered as the problem for the intermittent loss of transmitter power on 22/82.

Inquiries were made by Jim KA5PSF, seeking back-up net control operators for the Saturday Morning Swap and Shop Net.

Thanks went out to those members who participated in organizing the Christmas Dinner.

Leonard Hanstein W5MEL, was asked to coordinate the February weather meeting.

The membership was notified that the donation to the Island of Montserrat Repeater Fund was indeed made by the club.

The membership voted to passed all three proposed amendments to OCAPA's Constitution and By-Laws.

Leonard W5MEL, also suggested to the membership for consideration the formulation of ham classes.

Belated thanks were offered to attending members Rick and Linda Kukuk, KG5GD and AA5GS, for their donation of the roof shingles installed on the club's repeater shack Spring Field Day a year ago.

Frank N5FM, also asked for volunteers for the Salvation Army Net held each second Saturday of the month from 0800-0900 local. Frank also asked members of the Thursday night ARES Net to check for valid member numbers.

Jim Jones K5PER, requested ARES and RACES members to check to see if their old ID cards might need to be replaced with new ID cards.

With 22 members and 4 visitors present, the meeting adjourned.

CHRISTMAS MEETING

A most joyous and festive occasion when about 76 members and their families were able to get together at the very informal December meeting to enjoy all the Christmas blessings. And plenty of brisket there was, too, thanks to Leonard W5MEL, and Jim KA5PSF, who spent the early evening shaving the fine beef, and setting up tables and chairs. Greetings and salutations were exchanged; gifts were opened for those who beared gifts; Frank N5FM, insured that he got a piece of pie made by his wife this year; and while Lee Allen N5KXI, Ron Recer KE5M, and Hank Blackstock WA5JRH, insisted that they should have been able to stand up to croon Christmas carols, unfortunately, it was time for all to go. A fine, fine Merry Christmas and Happy New Year.

ONE POTATO, TWO POTATO...

For you information, the Oklahoma City Autopatch Association, Inc. has a total of 194 members as of January 15th, 1991.

NATIONAL EMERGENCY RULE CHANGE

(Received off packet and submitted by Mac Macdonald K2GKK)

In the Code of Federal Regulations, 47 CFR, Part 214 is the Procedures for the Use and Coordination of the Radio Spectrum During a National Emergency. Previous to December 11, 1990, Section 214.4(b)(4) read: "Close all amateur radio stations, except those operating as a part of the Radio Amateur Civil Emergency Service (RACES)." Section 214.5(b) read: "The FCC shall issue appropriate rules, regulations, orders, and instructions and take such other actions not inconsistent with the actions of the Director,

OSTP (Office of Science and Technology Policy), as may be necessary to ensure the immediate availability of the frequencies and facilities between 10 and 25,000 Khz provided for in emergency plans for use of the radio spectrum."

The December 11th issue of the Federal Register carried amendments to Title 47 CFR Chapter II, including the elimination of section 214.4(b)(4) which had mandated the closing of all amateur radio stations, except RACES stations, in the event of a war or national emergency proclamation by the President.

A revised Section 214.5(b), reads as follows: "The FCC, in coordination with NTIA (National Telecommunication Information Administration), shall issue appropriate rules, regulations, orders, and instructions and take such other actions not inconsistent with the actions of the Director, OSTP, and the NTIA Emergency Readiness Plan for Use of the Radio Spectrum as may be necessary to ensure the effective use of those portions of the radio spectrum shared by Government and non-government users."

The new regulations became effective upon publication, on December 11, 1990. Thus, in the event of a Presidential Proclamation, of war or national emergency, the Amateur Radio Service will not automatically be closed down; but, all FCC licensees will be obliged to observe whatever orders and instructions the FCC may issue in the interest of national security and of making spectrum available for government use.

Continued on Next Page

Moe: Do you still walk in your sleep?

Joe: Not any more. Now, I always carry cab fare with me when I go to bed.

MORE AUTOPATCH

MO AND JOE, CODELESS WONDERS

(Fiction by Chuck Wilhite K5NK)

Mo and Joe had been CBer's for several years, but had always wanted their ham licenses. It wasn't that they couldn't learn the code, but they simply didn't want to put out the effort. As a result, they never got their tickets. They were so thrilled when the FCC came out with the new codeless license that they were two of the first in line at the VE testing session to get one of the new licenses. Sure enough, they had no problem passing the written examination, and were all smiles from ear to ear when told they had passed. After waiting about 6 weeks, their new calls finally arrived in the mail. Now they could use the new two-meter radio they had purchased several weeks earlier.

It took some time for Mo and Joe to forget all their CB lingo, but they finally became decent operators. They had made several acquaintances on the local repeaters, even though they had never joined a club.

It was a very cold night in the middle of February. Oklahoma had been hit with a terrible ice storm. All roads were practically impassable and travel was being discouraged. There were many accidents all over town with several injuries.

Most people had settled down for the night. There was little traffic. However, some people had to work at night and had to travel home on the slick streets.

Charlie had just gotten off work at the Grape Nehi plant. After slipping and sliding through the parking lot, he finally made it to his car. He warmed up the car and finally got all the ice scraped off the windows. He headed home. He was glad that he had his two-meter radio with him to keep him company going home. George was normally around at this time of the night. It was around 2:00 a.m. in the morning, and all the regulars on the repeater had already gone to bed. He was unable to raise George, so he tuned in KXY to listen to his favorite country and western station. They were giving reports of all the accidents around the city.

Charlie lived on an acreage north of Edmond. To get home, he traveled north on I-35 and turned east on Britton Road for a couple of miles. He had little trouble on the Interstate as long as he took it easy. While going up a small hill, his car headed toward the steep embankment. Having no control at all, Charlie slid off the embankment, with the car turning end over end, coming to rest on its side. Miraculously, Charlie wasn't injured too badly, however, he was trapped in the car with both legs pinned. It was impossible for him to get out of the his car.

The first thing that came to Charlie's mind was trying to call someone on his two-meter radio for help. Miraculously his radio had survived the crash as did the magnetic antenna mounted on the trunk. Reaching for his microphone, he found it was shattered.

What was he going to do? The temperature was continuing to drop and he was getting colder each minute. He happened to remember that he had an old navy key in the

glove compartment. Struggling to reach the door to the compartment, he finally got it open and found the old key. After much pain and effort, he managed to plug the key into the back of his all-mode transceiver. Perhaps he could make contact with some person on Morse Code.

Mo and Joe just happened to be up and were talking on one of the local repeaters. Charlie, his fingers cold, managed to tap out a "BK" at about 5 words per minute. No response from Mo and Joe. Charlie kept trying to get their attention by sending "BK" and his call. "Something must be wrong with the repeater," Joe said to Mo. "Yeah, since the weather is so cold, they must be having trouble with the repeater," Mo explained. Since neither of them knew the code, they had no idea someone was attempting to make contact with them. They chatted for some time as Charlie kept trying to get an answer. Thinking nothing more about it, they turned off their radios and went to bed.

Charlie kept calling on various frequencies using his old key on CW. He was never able to make contact with anyone. As the night drew on, the temperatures continued to drop.

They found Charlie the next morning. He had frozen to death. If only Mo and Joe could have read the code.

THE GOOD OLD DAYS

(Commentary by Leonard Hanstein W5MEL)

There have been changes in the method of getting a ham ticket. When I was first licensed in 1946 with a Class B ticket, I had to wait one year before I could test for Class A license. Since then there have been several changes, notably the novice and technician classifications.

Lately, there has been a lot of discussion of the no-code license. I have mixed feelings concerning this major change. Regardless of the final outcome, I will be able to live with it.

I have been concerned with comments made on the air about the mental abilities of certain hams who have not upgraded. This should be a matter of personal preference and not a subject of public discussion. Some hams got their tickets in order to get frequencies for their operation of radio controlled equipment, and some are interested in VHF and UHF only. If that is their wish, so be it. But to berate the individuals on the air has changed our 'Don Nickels' image to that of a personal vendetta.

Let's make sure that the right of the individual has preference over personal attacks of that operator.

REMEMBER WHEN...

(Received off packet and submitted by Mac Macdonald K2GKK)

You could send a QSL card direct to a DX station without one or more "Green Stamps" and you would get one in return?

A computer was something you only saw on TV and if filled a 50' by 50' room?

Transmitters weighed 140 lbs. and you needed the XYL to help you slide it out?

A receiver main tuning knob was the right size to wrap your entire hand around it and not just two fingers?

Receivers had a control labelled "BFO PITCH"?

HT's were called walkie-talkies and weighed five pounds or more?

Packet was something sent through the mail?

Operating phone meant working AM?

CW was considered an artform and not a useless mode of communication?

Collins was the Cadillac of ham gear?

A 2-meter rig was the size of a breadbox?

A chip was piece of broken glass?

Geez, I just remember ham radio 'cause of all the pretty girls I'd meet!

Dah-dah-dit-dit-dit Dit-dit-dit-dah-dah,

Baron J. Bieber N5PQK

STOP PRESS!!

(Last minute news contributed by Frank McCollum N5FM)

On December 10 the world leader of the Salvation Army, who makes her home in London England, General Eva Burrows, honored the local Division headquarters of the Salvation Army with a visit. Although she was a great hit with the social elite including Gov. Bellmon, Lions, Kiwanis, and Rotary clubs she was an inspiration to Salvationists and volunteers. During her whirlwind tour she found time to visit the ARES station N5FM located at the Salvation Army Headquarters at NW 50th & Penn. While there she used the mic like a veteran and shared her visit with Salvation Army Officers in Atlanta GA via Amateur Station WA4BZY Quint Nelson with phone patch in Covington GA, 50 miles away.

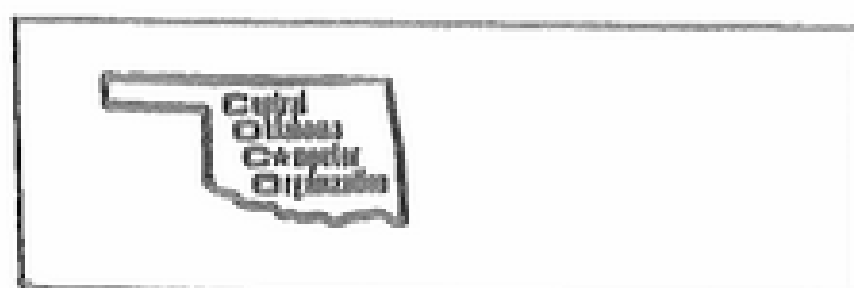
We enjoyed the General's visit to Ham Radio. She is quite a classy lady.

For those who do not know we have a nice amateur station at the Salvation Army. Those who would like to be part of our group can come visit with us. We have open house each second Saturday from 9am till 11am. Plenty of cookies and coffee for all. We hold our net from 8am until 9am. We need volunteer operators who will come in and get familiar with our equipment and procedures. Our next net and open house will be February 9th. Net frequencies are: 8:00 to 8:30 on 3.900MHz, 8:30 to 9:00 on 7.285. We have a net on 2 meters on 146.82 phone and 145.07 packet from 8:00 until net closes.. We have two radios which are not amateur rigs, one on State Civil Defense frequencies and one on Salvation Armies. Those of you who have Novice or Technician tickets or those without a license, you can operate the equipment as long as there is a control operator present licensed for the mode and frequencies being used.

We will be looking for you.

73 Frank, N5FM

<p>1 AERONAUTICAL CENTER ARC Meets: First Thursday, Flight Standards Building, FAA, South MacArthur 7:30 pm PR Doug Teachman, W0DXA 392-5458 S/T Ted Anderson, NY5W 685-4016 AsPR Harold Todd, WA5VAO 685-3685 AsVP Charlie Greene, WA5JGU 943-5631 Editor Jack WB5SUN</p>	<p>13 KAY COUNTY ARC Meets: 7:00 pm, Third Thursday, Sep-May, Pioneer Vo-Tech, Ponca City, OK PR John Spoon, WB5YSX VP Marsh Pronneke, WA5UBO S/T Gary Robison, WB5WMD 765-9727 Editor Dave Land, KD5FX 762-8616</p>	<p>PLEASE help us keep your information up to date. What time, where, when, who are your officers, editors, and their phone #. Check <u>YOUR</u> entry, it can be changed.</p> <p>If there appears to be a mistake - check with your club official. We can't do anything about it. Below is a sample table.</p> <table> <tr> <td>4</td><td>90/01</td><td>2</td></tr> <tr> <td colspan="3">WILSON, MIKE WA5RTY</td></tr> <tr> <td colspan="3">1234 W 49</td></tr> <tr> <td colspan="3">MCCLOUD OK 74851</td></tr> </table> <p>The "4" means Autopatch Club, 90/01 means he is overdue. The "2" is for postal rates.</p> <p>Dear Subscriber:</p> <p>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.</p> <p>Likewise if you see a RED X here this will be your last C&E until you renew.</p> <p>Dear Secretary/Treasurer:</p> <p>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</p>	4	90/01	2	WILSON, MIKE WA5RTY			1234 W 49			MCCLOUD OK 74851		
4	90/01	2												
WILSON, MIKE WA5RTY														
1234 W 49														
MCCLOUD OK 74851														
<p>2 CENTRAL OKLAHOMA VHF Meets: 11:00am 3rd Sat, Favorite's Cafe, 3701 S. Western, OKC 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>14 CIMMARON ARS Meets: 7:30 pm, Second Thurs., WX5Y Playhouse, 827 S. 13, Fairview PR Curt Briggs, N5RHO (405)227-4641 VP Terry McCall, N5MLT (405)227-3672 SE Dennis Painton, WK5V (405)764-3599 TR Nadine Painton, N5FMH (405)764-3599 Editor Jack Day, NN5Z (405)227-3462</p>													
<p>3 MID-OKLAHOMA REPEATOR, INC. Meets: First Tues, 8 pm, listen to KASTDA for location. PR Steve Cornman, KB5CDF VP Jim Buswell, N5BEQ S/T Linda Moore, KA5NAV 799-1765 Editor</p>	<p>15 SOUTH CANADIAN ARS Meets: 9:30 am, Second Saturday, Red Cross Bldg, North OU Campus, Norman PR Dorinda Skaggs, N5IUA 799-5363 VP Steve Wolfe, N18W 329-0203 TR Charles McCown, WB5UUX SE Ken Brown, N5KUK Editor Ken Brown, N5KUK</p>													
<p>4 OK CITY AUTOPATCH Meets: 7:30 pm, Third Tuesday, Salvation Army, NW 50 & Penn PR Jim Bartlett, KA5PSF 359-1299 VP Baron Bieber, N5PQK 557-1664 SE Ken Goddard, WA5DTL 946-4973 TR Mac Macdonald, K2GKK 672-4947 Editor Baron Bieber, N5PQKU 557-1664</p>	<p>16 EDMOND AR CLUB Meets: 7:00 pm, Second Monday, Various locations. PR Mark Northcutt, WD5DYI 755-4672 VP Wendell Cochran, WB5ISO 943-4308 S/T Kay Northcutt, WD5DYJ 755-4672 Trustee Dennis Orcut, WB5ISN 340-0034</p>													
<p>5 OKLA UNIVERSITY ARC Meets: 7:30 pm, Second Tuesday (Sep-May) 119 Wilson Center, 1334 S. Jenkins PR Frank Donaldson, N5IQJ 329-4172 VP John Wustenberg, KE5N 325-2382 S/T Jim Greenshields, WD5HPU 321-9981 Editor</p>	<p>18 GREAT PLAINS ARC Meets: 2:15 pm, First Sunday, Woodward Public Works Bldg. PR Bob Bayless, WB0GAX (Ft. Supply) 254-3561 VP Windle Hatchett, WA5PLW 766-3561 SE Rod Ford, WB5OVT (Gage) 923-7683 TR Freida Patterson, N5EOX (WDWD) 256-2111 Editor Phillip Perry, N5QCN 938-2453</p>													
<p>6 ALTUS ASSOCIATION Meets: 7:30 pm, Second Thursday, North Main Fire Station, (CD) Altus PR Loren Simms, WA5CBF VP None S/T Mike Schenkel, W5VXU 482-1797 Editor Mike Schenkel, W5VXU 482-1797</p>	<p>19 OKLA INDEPENDENT ARC Meets: 7:00 pm, Second Tuesday Southwestern Bell Offices, Ponca City PR Vernon Treiber, Jr., N5ANV 767-1571 VP Truman Stiner, WB5MRE SE Glenn Coker, N5NFC TR Jim Del Torto, K5FLL 762-1221 Editor Mike Morriss, N5JJR 765-6260</p>													
<p>7 BICENTENNIAL (76er) ARC Meets: 7:30 pm Second Tuesday, 1801 N. Lincoln Blvd, Parking in rear PR Hank Stokes, KB5XM 376-1067 VP Bill Skipper, KB5BS 392-4612 TR Bill Skipper, KB5BS 392-4612 SE Not filled Editor Not filled</p>	<p>20 CENTRAL OK COMPUTER ORG. Meets: 9 am, Second Sat, Midwest City Community Center, Reno & Midwest Blvd. PR Don Fox 733-8480 VP Patrick Roberts, KA5ZYM 681-5220 S/T Martin Schiel Editor</p>													
<p>9 WHEATSTRAW ARC Meets: 2:30 pm Second Sunday, Location varies, see Club Section for details PR George Maschino, K5GGL (Okarche) 263-7614 VP N5JWK (Leroy) S/T Joe Garland, WA5FLT (Calumet) 893-2660 Editor Ralph Wilder, WA5PFK (Watonga) 623-5421</p>	<p>CENTRAL OKLA RADIO AMATEURS Meets: 7:00 pm, Fourth Tuesday, Red Cross Bldg, 10 & Hudson, OKC, (Back Door) PR Frank Tassone, AA5GI 341-1124 VP Dorinda Skaggs, N5IUA 799-5363 SE Jim Buswell, N5BEQ TR Tom Mangham, K5LDI 677-5291</p>													
<p>11 EDMOND AR SOCIETY Meets: Odd Months, 3rd Sunday, 2:00 pm, Edmond EOC; Dinner, even months, 3rd Fri. PR Tommie Guinn KA5WAL 341-3886 VP Mike Delany, KB5HXT 341-7847 SE Jim Richardson, N5OHL 524-0456 TR Aldon Sage, KB5LIC 341-8978 Editor Mike Delaney, KB5HXT 341-7847</p>	<p>Vol. 16 February 1991 No. 192</p>	<p>POSTMASTER: Send form 3579 to: CORA, 9211 N. Council, Apt. 216, OKC, OK 73132</p> <p>CORA Collector & Emitter (USPS 116-150) is published monthly by CORA, INC, 9211 N. Council, Apt 216, OKC, OK 73132. Second class postage paid at Okla. City OK. Sub: Cora Member \$4.20, Paid subscription: \$7.00 per year.</p> <p>Postmaster: Send form 3579 to: CORA, 9211 N. Council, Apt 216, OKC, OK 73132. Editor: Joe Harding WA5ZNF 720-1019 Circulation: Bob Graham WB5NSV 677-8685</p>												



Welcome to the rebirth of the Central Oklahoma Computer Organization! Like the mythological Phoenix, we have risen from the ashes. (If you've attended some of the recent meetings, you know what I mean when I say "ashes.") In the process we hope to create a vibrant new club that will benefit computer users in the Oklahoma City area.

At the December 1990 COCO meeting, those assembled voted to change the charter of our organization. To recognize the undeniable trends of microcomputer technology, the attendees voted to support the computers made by Tandy, IBM, and the clone manufacturers. COCO, Inc. will continue to promote the Tandy Color Computer, as well as the others microcomputers in Tandy's line, whether IBM-compatible or not.

Hence, COCO, Inc. will remain the only source for assistance with the Color Computer in Oklahoma. However, to bolster interest and to infuse enthusiasm into this organization, we will, from this point on, emphasize the microcomputers that are in the mainstream of business, industry, and home use. To that end, COCO, Inc. will establish special interest groups (SIGs) to accommodate its varied constituencies.

Our intent is to satisfy the needs of novices while offering interesting presentations for the more experienced members as well. (We haven't forgotten that novices are the life blood of clubs such as ours and that their contributions will pay dividends in the long run.) In the coming months we have planned software seminars on WordPerfect and Harvard Graphics (among others) and hardware demonstrations featuring color LCD panels and 80386-based VGA portable computers.

As COCO, Inc. approaches its ninth anniversary of serving the needs of Oklahoma City's computer users, the future of COCO, Inc. looks bright, indeed. With your continued support, COCO, Inc. will continue its mission for the next nine years.

Please bring your friends and coworkers to share the excitement and knowledge. Let's work together to insure that our club once again flourishes.

Martin Schiel

COCO regular meeting was held on January 12 at the club house of Grana Village at 9:30. Club officers Don Fox, Martin Schiel, and Dorothy Roberts were present. VP Patrick Roberts was absent. A total of eight members attended.

NEW BUSINESS: Al Ingel suggested that the Color Computer Club might request a room at Rose State College. Martin Schiel sent in a request. Our February 9th meeting will be held in the Business Building of Rose State College in room BS120. The building is on the north side of the mall, two buildings west of the library. The time of the meeting has been changed to 12 o'clock to 3:00. There is a ramp access to the building for moving of equipment. This is a nice conference room...perfect for expansion; It also has a table and monitor for demo use. However, there is no eating, drinking or tobacco products allowed in the room. This will cause a problem with raising money for door prizes which was previously made through coffee and donut donations. One suggestion was to have a raffle and another was to have an equipment fee; no action was decided upon.

OLD BUSINESS: Some suggestions for demos were a lap-top computer hooked to an overhead projector and videos on programs played on the monitor. It was explained by several members that the computer can be fed to a VCR for recording. Next months discussion will be tele-communications and that theory of how digital information is sent over telephone lines.

Since the conference room at Rose State College has a phone jack, the club could finally put on a future demo on packet radio. The new FCC rules for Technician class require a longer technical test but with no code test. This new class is good for voice, code or packet at 30 meg or above.

COCO NET was briefly discussed and how to upgrade the memory. It was a question whether the net could be used successfully by IBM users. The number is 752-8955.

HARDWARE: One member needed help with Harvard Graphics. Al needed information on the expansion accessories or technical specs for Visual Brand XT-IBM compatibles. Dale told about a 30 minute panicked search for the reason for a dead monitor when he committed the no-no of unplugging the joystick while the system was powered up; he discovered that he had accidentally bumped the on-off button.. Several horror stories were told about crashes. It was pointed out that the head sits on the disk and glitches can be transferred to the disk even when the machine is off. It was suggested that the hard drive be "parked" at the end of the day..

SOFTWARE: Several people expressed the need to transfer their old ASCII files from COCO to IBM compatibles. There is a program available that can make the IBM think that one of its drives is a COCO, and the transfer can then be made. A future

TRAFFIC TIPS

I have observed operators who can not deliver a message for some reason trying to so advise the station from whom they received the message. This is incorrect, unless the station from whom they received the message was also the station of origin.

The proper way to service an undeliverable message back to the sender is not to attempt to send it back to the station from which it was received, but to the station of origin. The best procedure is to use ARRL Numbered Radiograms. ~~CA/R67~~ which decodes as "Your message number --- undeliverable because of --- Please advise is appropriate.

For example, lets assume that you were unable to deliver message #234 which you received from K5XYZ that was originated by W1ABC. Instead of informing K5XYZ that you were unable to deliver message #234, originate a message to W1ABC. The correct format for this message is:

UR MSG # URCALL ARL 17 URTOWN
TIME & DATE

JOE GUDFIST W1ABC
73 NONOISE ST
FRESHFISH ME 20030

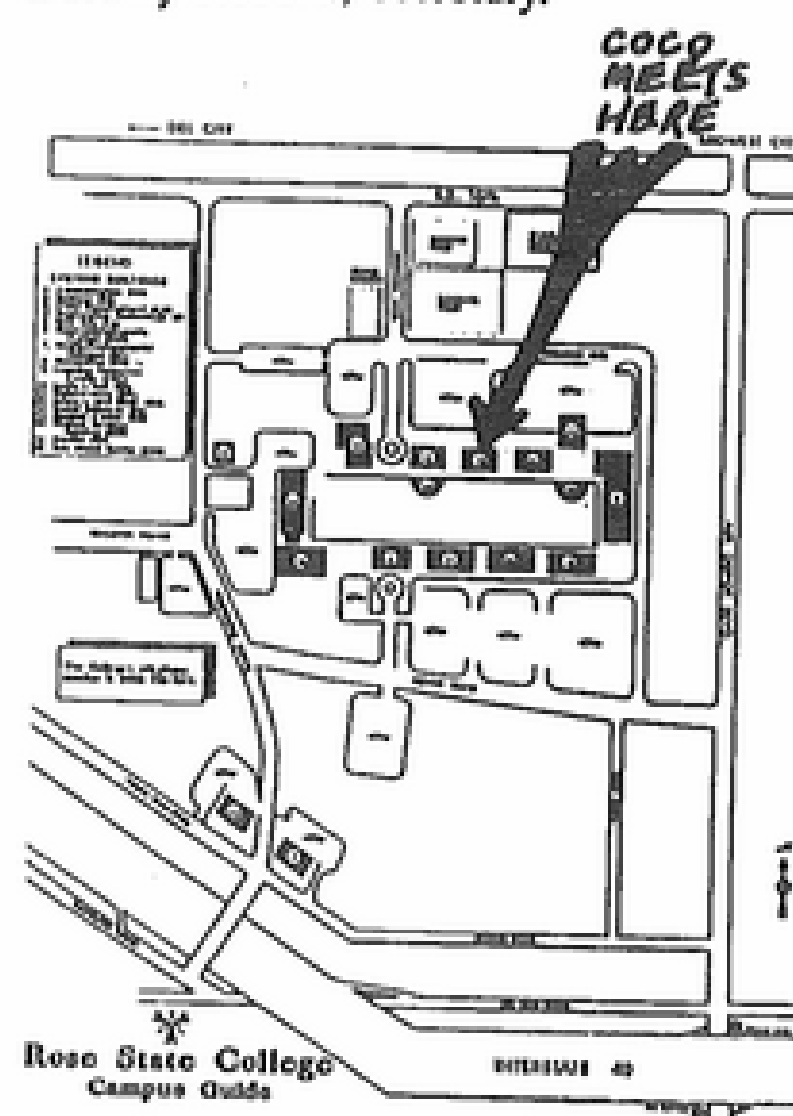
ARL SIXTY SEVEN 234 PHONE NR 405
732 2374 DISCONNECTED NO PHONE
LISTING FOR JOE BOSADVICH 73
URNAME & CALL

Always include the addressee's name and phone number as you received it so the originating station can verify the information with his records.

demo was suggested on this program.

Remember the **NEW MEETING PLACE AND TIME FOR COCO**. The place is Rose State College; Business Bldg. in conference room BS120 from noon to 3:00 pm on February 9th. See you there!!!!

Dorothy Roberts, Secretary.



Elk City Hamfest

March 2, 1991
Elk City Civic Center
8 a. m. Until 5 p. m.

Pre-Registration Award
Icom 229H
50 Watt 2m Mobile

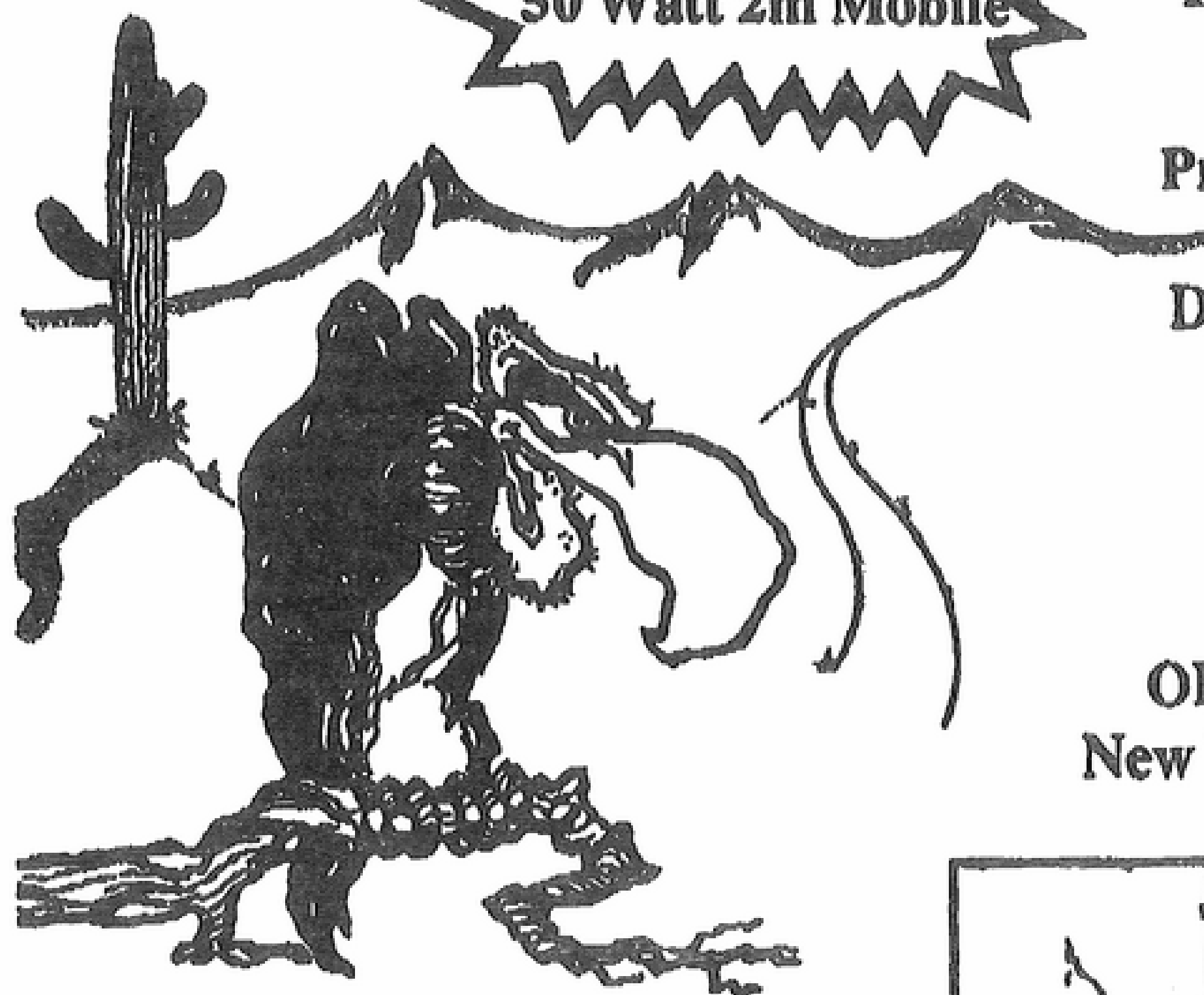
Swap Meet
\$5 table

Testing Session
1:00 P. M.

Pre-Registration
\$5
Day Of Hamfest
\$8

Talk In:
146.16\76

OK Comm Center
New Equipment Dealer



70 free RV hookups, first come first serve!

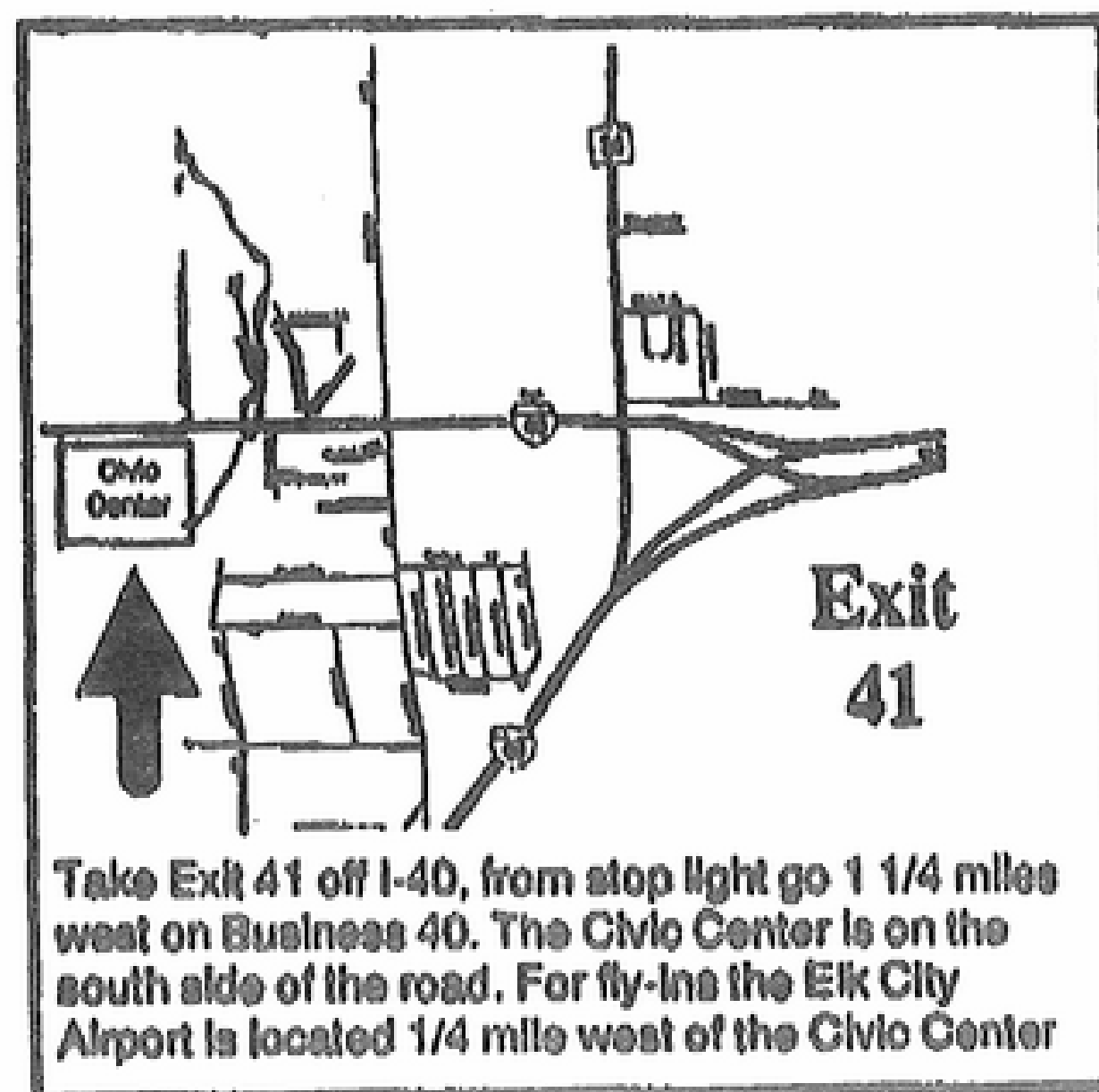
For more information call
(405) 243-1094, (405) 473-2572, or (405) 225-2523

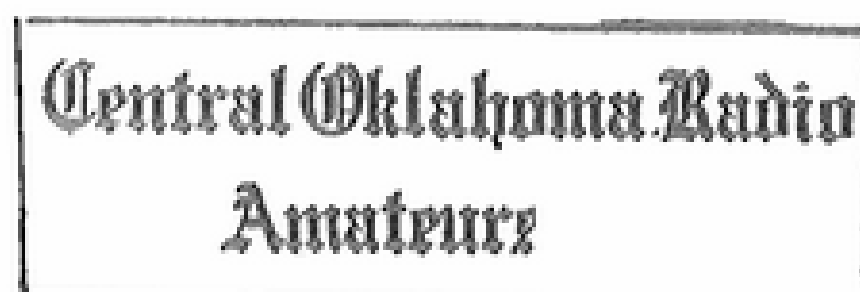
Sponsored by the West Central Oklahoma Amateur Radio Club.
This is an ARRL Sanctioned Event.

Name _____ Call _____

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





With introductions from some 20 members President Ted NY5W opened the first stated meeting of the new year.

Doug W0DXA gave an account of where the treasury sits, a goodly amount so the club is solvent.

Tom K5LDI our CORA representative stated Ham Holiday '91 will be held at the State Fairgrounds with our club operating Bingo. He also informed us that tee-shirts from 1990 will be sold at cost, while they last.

Jack AA5VU will assist Tom along with Charlie WA5JGU on being our Club Representatives to CORA.

Stan WA7WNM talked about the repeater on 2 & 440 and about some upcoming refinements. The power supply for the 440 machine to boost output power arrived tonight, thanks to Patrick KA5ZYM. Stan and Jack WB5SVN will try to instal same this coming weekend.

Well a piece of bad news has come to the club, the 5 element Tri-Band beam made by Telrex bit the dirt over the holidays due to inclement weather. It's possible that it may be repaired, but we are looking into the purchase of another beam.

There was a discussion about how the new Tech licenses will affect the older Tech license holders and the phasing together of both.

Ted NY5W, upon completing the necessary paper work will be the new club license trustee due to the retirement of Robbie AA0O.

The main purpose of tonight's meeting was the election of officers. The train came down the track and Doug Teachman W0DXA, ex-Secretary/Treasurers now President. Ted Anderson ex-President is now Secretary/Treasurer. Both men have done an outstanding job over the past year, we know we will receive the same this year. Three CHEERS!!!

Jack WB5SVN will take minutes at meetings and still will assist in all forthcoming work parties.

With all business transacted the meeting was adjourned at 8:30 pm to have coffee, dough nuts and lots of eyeball QSO's.

Best of the New Year to all from ACARC.
Jack, WB5SVN

When sending a service message on a piece of MARS (Military Affiliate Radio System) traffic, always include the filing time and date with the message number. Without this information MARS operators have no way of sending a service message. K5CXP, STM

Scars met on the 12th of January at the Norman Red Cross. The meeting was called to order at 9:40 by the president N5IUA, Dorinda. There was no treasurers report available. Due to problems with scheduling the meeting room at the Red Cross the dates for February and March have had to be changed. The February meeting will be on the 2nd and the March meeting will be on the 16th.

Old Business - The Christmas party was a great success and thanks go out to all those who helped to get it set up and organized.

Dues are once again due. The regular annual membership dues for SCARS remains at \$16. Persons who wish to make a donation to the repeater maintenance fund may round their check up to \$20 and this will help defray the operating expense of the repeater.

The assembly of the requirements list for the field day kit is progressing. Pledges of donations of several items are being sought, radios, antenna tuners, antenna materials, coax switch, power and light wiring, etc. Please check to see if you have anything that could be used and identify it to N5MAF.

Steve Wolfe has scheduled February 2nd as the day to reinstall the HF antenna at the Red Cross (weather permitting). Workers to assist will be appreciated.

Some discussion has previously taken place about setting up a "show and tell" booth at Sooner Fashion Mall to demonstrate amateur radio. The dates set up with the mall are April 27th and 28th. We will need to get a schedule set up for people to man the booth. With the new no code license provisions we hope to get a lot of interest.

New Business - A question was asked about starting a novice class but it was decided to wait until full details of the no code license were available and better scheduling of the meeting room could be made.

Storm Watch 3 severe weather spotter training session will be held at the Norman library on Saturday, March 23rd. Meteorologists from the National Weather Service will conduct sessions of basic and advanced spotter training.

The 89er bicycle race will be held the third week end in April. As usual, Volunteers will be sought to assist with the race. The race course this year will be in the lake Draper area.

The Mini Baja will not be held in Norman this year.

N18W is interested in having some programs presented at our meetings. He will look into this subject for future meetings.

Ken, KASEFJ, the Cleveland County ARES coordinator will be signing up new ARES members at the next meeting.

Guests at the meeting included K5SOJA and KC7LS.

Remember the next meeting will be on the 2nd of February. The meeting adjourned at 10:10
Ken, N5KUK

MINUTES - 27 NOVEMBER 1990

The meeting was called to order at 7:44 pm at Salvation Army Headquarters with President Frank AA5GI in the chair and the following Directors, representing 7 of the 16 member clubs, present:

ACARC W. C. Greene, Tom Mangham,
MORI Robert Moose, Ellard Foster
OCAPA Baron Beiber

76ers Jim Buswell

WHEATSTRAW Joe Lynch

EARS Steve Harlin

C & E Joe Harding

Visiting were Shondraya Harlin, Jack Conley and Bob Ashby.

The minutes of the October meeting and the report of the Treasurer were accepted as distributed.

Editor Joe WA5ZNF announced the next edit date, for the January 1991 issue of the C&E would be 19 December 1990.

VEC Phil N5HIP reported activity as usual: exams are still given on the third Monday of each month at the Salvation Army.

On motion by Phil and seconded by Joe it was agreed to hold Ham Holiday on 26 thru 28 July 1991 in the hobbies, arts and crafts bldg on the Oklahoma State Fair Grounds.

Programs, Flea Market, Scholarship Fund and Breakfast (if any) Committees still lack Chairpersons. All others have been claimed and report no activity yet except Facilities and Non- Technical Programs.

Again, Oklahoma Amateur Radio Clubs are asked to seriously consider working together for a National ARRL Convention in Oklahoma as early as Summer 1995 as that date is still under consideration and most likely not possible before then.

In New Business it was announced that Tee-Shirts will be representative of Ham Holiday yet unique to 1991.

Joe N6CL announced his request of local clubs and their support for replacing the 146.65 repeater on Montserret which was devastated by Hurricane Hugo in Sept 1989.

It was announced there would be no December meeting and the next meeting is scheduled for Tuesday 22 January 1991 at 7:30 pm at the Salvation Army Headquarters, as normal.

This meeting was adjourned at 8:47 pm
Secretary, Jim NB5BEQ

Joe: You're early. I thought I told you to come after dinner!

Moe: That's right. That's what I've come after.



As has been the custom for the President of Edmond Amateur Radio Society to write the last article (or the beginning) of the year to sum up what went on last year, here goes.

I guess the best way to do this is to go by one month at a time.

In January we discussed copurchasing several pieces of equipment for the club saltation. Since the nations Civil Defense system seems to be developing a traffic system that would require HF packet abilities we considered a KAM interface. Also to go along we decided that the club computer needed to be up dated with 640 kbytes memory and a printer. We also decided to purchase an extra power supply as a possible backup in case of trouble. Well, after some miss communication with the City we had to put the plans on hold. In September and October we decided to purchase all of the equipment except the KAM interface to improve our 2 meter station for storm spotting. We also had to repair the Kenwood 7950 in the club station as it was coming unlocked and transmitting all over the band.

We also made plans for the winter 1990 ORSI meeting that we hosted last year. On February 3 1990 we met at the library and listened to the group and since that was a long time ago I don't really remember what was discussed but I do remember that everyone was pleased with the hospitality that was offered by E.A.R.S

We discussed and approved the purchase of a service monitor and/or spectrum analyzer. We started a fund raiser and through the efforts of many members and a garage sale we finally purchased the Singer FM-10 CS in late October. The technical committee has met once so far to get familiar with it. After getting all the links and main site equipment up and running we will try to make the service monitor available to the club through the technical committee.

A weather spotters class was discussed for March 6 1990 set up by David Van Nostrum. About a dozen members were there to learn a little more about the weather.

In February we mailed our re-application for SPECIAL SERVICE CLUB status with ARRL. We later received the certificate confirming we are one of the few in Oklahoma who strive to be the best Amateur Club in the nation.

During the early part of 1990 there was talk of having our article published by NEON magazine but before we could come to a decision NEON was no more, or at least not as was discussed.

March had such things as St. Patrick's Day Parade and a discussion of the Bike-O-Lion and getting a P.O. Box number for the club to keep all the mail together if possible. Just in case you don't remember it is: P.O. Box 48 and the Zip is 73083.

In March we discussed getting new membership cards with the repeater codes on them for all new members as we had run out of the old. It was decided to try to kill two birds with one stone and use them for identification and information. We now have the cards but the identification part is slow coming along because we have to work with the City since all of our equipment is on city property.

We tried to build a graphics equalizer to have the voter at the repeater site vote by signal quality rather than signal strength. There is still a few problems with it and since we have had problems with the link we decided to wait until we had the links ready to go before trying to get it going.

We had two search and rescue alerts in March for two elderly people. One was found by our members and the other was found after a search of the rest of the home in which she was staying. Of course they didn't think to search the home until we were all out in the cold and rain looking, but both came to a good conclusion.

On April we discussed making a computer map for the State of Oklahoma. These were designed by Keith Miller KB5FCI and printed by Jim Greenshields WD5HPU and distributed at the ORSI meeting and we were given permission to copy them for the club members and Mike Mize did a very good job of copying them.

With deep sorrow we lost two members during 1990; Jim Timberlake and Don Seible. Both were fairly new hams and tried to do as much with the club as possible, they were limited, their passing has left a void in the club that will never really be filled.

In May we made plans for Field Day at Oak Cliff Volunteer Fire Dept. just as we did last year. We didn't make many contacts but we did have to shut down for a few hours for a thunder storm to pass by. Later that day Mike, Clarence (KB5RR) and I drove down a trail of very heavy hail that fell just South of Oaktree Golf Course. After finding leaves and several large limbs on the ground we reported them to Mike at the EOC.

After Field Day we got ready for the 4th of July parade in Edmond. Everything went well as could be expected for mass hysteria that usually happens every 4th.

At Ham Holiday 1990 we handled the registration again, Steve Hamlin (KG5UG) at the helm this year. We all had a good time this year and are looking forward to next year. It promises to be bigger and better.

We had two Hampouts this year the first at Lawton Hamfest camping in the wilderness. The second was at the Texoma Hamfest and

we tried to outsmart the Oklahoma weather, well it didn't work. The weather was beautiful and we thought of the night sky from the room we had rented to outsmart the weather.

We had a garage sale to help with the service monitor fund and raised about \$500.00 to help pay for it, Thanks to the donations of members.

In November the 1991 Board of Directors for the club were elected and will be installed at the January meeting. They are:

Tommie Guinn, Pres.

Mike Delaney, VP

Jim Richardson, Sec

Alton Sage, Treas

Board members:

Phil Wolfenbarger

Larry Traub

A. C. Adams

I would like to thank the 1989 Board for their support and faithfulness attending to the club business for the past year. Thanks:

Joel Beasley VP

Brad Kiespert, Sec

(Don Seible, Sec

Clara Granger, Treas

Phil Wolfenbarger, Board

(Alton Sage) Board

On December 15 we had our Christmas Dinner at St. John the Baptist Church. This year we had entertainment from the Edmond High School Group "Act II" group of 30 to chow down on turkey and dressing dinner.

We also had several simulated emergency tests with the City of Edmond. I don't remember that much about them but we have tried to help as much as possible and will continue to promote Disaster awareness among the club members. After all this is one of the reasons Amateurs have the frequency privileges that we do.

That just about wraps it up for now. There are a lot of activities we have planned for this year, 1991, and I hope you will be as active as possible. Sorry about not having this ready for the January issue but things got out of hand during December with all the activities as I am sure you are aware.

73 Tommie Guinn (KA5WAV) President.

NET	SES	TFC	MGR
OPEN	5	12	W5ZTN
ORN	5	18	WB5SZP
SAAN	4	0	N5FM
STN	26	59	W5OGF
WSN	4	3	WA5PEK
ONON	30	69	AA5GI
EARS	5	15	AA5GI
SAN	4	2	W5JPI
TARN	4	9	WB5OSM
NWOSN	9	0	N5LRR
OCARES	4	0	N5FM
OLZ	31	32	KV5X

Reports of net activities should be sent by message to the Section Traffic Manager, i.e. K5CXP prior to the 7th of the following month.

CIMARRON

"Laugh and the world laughs with you,
Weep and you weep alone....Puck!"

'Tis the season to be jolly, its often said (or sang) at this time of writing! I suspect, by the time this becomes print, most of us may be weeping as the plastic money...spent so joyfully in December...comes due, along with the taxes, in January.

A banker once told me, that if you want a short winter....have the note come due in the spring! But what the heck....don't worry....BE HAPPY!

CARA is certainly in the mood! TWO parties in the thirty days before Christmas. A Thanksgiving bash, Nov. fifteenth at the Longdale Community Center had for the Piece de Resistance a turkey, lovingly smoked and baked by Chef Peil WZ5H, our outgoing Prez! This noble bird was accompanied to the table by the best dishes of our ladies, and it was a feast to remember.

WX5Y Ruth Simpson was there, as was N5RHO Curt Briggs and his XYL Melody, N5MLT Terry McColl, N5IXN Olive Adams, N5KQU Alvin Adams, KA5SZD Vern Brewer and wife Fran, KA5RTW Betty Day, Sue Barnes, WK5V Dennis Painton, N5FMH Nadine Painton, WZ5H Leo Peil and wife Ann, and yours truly Jack Day NN5Z!

We all enjoyed the fellowship and an evening of cards and dominos. It is to be hoped that those missing this good meeting was properly remorseful!

The Christmas party, catered by Feedlot #2, was undoubtedly the best meal of the season. The banquet tables, through the efforts of Nadine N5FMH and Betty KA5RTW was attractively seasonal and it was evident that a good time was had by all!

Those attending were Melody and Curtis Briggs N5RHO, Fran and Vern Brewer KA5SZD, Ann and Leo Peil WZ5H, Sue and Ray Barnes AB5Z, Shirley and Bob Haigler N5KNK, Wilma and Ernest Martin N5KPK, June and Kenneth Paulson, Edith and John Medley KB5NBQ, Betty Day KA5RTW, Jack Day NN5Z, and Nadine Painton N5FMH.

Also Dennis Painton WK5V, Jack Kelly N5LBN, Jeanne and Ashley and Randy Dugger N5NOQ, Susan and Tom Adams N5NOP, Leigh Adams, Terry McColl N5MLT, and Ruth Simpson WX5Y.

Also Karen and Steve Schoonmaker KP5SW! This is by far the best turn-out of the year, and it is to be hoped that it will portend a super-active year for CARA.

The \$100.00 drawing was won by Ronnie Price of Canton...a ticket sold by WZ5H, and the \$50.00 drawing was won by Nadine N5FMH.

KAY COUNTY

AMATEUR RADIO KLUB

The January meeting was pretty well attended but I know a few guys stayed home and watched CNN just like Saddam did. (HA!) We went over our ending year's bank balance (it was quite good!) and it seems the only one who hadn't paid for the Christmas dinner was the club Prez! Hmmm, how could that happen? He promised he would get it paid soon.

The only order of new business was regarding some new books for the Ponca City library. N5OGP suggested that we buy the few books from the ARRL that we didn't already have in the library (we bought almost all the ARRL collection last year, remember?). We voted to do just that. They should all be in the library within a month or so, see N5OGP for a list.

The joint picnic and foxhunt with the Cowley County ARC was announced. It is presently scheduled for April 21st which is a Sunday. After a show of hands it seems about twice as many of our folks could be there on Saturday instead of Sunday, so there might be a schedule change if we can work it out with them. Stay tuned to the Monday night KCARC 2 meter net (146.97 at 9 P.M.) for new arrangements.

Our NEXT MEETING will be February 21st, we may hold this one at the EOC in preparation for tornado season. Listen to the Monday night net for details.

That's all for this month, see ya at our January meeting! DE KD5FX

Officers for the new year are to be as follows: President N5RHO Curtis Briggs, Vice President N5MLT Terry McColl, Secretary WK5V Dennis Painton, Treasurer N5FMH Nadine Painton, Activities chairman AB5Z Ray Barnes, and Editor Jack Day NN5Z.

In case you havent heard...the 14545 repeater lately, be advised that it is no longer sick. Trustee Dennis Painton WK5V moved it several miles west to a 100 ft. tower, and it is operating well. It is a shame to lose the height of the commercial tower that it was on....but at least it is on a tower now that makes the antenna accessible.

Well, this looks like a wrap. May the Good Lord keep the ice off your beams throughout the New Year and your easy chairs user-friendly!

73's NN5Z

GREAT PLAINS A.R.C.

NSHGH Repeater 146.13/73

The Great Plains Amateur Radio Clubs January meeting was held at Andy N5LLR and Sandra N5OKF's QTH. We elected four board members to fill the spaces left behind.

The four elected members were: Andy N5LR-R, Bob WB0GAX, Willis N5OO, and Leon N5OKE. Those who attended the meeting were: Lewis W5KFK, Freida N5EOX, Willis W5KFK, Lorene N5LEP, Rod WB5OVT, Lois N5JGQ, Andy N5LRR, Saundr N5OKF, Leon N5OKE, Kent N5HID, Bob WB0GAX, and yours truly Phillip N5QCN.

We talked about purchasing a generator for emergency communications. We also decided to buy an air conditioner for the club's communications trailer. Kent N5HID was given the honor of picking up the air conditioner as long as it is in good condition.

I, Phillip N5QCN, was chosen to take the job of Editor for the Great Plains Amateur Radio Club. (Don't tell anyone that it isn't as hard as I thought it would be.) Andy's dog, Tootsie K9ARF, and the donuts and coffee kept us entertained during the meeting.

Since the 146.13/73 repeater is off the air, the Northwest Oklahoma service Net and all other two meter activity has been moved to the 147.12/72 repeater. Also if you have not heard the NOSE has been moved to Monday and Thursday nights at 2100 local.

Willis N5OO and O.C. WA5OUV both have had some work done on their eyes for cataracts. They both seem to be recovering real fast and very well. Good luck to both of you!

This years Christmas party was held December 8 at the Northwest Electric Cooperative headquarters in Woodward. I was not able to make it, but from what I understand, there was a terrific turnout. There were amateurs from the local ham club, and others from across the state. We owe special thanks to the Northwest Electric Cooperative for allowing us to use their building for the party. We also want to thank all the people who made it possible.

At the party the GPARC donated \$100.00 to buy Christmas toys for needy children in Woodward and surrounding areas.

I want to let you know that the GPARC's annual Hamfest and Eyeball QSO will be held in Mooreland again this year. It starts on Saturday April the 6th and the final day will be Sunday the 7th. This will give you a date to work around. (So plan to come.) As soon as I find out more information I will pass it along.

Catch you next month! Phil N5QCN



VHF Club NEWS

WSLOW
*The Elmer Goshler Memorial
Station*

January VHF Club Meeting

Meeting was called to order at 12:00 p.m. by President Jack, WB5ZKZ, with 20 members and guests present. Treasurer Ellard, W5KE, gave his report and indicated that 20 members had paid their 1991 dues. He asked, and was given permission, to mail reminders to the rest of the 54 members who were paid up at the end of last year.

Jack, WB5ZKZ, opened the floor for nominations to add to the list of incumbent officers who were recommended to him last month. Motions were passed for all of the offices that the incumbents be re-elected. The officers for 1991 are therefore; Jack Muse, WB5ZKZ, President; Fred Boardman, W5NL, Vice-President; Ellard Foster, W5KE, Treasurer; and, Joe Buswell, K5JB, Secretary.

Meeting adjourned at 12:13 p.m. and the group watched K5JB's 30 minute video tape of the Wetmore's New Mexico estate. The video player and monitor were supplied by Jim, K5VRL, to whom we are grateful. Joe, K5JB, Secretary

ORS Meeting Planned

Plans are being made for the winter Oklahoma Repeater Society (ORS) meeting. It is scheduled to be on Saturday, February 16, on the same day as the next scheduled Choctaw Amateur Radio Club swap meet at the Midwest City Community Center. With this scheduling folks from out of town can come in early and kill two birds with the same stone. The swap meet will wind down before the ORS meeting starts. The ORS meeting place is being arranged by the Edmond Amateur Radio Club and it will be at the Edmond Public Library, and will start at 1:00 p.m. We will be in a smaller room than we were last winter but it should be adequate. The Edmond Public Library is located at 10 S. Boulevard.

The ORS 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 inter-

ested in VHF and UHF phone (voice) operation are invited. Joe, K5JB

Dear Jabby

On 75 Meter phone the other day, all the guys on frequency told me that I was off frequency. Everybody sounded good to me so how could I be off frequency? Frequently Duplexed.

Dear Freq.

I know exactly how you feel. Mac, K2GKK, came up on 75 Meters the other day and told me I was off frequency. Well, you know what? He was right. I already knew it and didn't particularly care, but once someone else figured it out I felt compelled to fix it. My transmitter was about 200 Hz off from my receiver frequency so I had to go into it and tighten down all the screws.

What I am about to describe is how to make one of the many adjustments that can be made to a complex piece of equipment without benefit of fancy test equipment, but instead by using some common sense and basic understanding of radio technology.

Those single sideband transceivers are amazing things. In order to arrive at the final transmitting frequency they go through all kinds of mixing, converting, filtering, translating, and gonzoiding of the little signals in that box. And, they do it differently whether you are receiving or transmitting. It is a wonder they keep things straight.

I got out my book on the radio and found some notes I made about ten years ago when I last aligned things in it and found where I had identified locations of the right screws and turned them just tight enough to make it listen and talk on the same frequency. At that time though, I performed a complete alignment of the rig to put all the oscillators where they belonged. The alignment process required first tuning up a frequency counter and setting all the oscillators on their correct frequencies. This time, I didn't think all that would be necessary; only that I get the transmitter on the same frequency as the receiver. Since I was taking the more pragmatic approach, I was also able to take some shortcuts. Here are of the tricks you can use to set up a transceiver without exotic test equipment.

It is almost mandatory that you have a second receiver to use for testing. Borrow one if you have to because you

can not depend on observations made over the air by others.

Before we get into the process of putting the transceiver on frequency let's do some rehearsing and let's go over some basic definitions and techniques for frequency setting and then return to the immediate question of getting a transmitter to agree with a receiver.

Zero beat. When two frequencies mix, they produce other frequencies. One of these frequencies produced is the arithmetic difference between the two frequencies. When the two original frequencies are very close together, this difference is very small and the resulting mixing product is so low a frequency that it is no longer a tone, but more of an impression of a rising and falling volume, like the beat in music. When this difference frequency is less than, say 20 Hz, you can't hear it as a tone anyway, it is more of a flutter sound. When it drops down to around 1 Hz, it clearly sounds like a beat in music. I guess that is why it is called a "beat frequency" in the usage, "BFO". When you "zero beat" a frequency, you listen to this beat, keep adjusting one of the oscillators until the beat gets slower and slower and seems to stop. The beat never stops, of course. I have tuned local reference 10 MHz oscillators so close to WWV that the beat sounded like a rising and falling volume, over a period of five or ten seconds. When I get to that point I stop trying to get closer to "zero beat". For my purposes, that kind of calibration is close enough (but it does have to be that close if you are going to do any work with that reference oscillator on UHF).

When tuning a receiver, you can't hear the tones between those at the flutter level (say, 20 Hz) and the lower cut-off frequency of your filters (maybe around 300 Hz) because the filters block it. It is actually quite difficult to "zero beat" an on the air signal with a SSB receiver because of this effect. You have to achieve "zero beat" by inference, meaning that the things that are within your hearing range do sound normal, so you assume your receiver is tuned to the correct frequency.

Here is a practice exercise and a practical example. If you want to set your receiver's digital display real close to your receive frequency you would normally use WWV, or some other signal known to be real close to correct. If you try to "zero beat" your receiver to WWV you will find it real difficult because of your receiver's fil-

tering. It simply does its best to remove things lower than 300 Hz. You can instead set it by inference by using the modulation from the station. When WWV is transmitting a tone, along with the ticks, you can use that tone as to set your receiver frequency and your digital display.

You have to find the control that is used for final touch-up of the receiver's frequency. Normally, the manufacturer provides an easily accessible control for this purpose. It is probably inside the rig, but will be where you find other controls, like sidetone level and such, behind an easily removable panel. We are only going to set the receiver on one band in this example, but I'll touch briefly on how to extrapolate this to another band if you want.

Here is the process of calibrating your receiver's digital display, step-by-step. Tune the VFO so the display shows exactly the frequency of WWV, say, 10,000.0 KHz. Tune back and forth until you see the display jump from 9,999.9 to 10,000.0. At the point where it makes the jump is where you want it when you adjust the receiver. Put the receiver on AM and listen to WWV's tone. Switch back to SSB and adjust the rig's internal frequency control until the tone you hear on SSB is the same frequency as the tone you hear when listening on AM.

When you get these two tones to sound the same, you may be able to hear the results of "zero beat". Turn up the volume while listening with SSB and listen for a flutter way down in the noise. Try moving the receiver's internal control a tiny bit to see if you can hear that flutter change frequency. If you do hear this flutter, you can really fine tune the frequency calibration by adjusting until this flutter slows down and almost stops. Don't get carried away with this process because there are dozens of signals floating around in that rig and you may be tuning to something completely unrelated to what we are talking about. Make a last check that the tone you hear from WWV's modulation, using AM, is the same as the tone you hear using SSB.

This procedure has set your display dead on, on one band, and using one of your two sidebands. That is all. It means you can bet beers on 10 MHz, but not on 75 M. However it is the starting point you can use for setting frequencies on other bands. We aren't going into the details on how to do that, this time, but I'll give you a hint.

You would now need to set one of your receiver calibrators dead on using the 10 MHz mode you just set, and use that calibrator to set the other bands and modes.

Now that you are expert in setting your receiver display, we are ready to start talking about transmitters.

Dummy load. If you don't have one of these, stop now and go on to the next article; the rest is of no use to you. If you are going to do ANY testing of a transmitter you must use a dummy load. Some of the tests you might want to run may be on band edges and thus, by definition, out of band. Besides it extremely impolite to transmit signals while performing transmitter maintenance. The process I am going to describe would be not only obnoxious on the air, it would constitute deliberate interference with others.

Get a little whistle somewhere. The one I have is one made out of a copper tube, notched, and plugged, that was used in the olden days for tone access repeaters. It's tone frequency is about 2000 Hz but that is not important. A harmonica, or a pitch pipe would work fine. What you want is something more stable than your God-given whistle. Unless you can whistle in perfect pitch you need a man-made whistle.

It would help if you had a couple of coax switches to be able to switch receivers on your antenna, and to be able to switch your transmitter under test to and from the dummy load, but if you don't have all this proceed on anyway. You just need a little more patience in swapping cables around.

Find the control that tunes either the receiver to the transmitter, or vice versa. This may not be an easy thing to do since the tune-up procedure will probably start with carrier oscillators, proceed to heterodyne oscillators, and then get into the VFO related oscillators. Look at the area of the circuit that deals with a clarifier control. What we are wanting to adjust is the "clarifier" control that is not on the front panel. Ideally, it would be easier if that control goes into effect when the rig goes into transmit. If not we can deal with it though. Let's assume that control, once you find it, will cause the transmit to shift frequency without changing receive frequency.

(Hint: Look for switching diodes that are connected to voltage points that switch when going back and forth from

transmit to receive, marked, "R:0, or R: + 12, or some such. This is the way different controls are switched in and out when going from transmit to receive and back.)

Do some tuning around and find some kind of station that is transmitting a strong, stable, signal. On 40 M you can use a broadcast station, but on 75 M you will have to find a QSO in progress. You may be able to find broadcast stations outside band edges on the other bands but remember the caution about using a dummy load when you fire up the transmitter. You can also use the calibrator oscillator in one of the receivers as a reference signal, but to hear it on the other receiver you may have to connect the antenna connectors together, a risky arrangement if you hit the transmit button by mistake. Actually it would be better to depend on a local oscillator than an off-the-air signal because its level would be more constant and easier to deal with. Maybe you can hear the color burst carrier oscillator in the color TV and use it as a reference.

Tune both the rig under test (RUT) and the second receiver to the off-the-air signal. Tune them both as close as possible to that signal so when you listen on either one the results sound the same. Put the RUT on the dummy load and key the transmitter while blowing your whistle. Set the transmit power level as low as you can and still be able to hear it on the second receiver. If the transmitter of the RUT is square on with its receiver, the whistle sound received by the second receiver will sound exactly like the sound you hear from the whistle itself. You wouldn't be doing this if that was the case so try turning that adjustment you found earlier. You should hear the pitch of the whistle coming from the second receiver changing as you turn that control. Adjust the volume of that second receiver so the sound you hear is of approximately the same loudness as what you are hearing from that whistle. Stop here and take a breath. You need to recheck both receivers to make sure they are still on the same frequency you started with. Re-attach the antenna to each of the receivers and see if they are still together on that external signal you were receiving. If the RUT has changed, go back to the schematic and tune-up instructions and see why it changed when you turned that control.

Let's step back and see what we are doing. The second receiver is acting

as a referee. When you set the RUT and that receiver to the external reference signal, you are doing the same as if you were in a three way QSO, except you can more closely judge with your own ears if both receivers are together. When you transmit on the RUT, the second receiver is telling you how close your transmitter is to your receiver. It is as simple as that.

Now, let's think briefly about the case where the internal "clarifier" control is controlling the receiver frequency instead of the transmitter frequency. We would have to use a different strategy but it would be just as simple. Once, the second receiver is tuned to an external signal, as described above, you can key up the RUT into the dummy load, and blowing your whistle, make the adjustment to the RUT with the VFO knob until the whistle sounds the same on the second receiver. Now, unkey, connect the antenna to the RUT, and while listening to the external signal, change the internal "clarifier" control until the received signal sounds the same on the RUT as it does on the second receiver.

Throughout all this process it would be nice to have two antennas so both receivers can hear the external signal. Perhaps some jumpers from the second receiver to the shield of your antenna feedline would do the trick. For my alignment, I used an external crystal calibration oscillator for the signal source, but I assume most don't have such a critter to play with. (They used to cost about \$10, but I don't know if you can even get them any more.)

When you have finished all this tweaking, you don't know what frequency you are on, you don't know how much your transmitter shifts frequency from USB to LSB to CW, and you don't know if your internal carrier oscillators are properly positioned with respect to the sideband filters, but you know that when they turn it to you to talk they won't have to reach for the clarifier controls to hear what you are saying.

A final suggestion about getting on the other folk's frequency. With all the various types of rigs, microphones, compressors, etc. we deal with, it is sometimes kind of difficult to tune a SSB transmission accurately. The trick is to try and tune for the minimum amount of distortion. The voice sound is rich in harmonics, and these harmonics have been selected by the Good Lord to sound rather pleasing. He chose to make them simple mathematical relationships with each other

and the result is musical. When we butcher this up with cold, inhuman, filters and oscillators in the process of splitting it up for transmitting over radio, and then reconstituting it in the receiver, we do rather badly in recreating the original sound.

By design, SSB transmitters only send a portion of the voice spectrum, and it sends none of the original phase information, so it is impossible to make the received results sound natural, but it is possible to get pretty close.

If you listen close as you tune back and forth, you can hear secondary voice components that sound like ringing mixed in with the normal speech sounds. These are mixer products caused by unnatural creation of new voice components that were not in the original. This is how we can perceive distortion. Careful tuning to reduce these extra little sounds will put us close to the correct frequency to allow reasonable re-creation of the voice, though with our equipment we will never duplicate the original phase relationships to duplicate the sound exactly.

If you prefer to tune a little to one side of an individual to make it easier to understand, use the clarifier on your own receiver after you have tuned as carefully as you can to minimum distortion. If you use the clarifier rather than the VFO, when it comes time to transmit you will be right on frequency!

This process of making one adjustment to a modern SSB transceiver illustrates the feasibility of maintaining your own gear without sophisticated test equipment, but with a sense of imagination, some creativity in using the available tools, and some knowledge of radio science.

Next question? Jabby

"HAM" - Another Explanation

Here's something Monte, WB5RZX, got from the WB5MJS packet BBS, forwarded to Mac, K2GKK, who forwarded it to me. Monte's and Mac's comments are at the end.

Origin of the Term "Ham"

Have you ever wondered why we radio amateurs are called "Hams"?

Well it goes something like this--the word ham was applied in 1908 and was the call letters of one of the first amateur wireless stations operated by

some members of the Harvard Radio Club. They were Albert Hyman, Bob Almy and Peggie Murray. At first they called their station Hyman-Almy-Murray. Tapping out such a long name in code soon called for a revision, and they changed it to Hy-Al-Mu, using the first two letters of each name. Early in 1909 some confusion resulted between signals from HYALMU and a Mexican ship named Myalmo, so they decided to use only the first letter of each name and identified their station as HAM. In the early pioneer and unregulated days of radio, amateur operators picked their own frequencies and call letters.

Then, as now, some amateurs had better signals than some commercial stations. The resulting interference finally came to the attention of Congressional Committees in Washington and they gave much thought to proposed legislation designed to critically limit amateur activity. In 1911, Albert Hyman chose the controversial Wireless Regulations Bill as the topic of his thesis at Harvard. His instructor insisted that a copy be sent to Senator David Walsh, a member of the committee hearing the Bill. The Senator was so impressed that he sent for Mr. Hyman to appear before the Committee. Hyman was put on the stand and described how the little amateur station, HAM, was built, and he almost cried when he told the crowded committee room that if the bill went through, they would have to close up the station because they could not afford the license fees and other requirements which were set up in the Bill. The debate started and the little station, HAM, became a symbol of all the little amateur stations in the country that were crying out to be saved from the menace and greed of the big commercial stations who didn't want them around. Finally the Bill got to the floor of Congress and every speaker talked about the poor little station, HAM.

That's how it all got started. You can find the whole story in the Congressional Record. Nationwide publicity identified the station HAM with amateurs. From that time to this, and probably to the end of time, in radio, "Every amateur is a ham".

From the Pearl River County Amateur Radio Club News Letter, Bogalusa, LA via Nick Gasper N5EQO. (Copied from the Benicia Amateur Radio Club "Log Book" June 1989 via Bob, N6ERR.)

Monte's comment: I'm not sure I believe it!

Mac's comment on the message: I don't know if I believe it either. The story I heard was that the amateurs were called hams due to a supposed parallel between them and "ham" actors. I have also heard that the amateurs were dubbed hams due to their "ham-fisted" ways with a CW key. Ya pays yer money and takes yer choices. Do what you wish. 73 de Mac.

My comments: In following the official policy of the C&E, "If it fits, we print it.", here it is. I am not sure I believe it either. The author says the whole story is in the Congressional Record so it should be simple enough for someone with computer query capability to look it up. That would be interesting. There was another "HAM" origination story in the Compuserve magazine which was totally unbelievable. Unfortunately I threw that issue away without thinking of re-typing it for the C&E. As Mac sez, "You pays yer money..." Joe, K5JB

Sex and the Unproto Call

THAT got your attention, eh? Here are the CORRECT meanings of various UNPROTO addresses.

UNPROTO ADDRESS	MEANS:
CQ	I am AT the keyboard seeking "YOU" for a live QSO.
QST	This is a general announcement to ALL hams. It's good for things like SKYWATCH & other public stuff.
BEACON	My TNC is in the automatic mode. I'm NOT at the keyboard. This is for use on mailboxes and digis.
MAIL	Mail posted for This is for BBS Use.
NODES	THESE nodes have been heard by THIS node. (Nodes only.)
ID	Meaning of this one should be obvious. It is for use by Nodes, Digipeaters, BBSs, Clusters, etc.
NOCALL	The LID running this TNC neglected to put his call sign in using the MYCALL command.

PLEASE don't leave your BEACON UNPROTO set to CQ, even if you are sitting at your keyboard waiting for a live QSO to happen. Choose an appropriate UNPROTO address for the status you have chosen for your TNC.

I.E., "BEACON VIA W1ABC,W0XYZ" for your MAILBOX, etc.

Also, don't beacon TOO often. Every 20 minutes is MAXIMUM! You'll soon notice that SOME stations beacon every 3 to 5 minutes. Nothing will get you a reputation as a packet LID any faster! DON'T use BEACON function to send CQs. Do it manually from the keyboard.

PK-232 OWNERS, PLEASE NOTE

Try these settings on your TNC the next time you are hunting for live QSOs.

MFROM	NONE
MTO	YES CQ
MBELL	ON

Now, every time someone sends a CQ, your terminal will ring three bells to alert you. But be forewarned, PLENTY of folks are still incorrectly using "CQ" as their BEACON, when they are REALLY out to lunch. Change the MTO to "MAIL" and your terminal will call you the next time the MAIL LIST is transmitted. This way, you'll be able to see if you have any mail without having to connect to the Mailbox or BBS.

You can easily set up your TNC so only what YOU want to see will be displayed on-screen. For example:

MBELL	OFF
MFROM	NONE
MTO	CQ,MAIL,BEACON,NOCALL

Now you can monitor for some useful info without having to see ALL the traffic on the frequency! 73 and good packeting de Russ, N3GHE @ W3TAI Edited for C&E by K2GKK

More on Coherent

Last month I mentioned that I had bought Coherent, the Unix workalike, and that it seemed to be working pretty well. I have to correct a comment I made about running TCP/IP on it. It won't happen with the Coherent version that I have. The largest program that can run in its environment is one that has less than 64k of code space and 64k of data space. The TCP/IP I compiled to run under Unix takes lots more, so I can forget about that. There is supposedly a version being worked on by the Mark Williams Company that will handle larger programs, so when it becomes available I may spring for it and port the IP to it. In the meanwhile, I am still impressed with how well it works and recommend it to

someone who wants first-hand experience with Unix. Joe, K5JB

Another Jabberwocky Satire

This was from Mark Israel, University of Alberta, supplied by Monte, WB5RZX.

VIRUWORMY
(with apologies to Charles Dodgson)

'Twas eunicks* and the asky chars
Did grepp and skanneff at the nik:
All mimdy were the hyperstars,
And the rad ravs outsmick.

"Beware the Viruworm, my sun!
Let not its bits, in temp space get!
Guard well the Passpass word, and shun
The durbious Internet!"

He put his darpal code in ram:
Long time the decson foe he sought --
So waited he, in the Dirdir tree
And slept awhile, swapped out.

And as with hashish dreams he slept
The Viruworm -- that spawn from shell --
Fast fingring through the mayle, it crept
And gettessed from Koornell!

Ping, pong! Ping, pong! And long by long
The darpal code went hicker-hack!
It ran no more, and with its core
He went dispiling back.

"And hast thou killed the Viruworm?
Nok bless your promms, my sparkish toy!
O megga win! Ess are eye! Bee bee enn!"
He broadcast in his joy.

'Twas eunicks and the asky chars
Did grepp and skanneff at the nik:
All mimdy were the hyperstars,
And the rad ravs outsmick.

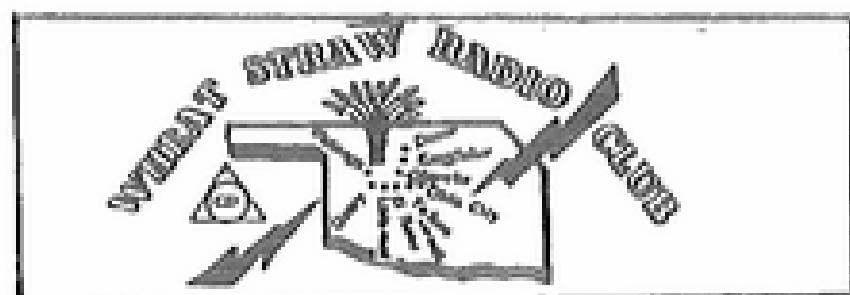
More programming humor...

More from Monte, WB5RZX.

THE LESSER-KNOWN PROGRAMMING LANGUAGES #18 -- FIFTH

FIFTH is a precision mathematical language in which the data types refer to quantity. The data types range from CC, OUNCE, SHOT, and JIGGER to FIFTH (hence the name of the language), LITER, MAGNUM and BLOTTO. Commands refer to ingredients such as CHABLIS, CHARDONNAY, CABERNET, GIN, VERMOUTH, VODKA, SCOTCH, and WHATEVER SAROUND.

The many versions of the FIFTH language reflect the sophistication and financial status of its users. Commands in the ELITE dialect include VSOP and LAFITE, while commands in the GUTTER dialect include HOOTCH and RIPPLE. The latter is a favorite of frustrated FORTH programmers who end up using this language.



1990 has come and gone, now it is time to look forward to another year. At this time I feel some sadness. For what I am about to write, I take full responsibility. I have asked no one, or have not had any suggestions.

I used to look forward to the Collector and Emitter. I would read it from cover to cover. I believe some clubs have dropped out of CORA, still there are seventeen clubs listed.

We all have worked hard to achieve the class of license we have. This world over I believe Amateur Radio is the largest universal freedom we have. I cherish this freedom very much. The way I calculated clubs writing articles in the January issue, there were only six. That figures out to be about thirty five percent.

If you turned to page two, you saw the editor behind the eight ball. Joe Harding, WA5ZNF, has been the Managing Editor of the Collector and Emitter since the beginning. I am afraid to say just how many years.

Spending hours of retyping for size, printing articles, letters that was sent to him whether he agreed with them or not. Sometimes Joe has been criticized, years back. Some of our reporting gets to him so late he works long hours to get it set in type before deadline.

Joe Harding is a licensed amateur, not only dedicated to radio, but to each and every one of us that gets a copy of the Collector and Emitter...I know that there is a lot of you good people out there that can write a more interesting article than I. Please don't take it for granted, get on the ball, give us some interesting reading. Joe is to be commended and should be recognized for giving so much to Amateur Radio.

Since I retired I have had a little time to think a little for myself. It takes less effort to do something nice for someone than to do evil to anyone, and you feel a hell of a lot better.

I enjoy articles and poems of the old days gone by. Notice I didn't say the good old days.

My wife Goldie has a hand written cook book by Ramona Jones. It reminds me of the days when we had no toys, "boughten" games to play, by a kerosene lamp you amused yourself. I read a poem by Katherine Edelman:

FIRESIDE HOUR

There by the fire, soft candlelight.
Curtains drawn against the night,
Crackling firewood, amber tea, light talk
flowing fast and free.
Nothing of false pretense or sham.
Just good friends sharing muffins and jam.

On the first page Ramona wrote: 'The real reason for writing this cook book is to share my very favorite recipes with friends. I feel that memories are for sharing. I love to entertain people, and feel that good food, good music, and friends all go hand in hand.' Please enjoy these recipes, and have some special days with your family and friends.'

Signed Ramona Jones

BATTER FRIED HOG JOWL

(Quoted as written)

As a youngster, I didn't seem to miss meat or meat dishes if we didn't have them every day. We did have plenty of vegetables in season. Had more squirrel and rabbit than pork or beef. If we had pork it was more than likely liver or jowl (jaw of a hog). I do remember having jowl fried on occasion, and it was something special. I would not want to write a cookbook without including my mother's recipe for Batter Fried Jowl.

"Slice jowl in medium thin slices. Dip each slice in buttermilk, then pat in flour. Place it in a skillet of hot grease. Fry to golden brown on both sides." (end of quote.)

WW1 VETERAN REINLISTS AT AGE 95

Goldie and I attended an unusual wedding January the ninth. It was the bride's ninetieth birthday and the groom was ninety five years young. William Widney and Myra Drake. Both are residents of Sunset Estates Nursing Home of Watonga.

An archway was set up in the east side of the lobby all decorated with flowers. Several bouquets of beautiful flowers were arranged by the Watonga Floral. A large three tiered wedding cake was placed on a table between the two bouquets.

The little flower girls came in with a basket of flowers, side by side. When the bride and groom were escorted in, the two wheel chairs were behind with a large white bow tied on the outside, his on the right hers on the left. Before the ceremony started Punkin McClung sang "I Can't Help Falling In Love With You". I must say, she did a beautiful job. The ceremony was performed by Rev. Russell Murrell a retired Baptist minister. I think there were a good one hundred people there. The reception was in the same lobby after the wedding.

Myra spent many years keeping house and cooking for the O.D. Sargent family. Will, as everyone calls him, is a WW1 veteran. Will joined the American Legion in France in 1919 and has been a continuous member ever since. After the war he came to a farm near Fay. He spent many successful years as a farmer and rancher. The couple have made many friends over the years, young and old. May God bestow blessings on their lives.

Wheatstraw ARC had their January meeting on the 13th in the City Hall at Calumet. There were thirty four present, two of those were visitors from Okarche. All seemed to enjoy the meeting and fellowship.

During the meeting N5IKN Tom gave a

presentation of the ARES program. A motion was made that the repeater and all Wheatstraw members register with the ARES provided the repeater trustee approved. The trustee was absent. Motion carried.

For some reason or the other I didn't hear of anyone getting ham gear for Christmas. We were sorry to learn about N5MPG Dave and N5NZU Jane's family having so much sickness during December. We had a good Christmas as usual. Our daughter and family were here for Christmas. Son John and family were here for the New Years holidays.

The next meeting will be held at Canton February 10th. WZ5H Leo, said that the meeting will be held at the Community building. From the red light at the center of town, go west to the railroad track then turn north about four blocks. You will see the building on the left side of the road. When you turn right there is a 'minie' stop on the west corner of street.

The program was a show and tell of a recent trip to China by W5JEB Father Joe. This was a special planned trip by a large number of priests. Their plane left San Francisco November 26th. Sixteen hours later they landed in Shanghai. They toured in groups of about 30. They visited four large towns, business districts, factories and financial sections. Since they went to the Catholic church and toured from there, I think the tours were planned by the Chinese. I did not get the names of the towns that they visited because I could neither spell or pronounce them. Going to a silk factory, there was a style show put on for them.

Father Joe was taken to the Childrens Palace. The group was entertained by the children singing and dancing.

People were riding bicycles, every where. It seemed bicycles were the peasant's transportation. The government controls the news media also. Father Joe said he could not understand the government policies or intentions any where they visited. Father Joe does not speak Chinese. Very good educational program. He landed back at San Francisco December 6th. Coming back with the sun it was quick, seemed like about two hours.

Meeting adjourned for refreshments. Thanks to all the ladies who helped.

73 WA5PFK Ralph


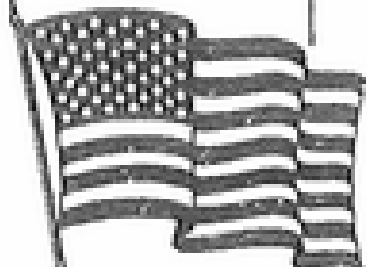


Teacher: Rosie, do you know how to spell "banana"?

Rosie: Not really. I know how to start, but I don't know how to stop.

CORA NEEDS SOMEONE TO BE CHAIRMAN OF PROGRAMS

FOR HAM HOLIDAY '91

Contact Frank, AA5GI

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1	2 OKC CD SIREN TESTS 1130 145.41 S C A R S
3 GREAT PLAINS A R C	4	5 M O R I	6	7 AERONAUTICAL CENTER ARC	8	9 CENTRAL OKLA COMPUTER
10 WHEAT STRAW	11 EDMOND CLUB	12 OKLAHOMA UNIV. ARC BICENTENNIAL (76ers) ARC	13	14 CIMMARON A R S ALTUS ASSOCIATION	15 E A R S	16 V H F OKC CD SIREN TESTS
17	18 VE TESTS 6:00 PM SALVATION ARMY 50 & PENN	19 AUTO PATCH	20	21 KAY COUNTY	22	23
24	25	26 C O R A 7:00 PM SALVATION ARMY 50 & PENN	27	28		
						

Knock, knock
Who's there?
Vission.
Vission who?
Vission you a happy New Year!

Customer: I'd like to buy a mirror.
Clerk: Certainly, sir. A hand mirror?
Customer: No, I want to look at my face in
it.

Customer: How much is that wig?
Clerk: Twenty-five dollars plus tax.
Customer: Oh, never mind about the tacks.
I'll use glue.

MIDWEST CITY SWAPFEST

The Choctaw ARC will sponsor the Midwest City Swapfest in the Midwest City Community Center on February 16 from 8 to 12. It is at, or near, Reno and Midwest Blvd. of course in Midwest City. Come swap.

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