

SECOND CLASS MAIL Postmaster, SEE PAGE 3

ANY ONE WHO WANTS A LICENSE CAN GET ONE.

The Day I Learned Morse Code

Once upon a time I thought I would like to get a amateur radio operator's license. I did a little research by reading the amateur radio magazines and learned that I had to learn the code well enough to pass a 13 word per minute code test and pass a written test on radio operation and FCC regulations.

Thirteen words a minute? Yeah. I didn't realize at the time that you could get on the air and talk if you only passed the five words per minute code test. Sure, I knew about the novice class, that it only required 5 wpm and that it was limited to certain bands, 75 watts input and CW. But, I had a special incentive to get the general class license. I was involved in an Explorer Scout Post at the time and several of the Scouts were interested in getting ham tickets. There were no licensed amateurs among the advisers so I needed to get the general class in order to give novice tests.

I had read all about the Technician Class, but I understood that it was a special class for those interested in high tech stuff like remote control model airplanes, and stuff like that. I didn't know they TALKED on those bands above 50 MHz! Besides, like I said, I wanted to be able to give Novice tests, and I understood that it took at least a General to do that.

Anyway, I set out to learn the code. The first thing I did was to get a code practice tape or two, and a record. I also managed to get a short wave receiver because I saw references in the QST magazine about code practice on WIAW. As I usually do when I get on a new binge, I became obsessed with learning code; so, I bought a book about learning code and read it backwards and forwards. It didn't help me much in learning any code but it gave me a lot of insight into what I had to do to learn the code.

Practice, practice, practice...work, work work. I listened to the records and tapes; I read the book; and, I fiddled with the dials of the

Hallicrafters SX-100, trying to find some code that was just right for me to learn. After a few weeks, I suppose I was learning a few letters but, even at extremely low speed, couldn't seem to copy more than about three letters in a row before blowing it. The tapes and records were pretty boring. They either sent nonsense letter groups (which were nearly impossible to check for accuracy) or they sent plain text (which I kept anticipating and eventually memorized). Besides, none of them sent code that sounded worth trying to learn. Even without knowing anything about code, I knew that I was having difficulty learning to copy because that code sounded real crummy! (The worse I did, the crummier I thought it sounded!).

I set out to learn 13 wpm so I started my serious practice at 13 wpm. I couldn't see any sense in learning at 5, then relearning at 8, and again at 10 and finally learning it, for the 4th or 5th time to get to 13 wpm. I figured learning it once was enough so I set out to learn it once, at 13.

The only code I could copy at all on my receiver came from WIAW and I couldn't copy enough of it to do worth a darn. They only seemed to send five wpm for about a minute and then went to 13 wpm for about 30 seconds, and then jump to about 100 wpm. Every time I tried to read code at my target speed of 13 wpm I was only able to catch one letter out of about five. I couldn't seem to get the whole alphabet down, at any speed.

Looking for other stations that were sending code was a bust. Every time I would find someone who was sending at a reasonable speed either they would quit, or some other station would come along and start sending code right on top of them. Drat! I spent a lot more time fiddling with the dial than I did trying to copy code.

I decided that what I needed was code practice tapes that were interesting, that sounded right, and at a speed I could almost copy. I bought a key. I built an oscillator. In

fact, that oscillator was probably my first amateur radio construction project. I think still have it around the shack somewhere because I have one of everything and hardly ever throw anything away. I used the key and oscillator to make some custom tapes, using five letter cipher group examples and articles out of my "How to Learn Telegraphy" book, and out of newspapers.

As you have all found out, it is a whole lot easier to learn to send code than it is to receive it. I guess it is because the brain uses a lookup table and goes through the process, 1. Decide on a letter, 2. Figure out what its equivalent is in dits and dahs, and 3. Make those fingers move on that key. Now, apparently the fingers can move on that key while the brain is thinking of another letter and translating it into code. In its little lookup table, it has letters on the left side and dits and dahs on the right side. It is kinda easy to find the letters in the left side of the table because the brain has been dealing with letters since it was real young and has them down pretty pat and knows just where to look on the table.

On the other hand, when the ear hears those dits and dahs, the brain has to look all over the right side of that table to find something that matches what the ears heard. While it is doing that it is awful busy. It is so busy that it hardly has time to do anything else, like telling the ears to keep listening. Even when it gets more familiar with where those dits and dahs are located on the right side of that table, another multi-tasking requirement appears. The brain has to tell the fingers to write that letter down and tell the ears to listen, at the same time! And woe be to you if you start thinking about what was said, or guessing what letters were coming next. There just doesn't seem to be time for the brain to do anything but listen, translate, and write! No wonder I couldn't learn the code!

On the other hand, between that hand and the brain, there is the arm.

(Cont. on VHF PAGE



Minutes of December Meeting

...will be in next month's C&E. This month's paste-up will occur before club meeting.

Hoping you get this before Christmas, the members of the VHF Club wish all their amateur radio friends and their families a most sincere seasons greetings and a prosperous, Happy New Year!

Jerry, KD5IS, our president, wanted me to remind you members that elections would be held in January. Be sure and come to join in on the fun!
Joe, K5JB, Sec'y

(Day I learned...Cont.)

I don't know much about the central nervous system but the hand is a long way from the brain. It may be that the signal from the brain to the hand spends a long time enroute, going all the way down the arm, and when it is doing that, the brain has time to look up another letter in the lookup table. But, since the ear is real close to the brain, the sounds come in and almost immediately go to the brain. When the brain starts looking at the right side of that table, powie! Another code character hits the ear and almost immediately hits the brain, finding a busy signal. I'll bet that is what it is.

The lookup table needed practice, practice, practice...work, work, work!

I believed the advice that one must practice at least a little bit every day. So I did, at least fifteen minutes a day. In addition, I put a little speaker under my pillow and slept on it, having heard somewhere about sleep learning. But, I didn't seem to be getting any better so I quit the sleep learning thing. I may have been able to copy code in my sleep, but that didn't do me any good when I was awake. I increased my practice time. I started listening to code while driving to work. After several weeks of all this practice I began to see some improvement. I tried all kinds of tricks with the text I was recording, like copying the newspaper articles backwards. This way I would not be tempted to guess ahead what I was hearing and I could still check the accuracy of what I was decoding.

During all this tape making, I was getting pretty good at sending. The tapes were 45 minutes long and at first I used a straight key. Boy, did I have a glass arm. By the end of 45 minutes, it was about-to fall off! I bought a Vibroplex keyer and added weight to get it down to 13 wpm. I knew what good code was supposed to sound like, from listening to WIAW, and I could tell that my first attempts with the keyer were no good by listening to the tape. It wasn't long though that I could send code almost as good as H. P. Maxim himself, maybe a bobble once in a while, but mostly pretty good.

My receiving was no where as good as my sending but I finally got where I was only missing about one character out of maybe 10 or 20. That was pretty good, but no cigar. I had to be able to copy 65 characters without a mistake.

I took a good look at the characters I was missing. P, Q, Z, ahem, J, and most of the numbers and punctuation. I made some tapes that heavily emphasized those characters and practiced with them. I had given up on plain language and gone back to the five cipher groups. I just wasn't getting enough practice with the numbers and punctuation with plain language text, even backwards.

I also discovered some discipline. I started from the beginning to copy behind a letter or two and was getting the cadence of hearing, hearing, writing, hearing, writing, and so forth, usually about one letter behind. It was about like patting my head and rubbing my tummy. I learned how to do that when I was a little boy, after only a month, or so, of practice. I found that if I closed my eyes, I cut out the distracting stimulus of checking to see if I was on the line, or near the right edge of the paper and about ready to go to the next line. I knew the FCC examiner wasn't grading for straight lines or pretty letters. He just had to clearly read 65 of 'em, jotted down correctly. I was printing because it took some of my limited brain power to decide whether to connect-letters together or not so it did no good to try and write writing. It looked like I was going to be stuck with printing if I was going to get anywhere at all.

It wasn't really very long and I could do the 65 letter thing pretty often. I was encouraged to know that the man was going to send three hundred and twenty five letters and I only had to get 65 in a row! I was ready, so I sent off the papers to Dallas for an appointment the next time the man came to Oklahoma City.

When it finally happened, I went down to the post office on third and Robinson and found the examination room upstairs. I think it was the room that they put federal prisoners in when the Pen in Kansas is full. Pretty scary! It had little tables all set up neat in rows, just like school, except there was no ink well, and the top didn't lift, or anything like that. They wouldn't have anything where they keep federal prisoners anyway.

The meanest looking man I ever saw handed out some pieces of paper and earphones. Those were the scariest earphones I ever saw. Did you ever see scary earphones? Well, those were the scariest anybody ever saw! Man! I was getting nervous. My hands started to sweat. Then he said we would hear some vees and then the code would start. He said the vees would count so write them down. HUH? He looked too mean to give a helpful hint like that. Maybe I would only have to copy only 60 more characters after those vees. I was ready and it started.

Didididaw! Didididaw! Didididaw!
Didi-de-dum-dum-diddi-dum-de dum...

...OH NO! My pencil! It just went limp! Just like it-was rubber. It went-limp! My hand started shaking. Joe, ya got to get ahold of yerself. Relax, let some of the code go by and pick up that old cadence. I guess I took a deep breath and listened for a moment and started trying to copy again. All there was on my paper was some vees and a couple of letters here and there. I closed my eyes and started crippling along, writing a letter now and then. I had a couple of runs but when I opened my eyes to see how long they were, I lost that cadence. As suddenly as it started, the sound stopped. I really took a deep breath and looked at the miserable paper. There was hardly anything there.

It was really hard for me to hand that mean looking guy that paper. "What the heck did he come down here for?", he was probably thinking. He called each test taker up to his desk one at a time and said something in a low voice. Some of them came back and sat down and a few left the room. He called my name and I went to his desk. Heck, I don't know why I waited. He didn't have to tell me I blew it. But, to my surprise, he looked up at me with eyes that seemed to sincerely say he was sorry and said, "I'm sorry". But he continued, "You got enough right to try for a Technician ticket if you want." I thought, "Why not? Beats going home empty handed, even if it is a booby prize."

So I went back to the scary little table and waited for him to hand out the written test. For some reason the table quit being so scary when I saw the written test. I was much more comfortable in the new environment. I took the test and passed it. That is about all there was to that.

I left the room with a pretty gloomy feeling because of my rotten performance on the code test. For a couple of reasons, I didn't try to tackle the code for a long time after that. Since I wasn't into model airplanes, I didn't even look forward to getting the license in the mail. When it came, I had a call, WA5TRS. Hmm, not too impressive. I put the ticket in the dresser drawer and forgot about it for almost a year. (Conclusion next month) Joe, K5JB

Latest OPRA Happenings

During the organization meeting of September 27th, a concept of a state-wide organization was adopted for implementation. Some questions were not broached, such as, how would the group function as a classical club? For example, what is a meeting? In the classical sense, all of the members gather at an agreeable meeting place and a structured meeting is conducted, usually under Robert's Rules of Order.

How does one conduct a meeting when all of the members are scattered across the state? What is a quorum? How will motions be entertained from the floor, and what is the 'floor'?

Obviously, some creative thinking had to be done before the drafting of Articles of Incorporation, By-Laws, etc. could be done. K8OQJ, the Prez, collected several examples of other club by-laws and tried to act as a benevolent dictator (this flavorful description was proffered by the venerable K5JB) and drafted documents with language that would provide for the good of the entire body, preserving the democratic process, yet collecting the ideas, opinions and desires of the membership-at-large which would be incorporated into the management of the Oklahoma Packet Radio Association.

This was no easy task, but a draft of By-Laws and Articles of Incorporation were produced and further aid was solicited from the notable, and generous, N5MS. As OPRA was involved in a time crunch in a possible transaction with a corporate donor, it was obvious that the Articles of Incorporation creation was the first order of business. Mike took that draft and re-worked it (this was necessary cause the Prez knew not a

whit of what he was trying to accomplish) and put it-into the proper format according to the most recent legislative requirements.

After the final draft was produced, in an original and three copies, the Prez took them about town to secure several signatures. The next step was to present the authenticated document to the Secretary of State for filing, along with a \$25.00 filing fee. The document was rejected for a minor revision and re-filed on December 8th after which OPRA was recognized by the State of Oklahoma as a non-profit organization! Hurrah, one down and a few more to go!

The letter from OPRA soliciting digipeater sites is still under consideration. So, all we can do is await a decision on that project. Another project for a donation which would enable us to equip all of the ten or so digipeaters with terminal node controllers plus a couple of portable stations is underway here in the city. Another project in Tulsa will have to await the receipt of tax-exempt status from the IRS before we will be able to pursue it further. This status may take as long as eight months, according to the filing notice!

K85XN was able to return his station in Tuttle to duty, and he is operating as a digipeater on 145.09 Mhz, as is K8OQJ for the near future. Jim was also able to secure the donation of four high current power supplies which will require some technical assistance in order to put them into service at selected DP sites. Anyone who would wish to tackle one or more of these power supplies may call K8OQJ at 789-8469 for more information.

N5HZR/Mark in Norman has developed the first cut at the soft ware required for the computer access at the National Weather Service Forecast Office. He is currently testing this work at his station. You done good, Mark! All we need now is to nail down a computer so that Mark may begin final work on the project.

That's about all there is to report on the doings of OPRA for this month. Happy packeting, folks & 73,
de J., K8OQJ

Oklahoma Repeater Society Meeting

The Oklahoma Repeater Society has scheduled its winter meeting to be held Saturday, January 31, 1987 from 1:00 to 3:30 P.M. in Stillwater municipal building, 723 S. Lewis. Repeater operators and users are welcome and encouraged to participate in the proceedings.

Joseph, WA5FLT

WB5AOH Conference Bridge

Bob Morgan, WB5AOH, of Ft. Gibson now has operational a WB5PUC TEXNET Conference Bridge. The "bridge" allows up to 6 stations on 2 streams to connect to each other by connecting to the bridge. Everything that one station sends is sent to all the other stations connected to the bridge on that stream.

The two independent bridges are WB5AOH-2 and WB5AOH-3. To operate the bridge you connect to it. The only command is ,ctrl. U to find out who is presently on the bridge. As the bridge cannot make connects, each station wishing to use it must connect to it. And again, once you are connected everything you send will also be sent to all the other stations connected to that bridge. Note however that if you are the only station connected to the bridge then anything you send is dumped to the bit-bucket.

Advantages:

1. One station can send information to multiple stations without having to switch streams.
2. Multi user unproto type round-table while connected.
3. Shorter path. If the bridge is midway between you and the other stations you are conversing with your path is only half of what it would be since you are connected to the bridge not the distant station.
4. Extension of digipeater range. Although it wouldn't be practical, if the bridge was 8 digipeaters away from you and 8 away from the other station, in effect you'd be 16 digipeaters apart.

Disadvantages:

1. Extremely frequency congestive. Since each station is connected to the bridge, every transmission by any bridge connected station is sent to each one and an acknowledgement must be received. To cut down on congestion, all connected stations should have solid paths to the bridge.

Recommendations:

1. Continued use of the bridge as it serves an important purpose.
2. Bridge retry count should be kept low. So that any station using a poor path will be disconnected from the bridge quicker.
3. Stations should refrain from useless frames, such as multiple (cr)'s.

4. Stations with poor paths to the bridge should not use it.

5. Further testing of the bridge in both prime time and non-prime time operating periods.

WB5AOH is active developing Level 3 here in Oklahoma. The conference bridge is one step in that direction and we all should give Bob a word of thanks. Unless Level 3 Networking becomes available soon, our Level 2 operations may come to a grinding halt due to path overload. The Oklahoma Packet Radio Association, OPRA, recommends operation not requiring the statewide linking system on 145.01 MHz be done on alternate packet frequencies such as 145.03, 05, 07. In other words, if you don't need to use an OI digipeater then please conduct your QSO on an alternate frequency so as not to tie up the entire system. Also, OPRA makes the following operating suggestions:

1. Try to use BBS's during non-prime time hours.
2. Please do not upload or download long files during prime operating hours.
3. DO NOT BEACON! Except for QST's of general interest to the amateur community. And then, please do not digipeat the beacon beyond the area of interest.
4. Set Maxframe to 1 or 2.
5. Set your retry count to 5 or lower.
6. On poor or congested paths, Pac-length should be 80 or lower.
7. On long paths Frack should be set in the range of 4 - 6 or higher.

Those are not "rules" only suggestions. If the paths become useless due to congestion then everyone suffers. To make our level 2 system work, we must work together.

Ron, WB5TTU

Some Satellite Stuff

Here is some interesting information that Steve, K2IYQ, left on my packet radio bulletin board. If you happen to keep up with satellites by using one of the popular computer programs, here are some Keplerian elements for the Fuji-Oscar 12, Oscar 10 and the sun (just in case you want to see if that program really works!) This information came from Amateur Satellite Report.

(I just noticed that the element set number doesn't look right for FO 2. It may be for AO-9...JB)

FO-12:
CATALOG Number 16909
Epoch time: 86310.12801044
THU NOV 6 03:04:20.102 1986 UTC
Element set: 957
Inclination: 90.6540 deg
RA of node: 350.9795 deg
Eccentricity: 0.0011463
Arg of perigee: 78.9664 deg
Mean anomaly: 281.2427 deg
Mean motion: 12.44392562 rev/day
Decay rate: -2.5e-07 rev/day
Epoch rev: 1061
Semi major axis: 7866.848 km
Anom period: 115.719110 min
Apogee: 1509.815 km
Perigee: 1491.779 km
Ref perigee: 3231.14559093
Thu Nov 6 03:29:39.56 1986 UTC
Translate Freq: 581.8000 Mhz
Invert: 1
Beacon: 435.7970 Mhz

OSCAR 10:
CATALOG Number 14129
Epoch time: 86312.44034196
SAT NOV 8 10:34:05.545 1986 UTC
Element set: 275
Inclination: 26.9515 deg
RA of node: 51.0499 deg
Eccentricity: 0.6033158
Arg of perigee: 158.5947 deg
Mean anomaly: 244.4550 deg
Mean motion: 2.05880591 rev/day
Decay rate: -4.1e-07 rev/day squared
Epoch rev: 2561
Semi major axis: 26103.384 km
Anom period: 699.434557 min
Apogee: 35474.408 km
Perigee: 3977.240 km
Ref perigee: 3233.59623735
Sat Nov 8 14:18:34.906 1986 UTC
Translate Freq: 581.0047 Mhz
Invert: 1
Beacon: 145.8090 Mhz

OSCAR 10 is available for use in Mode B any time it is visible from your QTH. Use QRP ONLY since the satellite is not commandable to optimize sun angle on the solar panels.

How do I calculate where the SUN is. Easy; just plug the following Keplerian elements into your tracking program.

THE SUN:
Epoch Year: 1990
Epoch time: 1.0 Days
i.e. 1990 Jan 01 0000:00 UTC (Mon)
Inclination: 23.4406 deg
RA of node: 0.0 deg
Eccentricity: 0.0167133
Arg of perigee: 282.7685 deg
Mean anomaly: 357.6205 deg
Mean motion: 0.002737778522 rev/day
Decay rate: 0.0 rev/day squared
Epoch rev: 1989
Semi major axis: 149597870 km

The following is excerpted from ASR Number 137 published by AMSAT, PO Box 27, Washington, DC 20044.

FO-12 PSK

A preliminary PSK operating schedule for FO-12 has been released by JARL and JAMSAT. The schedule is being revised at this time. Tune to the AMSAT nets (listed below) for the latest on the operating schedule. Initial Mode JD telemetry tests have proved quite successful as reports from Europe, Asia, South Pacific, and America indicate.

FO-12 MODEM

If you subscribe to QEX, you have seen the initial design of the PSK demodulator. W3IWI has been working on the TAPR prototype unit and recently demonstrated it at the AMSAT Space Symposium held in Dallas. The PSK demod unit is attached to a TNC2 via the external modem port (conn J4) to bypass the internal TNC2 modem.

The modem demods 1200 bps PSK and includes digital AFC to drive your rig to follow the Doppler frequency shift (approx 10 khz) during an FO-12 pass. TAPR plans to have a FO-12 modem some time in the near future for attachment to TNC's but they have not yet made any announcement.

The digital AFC has been tested on TS 711/811 radios and works very well in either USB or LSB (this is not an FM xmission).

FUJI OSCAR 12 (FO-12) Interim operational schedule copied from AMSAT Mid America Net (Tues, 9 PM CST, 3857 KHZ) 12/9/86.

Sunday	Mode JA	(2 meters up & 435 Mhz down SSB/CW)
Monday	" D	OFF for Battery recharge.
Tuesday	" JA	
Wednesday	" JD	DIGITAL (PSK) on 1 orbit, off 1 orbit
Thursday	" JA	
Friday	" D	OFF for Battery recharge.
Saturday	" JD	Digital (PSK) on 1 orbit, off 1 orbit

Days are UTC. Therefore, Sat Mode JD begins FRIDAY evening at 6 PM CST. Mode JD is 2 mtr FM Manchester coding uplink and 435 Mhz SSB 1200 baud PSK downlink. When the satellite is in Mode JD the beacon will be on at approx. 435.910 Mhz +/- doppler which is about 10 Khz max, TAPR is planning an external modem that will connect to the Modem Disconnect connector on most TNC's. W3IWI, Tom Clark demonstrated it at the AMSAT Space Symposium in Dallas recently.
Steve, K2IYQ

1 AERONAUTICAL CENTER ARC
 MEETS: FIRST THURSDAY, FLIGHT STANDARDS
 BUILDING, FAA, SOUTH MACARTHUR 7:30 PM
 PR BOB PACE, WASCJG 376-3569
 VP
 S/T JACK BARN, W05SW 677-8537
 EDITOR: BOB PACE, WASCJG 376-3569

2 CENTRAL OKLAHOMA VHF
 MEETS: 10:00AM THIRD SATURDAY, RED CROSS
 10TH & HUDSON (BACK DOOR) OKLA CITY
 PR JERRY WETMORE, K0SIS 524-5080
 VP HUGH BENSON, KAS06Y 946-0023
 SE JOE BUSWELL, K5JB 732-0676
 TR ELLARD FOSTER, W5KE 789-6702
 EDITOR: JOE BUSWELL, K5JB 732-0676

3 MID-OKLA REPEATER
 MEETS: 8:00PM FIRST TUESDAY, OKLA CIVIL
 DEFENSE, WILL ROGERS BLDG., STATE CAPITOL
 PR TIM RAUSCHER, KASNUG 848-9910
 SE MIKE SAMBUCCO, KASTSD 672-9176
 TR SID GERBER, WSK0Z 737-1050
 EDITOR: MIKE SAMBUCCO, KASTSD 672-9176

4 OK CITY AUTOPATCH
 MEETS: 7:30PM 3RD TUESDAY (7:00PM MEAL OPTION)
 GOLDEN CORRAL RESTAURANT 7000 NW 23 (ROCKWELL)
 PR CHARLES HOFFERBER, W5FNU 340-4468
 VP DAVE HOLDER, W56BY 524-4711
 SE DAVID CARAM, KF5EB 751-5672
 TR ART HERNANDEZ, KF5DK 354-9724
 EDITOR: DAVE HOLDER, W56BY 524-4711

5 OKLA UNIVERSITY ARC
 MEETS: 7:30PM SECOND TUESDAY (SEP-MAY)
 119 WILSON CENTER, 1334 S JENKINS
 PR FRANK DONALDSON, W5IOJ 329-4172
 VP JOHN MUSTENBERG, KESN 325-2382
 SE PETER RICHESON, KASCOI 329-3217
 TR GREG SMITH, KASLZN 366-1641
 EDITOR: GREGG SMITH, KASLZN 366-1641

6 ALTUS ASSOCIATION
 MEETS: 7:30PM SECOND THURSDAY
 NORTH MAIN FIRE STATION (CD) ALTUS
 PR DWIGHT DENNIS, W8SKRH 482-2498
 VP
 S/T MIKE SCHENKLE, K8SXN 482-1797
 EDITOR: MIKE SCHENKLE, K8SXN 482-1797

7 BICENTENNIAL (76er) ARC
 MEETS: 7:30PM SECOND TUESDAY
 KIPS RESTAURANT, RENO & MERIDIAN
 PR DONALD DUCK, AESN 691-4199
 VP TED VANLANINGHAM, W05JNT 262-1675
 SE JERRY SPROUL, W5AUH 354-2061
 TR
 EDITOR: JIM SEALS, K8SXN 381-2005

9 WHEATSTRAW ARC
 MEETS: 2:30PM SECOND SUNDAY. LOCATION VARIES.
 SEE CLUB SECTION FOR DETAILS.
 PR JOE GARLAND, W5FLT (CALUMET) 893-2660
 VP JOHNNY FISH, K5GBN (CALUMET) 893-2227
 S/T GEORGE MASCHINO, K5GEL (OKARCHE) 263-7614
 EDITOR: VIRGINIA BENEDA, W5EMD (WATONGA) 623-7935

10 CENTRAL OKLA COMPUTERS
 MEETS: 9:00AM SECOND SATURDAY, RED CROSS BLDG
 NW 10 & HUDSON. BACK DOOR.
 PR SAM HURR 324-6443
 VP TOM MANGHAM, K5L0I 677-5291
 S/T MARTIN SCHIEL 670-6891
 EDITOR: MARTIN SCHIEL 670-6891

11 EDMOND AR SOCIETY
 MEETS: 000 MONTHS, 3RD SUNDAY, 2:00PM EDMOND
 EOC. DINNER, EVEN MONTHS, 3RD FRIDAY.
 PR BOB MCCOY, W5BUJ 348-2032
 VP LEE VAUGHN, KASWIS 348-2961
 S/T AMBER THOMASON, KASVEK 478-4615
 EDITOR: AMBER OR BOB THOMASON 478-4615

12 QUARTER CENTURY W A
 MEETS: QUARTERLY AT VARIOUS PLACES.
 NET: 3855 KHZ SUNDAY AT 8:00AM.
 CHM ROBERT RUNYON, AA00 373-1818
 VCH GENE HAILON, K5OLE 341-8289
 S/T HOWARD BAKER, W5AS 721-5453
 EDITOR: ROBERT RUNYON, AA00 373-1818

13 KAY COUNTY ARC
 MEETS: 7:00AM THIRD THURSDAY
 PIONEER DRIVE-IN BANK, PONCA CITY OK
 PR DAVE LAND, K0SFX 762-8616
 VP STEVE SCOTT, KAS6GK 762-0117
 S/T HARRY BEATTIE, W050PR 765-3862
 EDITOR: CHARLES NORTH, W5EYD 762-8136

14 CIMMARON ARS
 MEETS: 7:30PM THIRD THURSDAY, W5FUD SHACK
 827 S 13, FAIRVIEW
 PR STEVE SCHODMAKER, W5FUP 886-3274
 VP BILL SIMPSON, W5HOK 883-5523
 SE NADINE PAINTON, W5FMH 764-3599
 TR BETTY DAY, KASRTM 227-3462
 EDITOR: JACK DAY, W55Z 227-3462

15 SOUTH CANADIAN ARS
 MEETS: 9:30AM SECOND SATURDAY, RED CROSS BLDG
 NORTH DU CAMPUS. NORMAN
 PR JEFF WYKE, KESEB 329-6762
 VP FRANK RIZZO, W20CH 321-2899
 TR MONTE BATEMAN, W8SRZX 329-7485
 SE LINDA BRANDT, W05WH 321-5081
 EDITOR: DAVIS EGLE, K0SIT 321-7570

16 EDMOND AR CLUB
 MEETS: 7:00PM SECOND MONDAY. SEE CLUB
 SECTION FOR LOCATION AND TYPE
 PR MARK NORTHCUTT, W05DYI 755-4672
 VP BOB MOORE, KASETA 799-1765
 S/T KAY NORTHCUTT, W05DYJ 755-4672
 EDITOR: MARK NORTHCUTT, W05DYI 755-4672

17 OK CPM USER GROUP
 MEETS: 7:30PM SECOND THURSDAY OSU,
 ROOM 307
 PR WILLIAM COOTER 360-2141
 VP JIM WHITE 364-5289
 S/T JOY NELTON 789-0280
 EDITOR: WILLIAM COOTER 360-2141

18 GREAT PLAINS ARC
 MEETS: 7:30PM FIRST TUESDAY
 WOODWARD PUBLIC WORKS BLDG.
 PR MINDLE HATCHETT, W05PLM (FT SUPPLY) 766-3561
 VP LEWIS PATTERSON, WSKFK 256-2111
 SE LOIS FORD, KASPYA 923-7683
 TR FREIDA PATTERSON, W5EOX 256-2111
 EDITOR: LOIS FORD, KASPYA 923-7683

19 OKLA INDEPENDENT ARC
 MEETS: 7:00PM SECOND TUESDAY
 SOUTHWESTERN BELL OFFICES, PONCA CITY
 PR DAVE WHITE, WNSLUI 765-5707
 VP VERNON TREIBER, W5ANV 767-1571
 SE GLEN BISHOP, JR, KASPB8 767-1031
 TR BIZ WICHY, W05HCO 762-3297
 EDITOR: DOUG EVERITT, W5DOB 359-0069

20 ARDMORE ARC
 MEETS: 7:30AM 2ND SATURDAY. CORRAL RESTAURANT
 INFORMAL: EVERY WEDNESDAY, 221 9TH NW
 PR GLENN HAMILTON, KESES 226-4379
 VP KEN FRANKS, W85WPC 226-1950
 SE ROBERT GRIFFIN, W85VKA 223-8741
 TR JOHN MEALYN, W05FZD 223-9543
 EDITOR: JACK GANT, W56M 223-2619

21 TRI-CITY ARC
 MEETS: 1ST THURSDAY OF THE MONTH.
 PLACE:
 PR LLOYD WILLIAMS, KASUXG 382-3231
 VP RON PHILLIPS, W05UPU 382-1856
 S/T J. B. BILLS, KESMU 379-3992
 P.O. BOX 655, HOLDOENVILLE OK 74848
 EDITOR:

CENTRAL OKLA RADIO AMATEURS
 MEETS: 7:30PM FOURTH TUESDAY. RED CROSS
 BLDG. 10 & HUDSON OKLA CITY (BACK DOOR)
 PR JIM BOSWELL, W5BEG 236-0368
 VP FRANK TASSONE, KASWGS 341-4945
 SE LEE WARD, W5HIR 789-0681
 TR SUSAN ST LAURENT, KFSLG 324-8180
 COM/COM: CHARLES HOFFERBER, W5FNU 340-4468

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EDITOR: JOE HARDING, W52NF 737-1044
 CIRCULATION: BOB GRAHAM, W85NSV 677-8685

EDITORIAL RESPONSE

First I would like to thank Mr. Salem for informing the CORA group that a second frequency coordinating body does in fact exist in the State of Oklahoma. Unfortunately Mr. Salem left out some important information as to the person to contact to initiate your coordination profess. The person to contact is Hal Deitz, WB9VMY, and his address is Rt. 1 Box 58C1, Calumet, OK., 73014-9723. If you prefer to use the phone his phone number is 405-884-2865 and he can be reached after 7PM.

About a year and a half ago I wrote to Mr. Schroeder requesting coordination of the two meter frequency pair 144.510 MHz/145.110 MHz. After a couple of months I received a letter stating that I could not use this frequency pair because it was reserved for special linear translators and experimental repeaters other than FM. I guess Mr. Schroeder assumed that I wanted to put up an FM only repeater as I don't believe that I mentioned exactly what kind of modulation I was going to use. I had intended to put up an FM to SSB repeater to give the hams in the Oklahoma City area an opportunity to find out how useful SSB on two meters really is. I have since found that Mr. Schroeder has a repeater sponsored by Larry Papke, WB5MPU, in Cleveland (county?) on the 144.520 MHz/145.130 MHz repeater pair. I am pleased to see that there are other hams in the area that are interested in other than FM only repeaters. I suppose that Mr. Schroeder could have suggested that the 144.530 MHz/145.130 MHz repeater pair was still available but as Mr. Salem has pointed out it is my responsibility to do the frequency coordinators job for him.

After considering the response that I had received from Mr. Schroeder I decided to scrap the idea of an FM to SSB repeater on two meters and try for a coordination of 1.2 GHz frequencies. This request was relatively quick in being answered but I now find that the Oklahoma Repeater Society does not have any interest in

coordinating frequencies other than VHF and UHF of this fact. Since I played at AT&T Technologies in an Electrical Engineering capacity and since I have been a ham since 1968 and since I hold an official observer position with the ARRL I felt that I had the required expertise to perform as a frequency coordinator in the state of Oklahoma.

I had also requested coordination of frequencies in the 70 cm band. Mr. Schroeder indicated to me that he was not interested in coordinating frequencies on the UHF frequencies. At this time I began thinking that maybe Mr. Schroeder needed some help or would like to give the coordination job to someone else. At the summer meeting this year I approached Mr. Schroeder and asked him if he would like some help doing this thankless task of coordination and even offered to take over the job if it was too much for him. He declined both offers. Apparently Mr. Schroeder has not had to give up any hobbies or other interests that are important to him in order to discharge his duties as he sees fit in acting as the frequency coordinator for Oklahoma.

I still hold to the belief that all amateurs have the right to coordination since the FCC has taken the view that the uncoordinated repeater is totally responsible to solve any interference problems.

I would like to point out at this time that article five, paragraph 5.2.2 of the Oklahoma Repeater Society by-laws states that "The frequency coordination committee will accept and record voluntarily submitted user frequencies and provide information to users regarding possible conflicts in frequency use and assignment. User requests for nondisclosure of utilized frequencies will be honored."

A couple of months ago "QST" came out with an editorial "When repeater coordinators don't". After reading this editorial I decided to set up the Oklahoma Repeater Coordinating Council and informed Stan Horzempa, editor

Since the FCC states that a coordinated station is one for which the transmitting and receiving frequencies have been implemented in accordance with the recommendations of a frequency coordinator I suggest that it is the frequency coordinators job to "recommend" a frequency for operation of a repeater, not the repeater owner. After all, the frequency coordinator is the one who has knowledge of all those secret frequencies that are being used. Why should I as a prospective repeater owner have to shoot in the dark for an available frequency pair when the frequency coordinator already has the information I need. It should suffice that all I do is indicate what band of frequencies I desire operation on and the frequency coordinator inform me of all the available frequencies in that band. Then all I have to do is pick one.

I'm still willing to work with Mr. Schroeder as a second frequency coordinator in the State of Oklahoma. I have always been willing but Mr. Schroeder's disinterest has precipitated the present situation. I would like to present my views to the Oklahoma Repeater Society but when they only have two meetings a year it is rather difficult to do so. I believe every ham would agree that it is better to have a committee or council of more than two people doing the frequency coordination in a state. How in the world is one individual supposed to cover the entire state and know what frequencies are in use?

If Mr. Schroeder and the Oklahoma Repeater Society would like to work with the Oklahoma Repeater Coordinating Council and myself they know how to get in touch with me.

Continued on next page

(EDITORS NOTE: The article about Editorial response on a previous page was EDITED. Much of the deleted parts may be presented at the January 31 meeting of the Oklahoma Repeater Society. Everyone interested in Repeater Coordination should attend the Stillwater meeting, Municipal Bldg 1:00pm. The following was received before this was printed. It is included as additional comment.)

REPEATER COORDINATION- THE FCC RESPONDS

In response to a question from an individual about repeater coordination in the Kansas City area, the FCC's Ray Kowalski, Chief of the Special Services Division of the Private Radio Bureau, said "The FCC intends to rely upon state and regional councils to recognize legitimate local coordinators. The FCC will support their determinations ... Revocation of regional and state council recognition of another local coordinator is - prima facie - evidence that the coordinator no longer has the support of a majority of those eligible to establish repeaters in the area it claims to coordinate. Stations which operate with illegitimate repeater coordination do so at their peril. "The FCC further stated that "two active coordinators in the same large metropolitan area which do not take each other's coordinations into account may soon cause repeaters in the area to experience interference. And it is the licensees of these repeaters - not the coordinator-who risk sanctions if interference occurs." occurs." The ARRL Letter

The PHD NEWS reprinted Mikes article: "We are reprinting the above (Mikes article) taken from the CORA publication of the Council of Clubs of Oklahoma City and Oklahoma. It looks like Kansas City is not the only place where bootleg repeater coordinators have shown up. California has also had a number come out of the woods. The FCC has to a great extent stayed out of the disputes. Only last week they suppositionally has ruled that State Repeater Council take precedence over local councils. But they must have documentation that the repeaters they claim to represent have

had a vote of the users of that repeater to prove that they want the council to be their coordinator. In the case of the Mo-Kan Council Repeater Frequency coordinating council they not only represent 2 states, they have been a coordinator for over 15 years and the only in the two states have members activity in coordinating for some 20 years. It's a shame that all amateurs don't spend their time promoting amateur radio and not pushing their own interest before the black box."

That's enough of this matter. WA5ZNF

This is just a little note to all editors---Most clubs have elections at the first of the year. Please furnish me with their
POSITION NAME PHONE NUMBER
and correct meeting data. let's get the list on page 3 up to date.
Tex Joe,

MOBILE BATTERY CONNECTIONS

Belden makes a kit that makes mobile battery power connections a snap. It is also much cheaper (I paid \$1.09 for a package of two) than the GM adapter kit mentioned in N5MS's column. The kit consists of two bolts that replace the existing bolts in side terminal battery connectors. There is a hex head screw in each of these bolts that allows you to connect crimp type terminals directly to your car's battery. The Belden part number is 728198 and is available from most auto parts stores. If not in stock, they can get them from the warehouse in one day.

DE WD5G (VIA PACKET)

FOR SALE: 12 ga shotgun model 1200 pump, .303 British Enfield, 22 cal Winchester lever action, Parker-hale 30-06 /w/ 3 thru 9 scope, Ruger 22 Magnum pistol /w/ western holster. Will sell cheap. Call Holly 387-9267 (after 5).

CORA MEETING
There will be NO December meeting of CORA.
The January meeting will be held at the Holiday Inn West, 801 S Meridian.
Be there.

FCC Issues New RFI Handbook

(This is quoted from the Sept. 15, 1986 W5YI Report.) The Field Operations Bureau, FCC, has just released a new Interference Handbook. It is the best ever! Written by the Staff of their Public Service Division, the manual identifies sources of interference to home entertainment equipment and recommends an appropriate solution.

Covered is interference involving two-way transmitters, television, computers, paging systems, VCR's, TV booster amplifiers, telephones, electronic organs, AM/FM radios, stereo-hi-fi equipment as well as electrical power and power line RFI.

A chapter lists dozens of manufacturers of consumer electronics and what each will do to assist the public with RFI problems involving their equipment. Performance ratings of low-pass, high-pass, power line and other filters are also given.

Step-by-step transmitter (and television) modification instructions advise qualified technicians how to evict RF interference. An interference check list tells amateur operators what to do when they get a report of TVI.

The 64-page full-color handbook will be available at all FCC Field Offices shortly. It is must reading for every ham operator!

Joe, K5JB

A new pilot invited his friend for her first airplane ride. "What I like about flying," he told her, "is that there are no road signs or traffic lights so I won't be bothered by back-seat drivers." With that, his passenger looked through the window and cried, "Watch out for those birds!"

FOR SALE: YEASU 101-E, Heathkit Linear Amp SB-200, 60 foot Rohn tower /w/ base, Ham 2 Rotor, 2 meter beam, Tri band beam, 10-80 Vertical, 16 channel programmable scanner, Tempo VHF+1 2 watt mobile, CB mobile radio, Clock radio, Coax, Lots of accessories. Excellent prices! Call Holly, 387-9267 (after 5).

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CHRISTMAS DINNER

Thirty-Five members and guests attended the GPARC's annual Christmas dinner and meeting. This year's covered dish dinner was enjoyed by all. The club furnished the turkey and ham, Freida prepared them, and the members did their part by gorging themselves. We somehow managed to con Alan Penrice, KA5VYS, out of the few remaining portions of his banana split dessert. He claims to have made it with his own hands. The OM maintains he should open his own dessert parlor! Immediately after the meal the business meeting was called to order. Four vacancies were to be filled on our board this year from a list of nine willing candidates. The race was very close, so close in fact, that a run off was necessary. The winners were: Gerry Ford, NC5C, Gerald Bowman, WG5Z, Lewis Patterson, W5KFK, and Ron Tice, WBOPGD. After some discussion the club decided to separate the position of Secretary and Club Reporter into two positions. The office of secretary to be elected and that of Reporter to be appointed. Rod, WB5OVT, was elected but guess who was appointed.

The following personnel were elected to positions on the board: President - Windel Hatchet, WA5PLW; Vice President - Ron Tice, WBOPGD; Secretary - Rod Ford, WB5OVT; Treasurer - Freida Patterson, N5EOX; Activities Chairman, - Gerald Bowman, WG5Z. Gerry Ford, NC5C and Lewis Patterson, W5KFK, will fill the remaining board positions. Bart Lawson, NZ5T, gave a very interesting report on amateur radio happenings in the Mooreland High School which included setting up their own ham radio station. Volunteer Testing is to be held at the Vici High School. Actual testing will commence at 10:00 am Saturday, January 10 1987. The GPARC also plans to start Novice Classes after the first of the year. Know anyone interested?

We were very happy to see all the visitors from the Cimmaron and Wheatstraw Clubs at our annual affair. Some

came quite a distance to attend. We overheard a new acronym "Who Knows Five Varmits" coined at a nearby table. At any rate everyone present had a great time and I don't think anyone went away hungry!

Participation in the Northwest Oklahoma Service Net is holding up very well. Gerald reported for the month of November, 12 sessions with 118 check-ins and five pieces of traffic being handled. With all the holidays, the December count should be better!

HOLIDAY EXCURSION

Freida, Lewis, Rod and I had the opportunity to journey to Fairview and take the Cimarron ARS members up on their invitation to attend their Christmas festivities. The dinner portion, held at Feed Lot #2, located in downtown Fairview, was excellent. After the meal everyone adjourned to the lovely residence of Ruth and Fred Simpson, N5FUR and N5FUO. What a nice evening! Fred played his new keyboard for the group and was joined by several others who either sang or played another instrument. The group was very interested in packet radio and hopefully, we'll hear some activity from this part of the state soon. We had a great time, thank everyone for their hospitality and we're just sorry that we couldn't make it to Watonga the next day for the Wheatstraw meeting. Maybe next years!

SCROOGE LIVES ?

The hour was late on Christmas night

All our homes look quite a fright

Santa Claus had come and went Our hard earned money spent

New antennas, computer and radio Mixed in with the Kid's Play Dough

We had all eaten a tad too much

But plenty was left for tomorrow's lunch

Our repeater has fried and gone down

It's lofty antenna blown to the ground

Christmas Day in the middle of the week

Had made the traveling situation bleak

Oh My! I just can't seem to remember

This article was due the 19th of December

Whoopie! Work is tomorrow again

That in itself must be a sin Everything without a good reason

This surely must be the Holiday Season

But I can state without much fear

I'll be ready to do it again next year.

The author wouldn't claim his creation and you can judge why. Have a great and safe Holiday Season.

73 Lois, N5JGQ

What do automobiles and politicians have in common?

They are both subject to recall.

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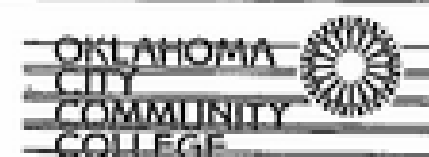
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-FILE ZERO-

I don't know how many false starts I've made for this report. The muse just isn't working. Fred, W5NL, is carrying the load of getting a report for the chapter members out and in to print each month for a while and I've promised to try to get back in harness and live up to the Chair. However, it is not yet time for that I guess.

After a very long hard year of long days, evenings, weekends, and holidays, Glo and I planned to reward ourselves with a long leisurley trip completely out of touch with central Oklahoma and the job. We did it, and here is the report for what it's worth.

Without going into detail about the trailer sitting for over a year virtually ignored, and the acquisition of a "new" used tow vehicle, and the decisions as to which way to go (Glo and I almost never discuss destinations. Our travel decisions have to do with general directions), we decided West and South was for us. The trip took us to Las Vegas, Southern Utah, the Grand Canyon, Phoenix, Tucson, the Mexican Border, Southern New Mexico, El Paso, West Texas, and home.

During the trip, we won, and then lost a pile gambling, had a lovely luncheon visit with Bob James, K5FW. (Bob taught me his Blackjack system... that's when I started losing. Bob says I didn't stay with it long enough to prove it out. That's when I found out that over the past several years he was about even... using his system.) We stayed in a big, brassy, fancy hotel on the strip for a few nights. Nice place to visit, but I wouldn't want to live there. I had bummed around the country for a while in the mid-late forties. That town has changed a bunch since those days!

Having done our thing on the strip, we checked the trailer out of storage at the KOA, and moved it to the Hacienda Hotel Campground at the far south end of the strip. We attended Ham-West at the Hacienda, and had a couple of pleasant surprises. It was strange being a stranger at a hamfest...but there I was in a sea of unfamiliar faces... all hams. I was wandering around looking at the goodies, thinking about being in a community of people with a common hobby and having only strangers to talk to. The place was full of "6-landers" and those folks are a little strange anyway. Then I looked up and saw Raymond Willis, W5ATO, or at least a reasonable likeness. I remember thinking... "how strange... they have one of those at every hamfest I attend..." Raymond was sitting on a chair in a corner kind of taking it all in, and in conversation with a friend, and obviously not going anywhere. However in my strange frame of mind, and just having spotted what I thought was a familiar face so far from home, I sort of hit the panic button, and irrationally became worried that Raymond was really not there, and would disappear unless I quickly laid hands on him. In my haste to stop Raymond from disappearing from that chair, I bowled over a couple of hams who had wandered into my path, and greeted that gentleman like a long-lost brother. Once having overcome the bemused mind over seeing W5ATO, I was not nearly so impacted when Bob Boswell, W7LOU, late of OKC and Chapter 63 placed his hand on my shoulder with greeting. Raymond and Bob each in turn introduced me to a circle of their friends in attendance, and I was once again surrounded with real live friends at a hamfest. What a trip! in one week I had made and lost a small fortune (breaking even in the end), and renewed acquaintance with three valued friends. After Ham West was over (compared to Ham Holiday it's about the same size, but bills itself as the "Dayton of the West"... that is not a fact). We had been on the road a full week. We were very

happy to leave Las Vegas behind. Maybe in another 40 years or so, I'll go back... but it really has not changed all that much... just grown. One last word on Ham West. The keynote speaker for the banquet was Wayne Greene. Boy, was I ever lucky!! I didn't have tickets for it. Close call. Just being in the same town with that screwball was bad enough!! I almost wound up in the same room! (Opposing views will NOT be given equal space, thank you).

Went north from LV toward southern Utah where I had done quite a bit of bumming around 40 years ago. Glenn Canyon wasn't there anymore. It had become Lake Powell. Beautiful scenic addition to an already beautiful piece of real estate. Having never been to the North Rim of the Grand Canyon, we made our next stop there. We camped in the forest at about eight thousand feet (temp went to 15F that night, at that altitude.) The diesel sure was reluctant to start the next morning. We, however, were snug and cozy in the trailer with nary a worry except for the amount of propane it took to keep us that way. We had one other small concern... we were camped in rugged, remote country in deer territory... and deer season was in full swing. We hoped the big shiney trailer would not be mistaken for a deer... stranger things have happened. We visited the lodge on the north rim at Bright Angel Point. Glo walked out to the point. I pooped out a couple hundred yards short of the mark. She reports it was impressive. Must have been something to see... Glo is not easily impressed.

We decided beautiful or not, it was much too cold, so we made our way back to what passes for civilization in that part of the world, and turned southward in haste vowing not to stop until shorts felt good on bare legs, and sandals were not worn with frostbite. We did not find the right warmth short of Tucson. Even Phoenix was too chilly and we

Continued on next page

did not tarry. Tucson was much too urban... so we wound up about 40 miles southwest of there, across a huge valley from the Kitt Peak National Observatory. Coming down from Flagstaff, I was working a few repeaters along the way, and the ZIA Connection came up. I had remembered the article in the October issue of Ham Radio. Suddenly, there I was in range of that grand effort, and talking on part of it (there was a system problem for a few days). I got the article out the first opportunity, and read up on it.

The ZIA Connection is a linking of twelve (12) repeaters (there were 11 when the HR article was written) in such a way that an input to any one results in output from all. So when you access the system, it's just like talking on a giant repeater covering enormous range from Flagstaff, to Blythe, to Albuquerque, to El Paso... solid. Zia was our only connection to the outside world on the desert. We had no TV, no telephone, no commercial electricity, and very little water. We did have ZIA, and that was quite a comfort.

Glo and I learned how to make a goat out of a trail bike. Imagine, if you will, me (250#), Glo (115#), survival gear, rock hammer, cameras, water, etc. (50#), and eventually a hundred pounds or so of rock, all on a 1972 model rusted up (but running good) Honda Trail 90 bike... climbing in the mountains where there are damned few trails. Talk about fun!! We went places I could not have imagined going on any kind of wheels, let alone that poor little overgrossed bike. We poked into old mine digs back in those hills in southern Arizona until we thought we would die from the sheer experienced wonder of it all... and we were rewarded with some beautiful rocks for our garden. Not to mention the reinforced bonds of companionship and shared experience peculiar to being miles from anywhere, alone with nature in the desert. Thus, we squandered the second week. Playing on the

desert, and cluttering up the ZIA.

Week three played just about the same except with a locale some 200 miles east across the Continental Divide on the New Mexico desert not far north of Deming, with a short stop for some high country prospecting in the Burro Mountains directly astraddle the Divide. More bike climbs... more rocks... more cold... more sheer fun. Then the descent to warmer climes on the desert. With more abandoned mines and more pretty rocks to be collected. And, another encounter with deer season. We were on what appeared to be an old prospector trail way up on a steep mountain when we spotted a couple of deer up slope from us near the crest. Deer are usually not to spooked, but this pair was. We soon became aware of why... Below, about a thousand feet or so in a draw we had just come through were two hunters with scoped rifles. They were obviously stalking those animals... and we were between them. Every move upward we made caused the deer to veer away from the hunters. Deer hunters are rather touchy about folks spooking their stalks. We were alone (with only side arms), a long way from "civilization", and in a very remote part of the world. Then was when we had our first and only spill on the bike. I was distracted, hit a big rock, and over we went. Glo got her foot caught under the bike. (the pain and bruises did not show up for a few days, but it was a nasty fall) She walked for a while after that while I continued to fight the bike in that very hard climb. The Hunters probably were cussing, but turned away, and we went on up to the crest. Glo was happy we had "saved" the deer, and I was happy not to have drawn fire. I wanted to get off that damned mountain in one piece.

With week three over, and week four to work our way home. We learned from ZIA that Interstate 40 had been closed between Albuquerque and the Texas border because of snow, so we altered a plan to go north from Las Cruces,

and instead elected the southern route through El Paso, then to I-20, and through Ft Worth. Turned out to be a mistake, but the return trip had it's own set of adventures. We made contact with Tom Banks, W5HJ in Las Cruces on 2 meters. Stopped by his home, and had a very pleasant visit with him and his lovely wife. Tom regaled us with stories of some of his adventures, and it was a most enjoyable break in the trip. Tom is an entertaining and interesting fellow.

We made a couple of stops in West Texas, but for practical purposes the trip was over when we left Las Cruces. We took HF gear with us, but never broke it out, not even in the most remote desert. I guess the long-distance communications urge must have been satisfied on ZIA.

Glo and I always try to avoid resorts, developed campgrounds, and large cities. We were successful on this trip in those goals. It was nice to get home after a month, but we are already talking about the next adventure. By the way, we carried a boat on top of the Suburban for the entire trip: After we left the Lake Mead and Lake Powell areas, we almost forgot it was there. It never got off the car!

73 for now. Thanks for being so patient. - ROB, AA00

-LATE BULLETIN-

K5DLE has just announced the January 11, 1987 meeting place:

FURR'S CAFETERIA
N.W. 63rd & Mac Arthur
2:00P.M.--1400 hours

-FILE ZERO ADDENDUM-

The QCWA Hotline Report arrived today... after the December report was transmitted to Joe, WA5ZNF. Joe said he thought he could fit it in, so here's hoping.

The International Board of Directors has urgently requested each chapter to advise it's members that the QCWA will publish a 1987 directory. The listing will come directly from the

Continued on next page

database as of December 31, 1986. If membership dues have not been paid, then your name will not appear in the 1987 directory. Dues notices have been sent to all members. The label on your QCWA News shows your expiration date.

HQ now has stationary with the QCWA logo imprinted for individual member use. Envelopes are not yet on hand, but when received, "sets" of 25, 50, and 100 will be available. The stationary will be priced to include printing, packing, and postage.

40 year pins are on order, and will be available soon.

Ted, W5EJ urges all members to carefully read the winter issue of QCWA News (which should be in your hands before the end of December). There are a number of important bits of information included. There will also be an "abbreviated minutes of the St Petersburg meeting of the Board".

Leland, W5KL was honored at the November 21 meeting of the Radio Club of America. Super news! Congratulations Leland -.ed

The International wishes us all "Health and Happiness in this wonderful holiday season!"

And Lastly... George Egli, WOCBI is listed as the newest member (#20114).

There was one confusing entry in HLR this month. I'm writing Ted for clarification. It concerns a cassette version of the QCWA News for handicapped folks. More later.

73 from Rob-AA00

<<NOTICE NOTICE NOTICE>> !!JANUARY MEETING!!

From our Vice President, Gene Nailon, K5DLE: Our first 1987 meeting will convene Sunday, January 11th at 2 PM (14:00 Hrs); FURRS CAFETERIA; NW 63rd and MacArthur (more exactly-6425 N. MacArthur).

The program will consist of (1) Election results & proceedings, (2) Vy short Business Meeting (3) short program of equal interest to OM's and YL's.

Merely a suggestion: For those whose stomach's may growl earlier, eating can take place in cafeteria proper-but meeting room will not be available until 2 PM-perchance a little before!!

CU @ Mtg. Gene, K5DLE

<<INFO VIA HOWARD, W5AS>>

Dec.19th: Via Hortense, learned that Howard has been in Baptist Hospital since Monday & part of time in Intensive Care Unit. At this writing, Howard is being released today & is now on the mend. Hortense said, "Howards problem was mainly a diabetes flare-up". We all wish you, Howard, a very speedy recovery & "to your good health".

QCWA, Chapter 63 operation on the air for November 1986.

SESSIONS	5
CHECK-INS	185
TRAFFIC	20

Here is our birthday list for January 1987. Looks like lots of our folks can be called "Early Birds"-it is a long list.

02 Robert Runyon	AA00
03 Corrine Weseneck	YL W5NQP
05 Cecil Cash	W5PML
05 Marg. Dalby	YL W5COE
05 Jeanis Phillips	YL AB5J
07 Travis Harris	K5DZV
10 Ottis Cornelsen	YL W5LHU
11 Mildred Drumeller	YL W5JJ
11 Myrtle Broudy	YL W5MCJ
16 Jo Ann Wilson	YL W5FLO
16 Bess Black	YL W5JCB
18 Linda Stewart	YL KD5DL
20 Maude Cornelius	YL W5PHD
21 Gloria Runyon	YL AA00
24 Pat Maier	YL W5RDE
25 Helen Smith	YL W5KL
28 Garnet Foster	YL W5KE
28 Larry Shima	W5PAN

<PERSONALITIES, CHAPT. 63>

Keeping a good thing going, Howard has been able to coerce/induce two of our distinguished members to write a little of themselves concerning mostly their Amateur activities-over the years. Have taken the liberty of presenting the information as a "Inquiring Reporter" might do!!


Carl C. Drumeller, W5JJ

(1) Military Related Activity: Carl joined the Army-Amateur Radio System in 1933 and was active for several years. Later on, Carl received a direct commission in the Army Signal Corps in 1942 as a Communications Officer. Later he was transferred to the Air Corps. After WWII, Carl stayed in the Reserves and was sworn into the newly constituted USAF; serving as Group Communications Officer for the 323 Bomb Group until retired to the Honorary Reserve for physical disability in 1952. Sometime later when MARS was constituted, Carl joined immediately and held just about every office in MARS, ie: Net Control, State Coordinator, Zone Director, Manager of the Southern Communications Region Technical Net, Manager of the continent-wide Technical Library Net, etc., etc.....

(2) ARRL Activity: Carl joined the League in Nov. 1931 and has maintained continuous membership. He was elected two terms as Colorado Section Communications Manager and two terms as West Gulf Vice-Director. Carl also held many appointive offices, such as Ass't Director, Ass't Emergency Coordinator plus ORS, OPS, OES, OBS, etc.....

(3) CAA/FAA: Carl went on terminal leave from the ARMY, DEC. 1945 and started with the CAA as a Radio Engineer in Jan. 1946. Later he was reclassified as an Electronics Engineer. During this period & to retirement he taught just about every ground based aid to aerial navigation-all the way from the LF range to DME. Carl further said, "I found transmission lines and antenna patterns most interesting. Carl retired from FAA January 1971.

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2-7

The South Canadian Amateur Radio Society

SCARS

held its annual Christmas party on Saturday, December 13 at the Jack Santee lounge on top of the University of Oklahoma football stadium. There were 65 good ole folks and a couple of good young folks who attended. The night included a surprise appearance by the most loved ARO in Oklahoma.

De Chow

was unbelievable. Unbelievably good that is. Andi and Dorinda brought the ham and turkey. Everyone else contributed a wide variety of other dishes to the Pot Luck table. There were twelve types of salads, nine appetizers, eight veggies, several types of taters, three dressings and stuffing, more breads than I could count, and too many desserts.

A whole

bunch of door prizes were given, thirty-one to be exact. If a modest value is attached to the main prize of a 10 meter FM transceiver kit, the total value of the prizes was over \$150. Of course that does not include the priceless gift of an autographed sheet from the great one's log book. A big hit was a Captain Tuna kit (sans instructions). We never did find out what the kit produced; it smelled kinda fishy! I ended up with a 'workbench' kit which had about a dozen items in it, including a set of four jumpers, a pair of pl-259 connectors, several capacitors, resistors, miniature banana jacks and plugs, a roll of wire (real copper), and several other items that will undoubtedly be useful one day.

The Award

for the best scientific paper presented at a SCARS meeting was given to David Medders, K5PL, and Marshall Maddox, KF5RQ, for their treatise on "Topics Relating to the Preparation and Transportation of Devilled Eggs." Dave and Marfo had volunteered to

prepare devilled eggs for the party and discovered quite a bit about the difficulties of culinary arts in the process. The paper, delivered at the party, drew equal rounds of laughter and groans.

However the

surprise of the night was the showing of a newly released short movie entitled "A SCARS Dxpedition." This gem was conceived, written, filmed, produced, and edited by Andi, KA6PKJ, with help from the OM Steve, N18W. The audio was done by Mark, N5HZR. This celluloid masterpiece featured a never-before-recorded view of Q.R. Zedd. Although just a fleeting glimpse of the great one and his magnificent shadow were seen, the cheer of the crowd was deafening.

The film was a big hit and will be seen again at a SCARS meeting. Watch your local newspapers and packet bulletin boards for an announcement.

A White

elephant gift exchange finished up the evenings entertainment. Forty-two gifts were opened, swapped, and reswapped for an hour's worth of good laughs. The two hits were a desk lamp(?) and a box of floppy disks which were swapped back and forth at least a dozen times. However a number of other gifts that the eye of several of the participants. There were gleams in the eyes of a number of folks which proves that one persons white elephant is another's red Ferrari.

Kudos to

Andi, KA6PKJ, and Dorinda, N5IUA, for arranging a whiz bang party. Also credit to Ken, KA5EFJ, for arranging for the use of the Jack Santee lounge, and to Mark, N5HZR, for help with the program. We owe this group for their hard work and bright ideas.

The NOVICE

class ended on December 1 with nine of the eleven starters achieving the first license. The successful novices were: Gary W. Bailey, Rob Evans, RandWall Jacques, Alan McCoy, Eddie Joe Peters, Dave Rust,

and Terry Schuur. Six of these new Novices went on to upgrade to Technician. See the article below.

Kurt Nielsen and Ann Prohaska passed the 5 wpm code test and with a little more work will pass the written test. The concurrent upgrade class resulted in three successful candidates. Joe Green, KA5AXQ, upgraded to General; Ron Knickerbocker, N5HZS, upgraded to Advanced; and Marshall Maddox, KF5RQ, upgraded to Extra.

Monte

WB5RZX and your multi-faceted (some would say two-faced) editor did a great job once again with the Novice class. Mark, N5HZR, led the code upgrade with his Compaq and a code generating program. Bronze images of the three should be hung in the SCARS radio room to express eternal gratitude.

Several ARO's

upgraded at the SCARS VE exam held on December 3 on the OU campus. Here is the list:

Earned Novice Ticket:

Gary Bailey from Mustang, OK

Upgraded to Technician:

Randall Jacques of Bellevue, NE
David Rust of Norman,
Edmund Peters of OKC,
Robert Evans of Elk City,
Terry Schur of Norman,
Alan McCoy of OKC.

Upgraded to General:

Ron Knickerbocker of Norman,
Joseph Green of Norman.

Upgraded to Advanced:

Larry Hazelwood of OKC

Upgraded to Extra:

Marshall Maddox of Norman.

Congratulations to the new ticket holders and the upgrades.

We discovered on the night of the SCARS party that Andi, KA6PKJ, upgraded to Extra that morning at the Moore VE exam. Congratulations Andi!

The club owes a big round of thanks to Sam Barrett, WA5RPP, who organized the exam, and to Dave Medders, K5PL and Mike

Continued on next page

CIMARRON

A new year is fast approaching and CARA is ready with a new slate of officers:

Pres: Bill Simpson, N5HQK
Vice Pres: Ray Barnes, AB5Z
Sec.: Dennis Painton, WK5V
Treas.: Terry McColl, KA5TVF
Editor: Jack Day, NN5Z
Net Mgr.: Leo Peil, KE5TP
Activities Chairman: Vern Brewer, KA5SZD.

The holidays brought on a flurry of activities that were greatly enjoyed by the club. The Thanksgiving Dinner at Feed Lot #2 was attended by Mr. and Mrs. Vern Brewer, Fred and Ruth Simpson, Jack and Betty Day, Leo and Ann Peil, Ernie and Wilma Martin, Dennis and Nadine Painton, Ray and Sue Barnes and Terry McColl.

The dinner and meeting of the year, though, was our Christmas Dinner held Dec. 13th, at the Feed Lot #2.

We had the best attendance that our small club has ever had at any function.

Those attending were: Major and Dede Bailey, Terry McColl, Bill and Helen Simpson, Dennis and Nadine Painton, Fred and Ruth Simpson, Jack and Betty Day, Bill Pool, Leo and Ann Peil, Vern and Fran Brewer, Ray and Sue Barnes and Ernest and Wilma Martin.

Guests included:

Lewis, N5KFK and Freda, N5EOX Patterson, Rod, WB5OVT and Lois, N5JGQ Ford, all of the Great Plains ARC and Martha Arnold, Virgil, KA5RVW and Mary Fowler of Ringwood.

After the dinner the club met at the Fred Simpsons for a regular club meeting.

Rod and Lois Ford discussed their experiences with packet radio and answered many questions on this subject. There is considerable interest in packet radio in the club and I suspect a digipeater and one or more stations will appear in due time.

Novice classes were discussed. Anyone interested in helping or attending please contact Ruth Simpson or Dennis Painton.

Its good to see Leo Peil feeling good again. Ann takes good care of him.

Major and Dede Bailey, K15P and N5FUN respectively, are moving to Canyon TX. Major is assuming a considerably greater position of responsibility for his cable TV employer and will leave us shortly. Dede and the boys will finish out the school year before packing up. Major has been a prime mover in CARA, since its inception. He has provided the Elmer figure for most of us, and most of what our club is today is due to his leadership. We want to thank you Major, for all that you have taught us about Amateur Radio and about friendship. May the bands always be clear for you and Dede and the boys.

One more item: FOR SALE: TENTEC 540 w/power supply and SHURE desk mike. All for \$400.00. Write Terry McColl, 517 W Central, Fairview OK 73737 or call (405) 227-3672

SCARS

Salem, N5MS, who rounded out the three VE's need for the exams. Thanks Guys for your time and hard work!

Jack, KU5B,

and Sam, WA5RPP, were heard working the ARRL 10 meter contest on December 13 and 14. Perhaps there were others that helped with the effort. How about a report for the next C&E?

LOGO LOCO

The logo contest was delayed until the January meeting. So if you have been thinking about an idea for a SCARS logo, draw it up and bring it to the meeting.

Y'ALL have

a Happy Holiday season and best wishes from SCARS.

We Meet Agn

on Saturday, January 10, at 9:30 am at the Red Cross building, 1205 Halley Drive, in Norman. Hpe to c u there.

***** KD5IT *****



Our December meeting was held in Watonga at the End of Main Restaurant. Dinner was served to 58 club members and guests.

We also celebrated Perry Jones', W5MGZ, birthday with a decorated cake made by Goldie Wilder.

Homemade Christmas candy was brought by Ralph. WA3PFK, and Goldie Wilder.

We took donations for the Crippled Childrens Home totaling \$100.00 from club members.

New officers for 1987 were elected as follows:

President: Ralph Wilder, WA5PFK, Watonga

Vice President: Tom Johnson, N5IKN, El Reno

Sec/Treas: Joe Garland, WA5FLT, Calumet

Reporter: Jan Kuehn, N5JUT, Okarche

Officers for 1986 did a very fine job, and on behalf of our club WE THANK YOU!

The Wheatstraw Club is sponsoring code practice on Monday and Thursday nights at 9:00 pm. We try to play various speeds of code, so join us for code practice on 146.610 MHz. Wheatstraw ARC Net night is every Wednesday at 8:30 pm on 146.610 MHz. We invite everyone to check in for net or code practice.

We have six Extra Class members and several working toward upgrading.

We wish the new officers GOOD LUCK for the new year and hope to see our club continue to grow.

The January meeting will be hosted by Okarche members at Community National Bank in Okarche on January 11, 1987 at 2:30 pm.

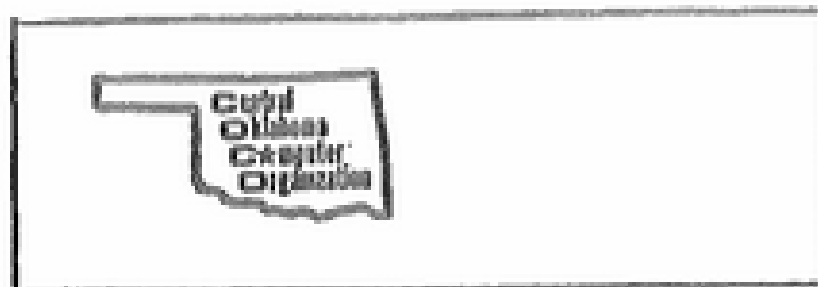
Net control for January are Okarche members.

Have a safe and happy New Year.

Jan, N5JUT

A rising young actor made his first visit to the Stork Club. He wanted to sit in the Cub Room, but the tables were occupied and he was told that he'd have to wait. "Tell them who you are," a companion whispered.

"If I have to tell them who I am," replied the actor, "then I ain't."



President Sam Murr called the meeting to order at 9:14 AM on December 13, 1986. 98 members and guests attended.

Old Business

1. Sam Murr forgot to bring the MABEL documentation.
2. Sam also forgot to bring a disk drive with a terminating resistor so that he could give his presentation on ELITE FILE.
3. Sam also forgot to bring his head, but luckily he didn't need it.

New Business

1. We elected a new slate of officers. Paul Pape won the presidency by acclamation. In a very close race of two able candidates, Ronn Folk edged Tom Mangham for the vice-presidency. (Does that mean he's the president in charge of vice?) In another close vote Martin Schiel (i.e., yours truly) was reelected won the secretary-treasurership. Congratulations to the new officers, and thank you, Sam and Tom, for the outstanding jobs you two did during the past year.

2. Al Ingle's wife needs access to the Library of Congress card catalog via modem. Rob Runyon thought that CompuServe allowed access to the Library of Congress for a small surcharge. However, the December issue of ONLINE, the CompuServe monthly magazine, didn't list such a service.

3. John Boyer was curious to know where to obtain a Page Mate, demonstrated last month by its inventor, Don Hartman. Supposedly, Data Mart on Main Street in Norman and all Radio Shacks carry this useful creation.

4. Tom Mangham volunteered to contact Dorsett Educational Software to have them demonstrate their software in the near future. Tom will see if they're free for the January meeting.

5. The Quail Springs Radio Shack is portraying both the CoCo II and III as being IBM-compatible. The CoCo is a lot

of things, but that's not one of them.

6. To point out how lucky we are to have Color Computers and how easy it is for us to find reasonable service for our machines, Tom Mangham told us the story of a friend of his. The friend has an Apple computer, which recently malfunctioned. When he took it to the repair center, the serviceman told him it would cost \$395 for a new logic board. He wouldn't even troubleshoot the problem and replace just the bad components. His only option was to replace the entire guts of the machine. The moral of that story is: buy a CoCo, not an Apple.

7. President-elect Paul Pape solicited our ideas for future programs. Let's help him out. What would you like to learn more about? What are you doing that's unique and that you'd like to share with the rest of us? Don't be shy.

Hardware Problems

1. Lewis Sample would like to buy a disk controller.

2. Al Jakubowski has tried, to no avail, to hook up a DMP105 printer to a Model III and a Model IV. He explained all the details of his problem and then Darwin Smith surmised that a defective cable was the root of his trouble.

Software Problems

1. As a class assignment Sam Murr wrote an Apple program which he plans to port to the CoCo when he has some free time. The program allows the user (usually a teacher) to write an in-depth quiz on a particular subject to test other people's (generally students) knowledge of that topic. When the student answers correctly, the program allows him to continue. An erroneous response triggers a remedial lesson on the subject matter. The program also records students' scores for the teacher to inspect. Sounds very involved and very useful.

2. Lee Lash was curious about conversion programs between the CoCo and other machines. Rob Runyon mentioned a program which transports ASCII files back and forth between the CoCo and the IBM PC.

3. Ron Sonheim spotted a program in the December RAINBOW to print Hebrew characters. The program was designed to print on an Okidata 92, but Ron has a Radio Shack printer. There was some debate as to whether the program would work with Ron's particular setup without modification. The consensus was that he should try the program first and then worry about modifying it only if it doesn't work as is.

4. Lewis Sample invited OS9 users to meet with him during the break. Jeff Landrith suggested that prospective OS9 users should purchase A RAINBOW GUIDE TO OS9, available at Radio Shack for \$15.

5. Darwin Smith wasn't able to backup his copy of P51 using BACKUP+. It turns out that you have to use the original diskette for making copies because of some nefarious copy-protect scheme.

6. Lee Lash has a CoCo 3 and a monochrome monitor. He wants to brighten the screen. He's tried CLS5, but when he reads in a program, it clobbers the effects of the CLS5. Al Ingle suggested he read an article in the January issue of the COMPUTER SHOPPER covering that very topic. Marc Bosley, always Johnny-on-the-spot with helpful ideas, suggested the following: PALETTE 0,0: PALETTE 7,63: CLS8.

7. Ronn Folk announced that he would make several cassette copies of the swap disk each month for those members who don't have disk drives.

8. Paul Asplin is selling the New Testament on disk (four, to be precise) for \$20.

Doorprize Winners

music cartridge - Lee Lash
80 MICRO journals - Mike Parish
cartridge with DCBUG & J64K - Sam Murr
Handyman cartridge - Frank McCollom
CHECKERS - Ronn Folk
500 PEEKs, POKEs. and EXECs - Vic Moore
disk manual - David Burkleo
disk manual - Jay Black
used disk - Scott Garland
Disk Graphics - Gerald Jordan
Art Gallery - Mike Weigel
Art Gallery - Gene South
Art Gallery - Tom Mangham

Continued on next page

CDCD CONTINUED

Art Gallery - Paul Pope
diskette holder - Bob Lyon
diskette holder - Robert
Browning
diskette holder - John Flick
diskette holder - Martin
Schiel
diskette holder - Loyal
Roberts
ECG Semiconductor Replacement
book - Jim Mosier, Chris Bell,
Daniel Jamet
Program folders - George
Roberts
OS9 - Paul Asplin
Atari Sounds and Graphics -
Fred Cundeliff
Mapping the Atari - Bill
deMand
blank disks - Dan Kesler
blank disks - Al Jakubowski
blank disks - Jim Stover
blank disks - Tom Brewer
blank disks - Allan Atwood
blank disks - John Foss

Special thanks to Toby Striegel for drawing the numbers and to the Radio Shack Computer Center on 59th Street for donating so many door prizes.

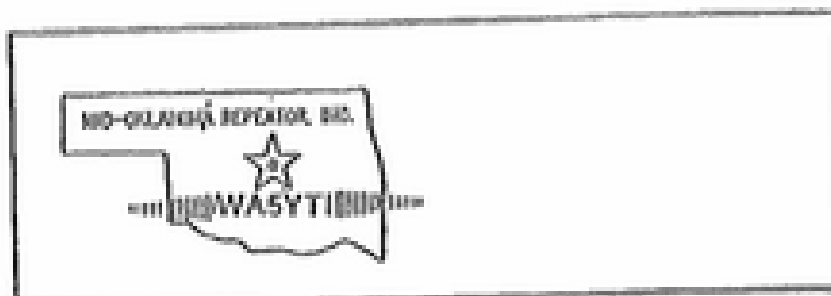
Program

Sam Murr outdid himself this month when he demonstrated ELITE FILE. In what was his best presentation yet (at least in my opinion), Sam systematically took us through the intricacies of this DBMS.

Sam pointed out many of the strengths of this program. ELITE FILE allows the user to create new data bases from old ones, carrying over only those fields that are required. The program allows multiple sub-levels (256?). The user can view records by record number, by key, or by character string.

Although the ELITE series of programs is not fully integrated, the constituent modules do interact with one another. So, the user can construct files with ELITE WORD that produce reports in ELITE FILE. In an earlier demonstration several months ago, Sam mentioned that ELITE WORD will pull in data from ELITE FILE when printing out text, making it possible to personalize form letters, etc.

Two deficiencies of ELITE FILE glared at me during the presentation. First, ELITE FILE lacks a screen painting feature for designing reports.



By the time you read this, Christmas will be past, the old year will have expired, and the new year will be under way. We always look to the new year as a time for new beginnings. It is time for new beginnings for MORI. We really need to have a good turnout for the January meeting. If we have a quorum we will have elections. We have some volunteers for some of the offices, so let's have a good turnout and get this taken care of.

The meeting place for January is tentatively scheduled to be at


POP's B-B-Q
NW 23rd & Hudson

Check either the 07/67 or 34/94 machines for further messages.

That's about it from this little corner of the world for now.

De KA5MUG - Tim

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The method ELITE FILE employs is a series of cryptic keyword mnemonics in conjunction with strings of text. That makes for tedious coding. The second drawback is the lack of helpful prompts to coax the user what to enter. ELITE FILE frequently displays blank screens, causing the user to scurry to the documentation to relearn how to perform the task he wishes.

Despite the drawbacks, Sam's obvious enthusiasm for this program seems entirely justified. Excellent job, Sam.

Merry Christmas, Happy Hannukah, Feliz Navidad, Joyeux Noel, etc.

-- Martin Schiel, 670-6891



From the president.....

December being my last month as president of EARS you might think that at last you won't have to read words of my thought. Not so. This issue will be short as I have been so busy this is a last minute thing. Next month I will try to cover the past year accomplishments.

Lee Vaughn, KA5WIS, this year's vice-president and 1987 vice-president will be club editor for 1987. Anyone from the club can submit responsible material for print in the C&E, so expect articles from a variety of sources, maybe even you!

Writing good articles for the C&E is quite a chore. The time requirement for an excellent finished product can be an hour to even three or four hours; probably more time than most people realize.

Joe Harding (I hope I spelled your name correctly Joe) the C&E editor puts all of the submitted material together to form the published copy of the C&E. Folks, he doesn't do it in an hour or two; THANK YOU Joe from all the EARS members for a job well done. EARS also wishes to thank all the other club editors who contribute to the C&E to make it the success that it is.

Project Santa is underway. EARS charges \$20 for a visit from Santa to households and even other places. Seems slower this year than last. Club members are supporting the project but general public request are down from last year. The money goes to the repeater fund. More info next month.

Planning on joining the ARRL. Please put our number (EARS) in the box provided on the application form. The number is 2086. Our club will benefit most if you do this before December 31. We are real close to winning the ARRL club challenge program. If we win we will receive a HF rig from the ARRL. This will help us provide better emergency communications

Continued on next page



What started as a new year twelve months ago is about ready to call it quits. A lot has happened in 1986--some of it was good, and some not so good.

The best news came over the air in the form of new callsigns as more and more local people were introduced to amateur radio or upgraded their licenses for higher privileges. They put forth a lot of effort for these goals, and deserve recognition. Congratulations.

More good news came as hams upgraded their stations with new equipment and added a lot more enjoyment to their hobby. Technology seems to leap in exponential bounds, and last year's computer-aided radios now seem able to aid the computer back.

Packet radio enjoyed huge successes with thousands of hams discovering this mode and becoming "packeters." Part of the FCC's rules were changed because of packet technology, and now a digipeating packet radio station under automatic control need not have a control operator present during the relay of third party traffic.

Another technological first for 1986 was the launch of OSCAR 12. Fugu, as the Japanese owners call it, is the first amateur radio satellite with digital data capability. It can store and forward packet information in addition to the traditional modes of CW and voice relay.

Another satellite, this one commercial, is being used to relay digital packets from coast to coast. Although the practice is controversial, ham radio packet data is being sent via a Telstar geostationary satellite.

Good news came from Mexico, where it appears that steps are being taken to establish reciprocity with US hams. As a result of the devastating earthquakes there last year, and relief aid provided by US amateurs, the Mexican government now issues "courtesy" Class II licenses to US hams visiting south of the border. (The bad news is that some hams are abusing the courtesy--novices getting the Mexican licenses then using them to operate voice modes). Still, the Mexican initiative is welcome by many.

With the good news came the bad. A tornado cut a sizable swath through Edmond, but spared the lives of those in its path. A lot of credit goes to the ham radio storm watchers, spotters and coordinators--their eye witness weather reports were

EARS CONTINUED

in time of disaster and also provide a rig for students of our classes (at a club station). You don't have to be a member of EARS to use the number. Even if you are not a member of EARS but perhaps have heard of the great things EARS is doing for amateur radio and would like to help; if you aren't an ARRL member -- please join and use our number 2086. Let's let the rest of the country know that there is activity in OKLAHOMA. Thanks.

Hope you had a Merry Christmas and may you have a prosperous New Year.

Bob McCoy, NSBUJ; 348-2032 73

MORE CB TO 10 FM

In December we listed some of the "CYBERNET" CB boards that convert easily to 10 FM. If you've found one and want to convert it you may be wondering just how and where to get parts, information, and schematics. Well, here is a good start so perhaps you can take the ball and run with it.

Bob Heil, K9EID, published a 10 FM Handbook for around \$5. This book is invaluable because it goes into detail on how the Cybernet board works and various uses for it. It also details the conversion process to 10 FM nicely. Heil, Ltd. in Marissa, IL used to sell a complete kit for 10 FM with repeater offsets and everything for around \$65-75. He may still have some of

being used by the National Weather Service and by the local media to track severe weather and warn potentially hazardous conditions.

During Ham Holiday RACES and ARES forums presented a fresh look at the needs for amateur radio and volunteers during disasters. First--we need to be prepared. Next--we need to be trained. And finally--we need to be ready.

ARES tries to take care of the first two steps--helping to prepare for possible emergencies, and training in the various communication techniques anticipated.

ARES is voluntary. All you need is a ham ticket and a willingness. Give us a listen. In the Oklahoma City area monitor the W4SYTI VHF repeater (146.94) Thursday evenings at 8 PM local time.

From all of us to you and your families, have a safe holiday season, and Happy New Year.

these for sale.

73 magazine, from around 1977 to 1980, had numerous articles in a series called CB-TO-TEN. If you can gain access to these magazines, look in the December issues for an index. There were many good conversion articles in those issues for AM, SSB and FM conversions, all listed by make and model number of the radio. However, most of these were for SSB. By the way, most conversions I have seen were either SSB OR FM. I have yet to see an article incorporating both modes. The definitive article on 10 FM was in the January 1980 issue of 73. If you can locate a copy of this article, it would be well worth your time to look at it. This conversion is the super-deluxe version, but they don't have to be that complicated to work well.

There are basically two main steps to shift the frequency to 10m and convert to FM. These are:

1). TRANSMITTER CHANGES

A). Install a 12.651 MHz crystal in place of the factory 11.806 MHz crystal, so the PLL can operate in the 10m bands. Retune the transmitter and receiver for maximum power out and noise on receive. Convert the transmitter to FM (easy part. It takes one capacitor and one small 5k pot).

B). Install optional repeater offset crystal. (10.795 MHz to operate 10m repeaters).

2). RECEIVER CHANGES

A). Install FM detector board. (only 4 hookup wires)

B). Hook up an antenna and wait for the band to open up.

There are obviously a few more steps than I've described here, but it is still quite simple. Here is a list of parts and information on suppliers you may find useful.

CRYSTALS-KW Mfg. P.O. Box 508, Prague, Ok. 74864. Ph # (405) 567-2285. (Ask for the 12.651 MHz for the Hygain 23 ch. CB conversion like Bob Heil uses. They will know which one to make.) Costs about \$4.

FM DETECTOR BOARD-Morning Distributing. P.O. Box 717, Hialeah, FL. (Costs \$8)

Salem

FREQUENCY COORDINATOR BLUES (Take Two)

There have been several responses to the article I wrote for the November 1986 issue of C & E regarding the existence of an "alternate" or rump frequency coordinator. I heard from John Pedersen N5DKQ, coordinator of the Kansas Amateur Repeater Council who detailed a similar problem in Kansas where a small disenchanted group of amateurs in the KC area declared an alternate coordinator to handle frequency coordination matters in the KC surrounding area. Efforts to meet with the rump "coordinator" met with little or no success and the situation degenerated into a small version of a range war.

John indicated that the "coordinator" spare arose when a previous regional coordinator sponsored by KARC was asked to resign. Unfortunately, he took it personal and decided to vest himself with the continued power (really a misnomer) to "coordinate."

Perhaps the more interesting of the developments was a phone call from one of the "founding" members of the Oklahoma Repeater Coordinating Council who called me and disavowed any participation in the group by him. He said that he was contacted about starting a group and he urged the person to investigate the problems. He later found out about his name being placed on the ORCC "Manifesto" I referenced in the November article, apparently without his permission. He said that he wanted to make sure that it was understood that he was not participating and he also wanted to apologize for any misunderstandings. Humm. Well, looks like to me that the ORCC has a few organizational problems of its own to clean up before it offers its help to the Oklahoma Repeater Society.

Another response is yet another article on frequency coordinators in this issue of the C & E by Hal Deitz WB9VMY, the new "frequency coordinator." Hal thanked me for

bringing his new organization to everybody's attention, but then chides me for not mentioning his name. And, oh, yes, Hal. You can call me Micheal or Mike. I don't even let my secretary call me Mr. Salem. Awful formal, especially in the amateur fraternity.

But seriously, Hal, I had a reason for not mentioning names. I think the recent phone calls from one of your "organizational members" bears out my judgment. The document that I received that established the ORCC appeared to have been typed on a computer printout and was unsigned by anyone, including you. I only received it several days prior to the C & E pasteup. I only had a brief time to consult with Dan Schroeder K5FVL, frequency coordinator for the Oklahoma Repeater Society. The document had only names and calls for its committee and no addresses or phone numbers. Forgive me, but the last current call book that I had was in 1964, shortly after I got my general license. I really didn't spend a lot of time looking for the roster issue of the C & E. So I chose not to list the names because I was not able to personally verify directly or indirectly that any of the persons listed actually subscribed to your organization. Now, I am glad that I did not embarrass someone by publishing their name and associating it with an organization which they do not support. Come to think of it, you didn't publish their names either.

But, as the story goes, seriously folks, I don't want to minimize the apparent dissatisfaction Hal feels about the present coordinator. But, for the most part, I find that his experience doesn't jive with me. Dan Schroeder is a fine person and has always treated me with utmost courtesy. He has coordinated several frequencies for me and is very knowledgeable about Oklahoma and repeaters. He has built and designed and maintained VHF and UHF repeaters probably as long, if not longer, than I have. I just can't believe that he intentionally gave Hal the brushoff.

After reading Hal's article, I conclude that one of Dan's problems is that he is not a mindreader. The fact

that Hal did not mention in his request for coordination that he did not intend to put up a FM repeater should have automatically made Dan expect something exotic was afoot. Not even Jean Dixon might make that leap of faith. I guess Dan just concluded, erroneously, that the repeater was not FM.

It is unfortunate that the request for coordination was determined to be unsuitable. But that is why we select frequency coordinators. Somebody has to maintain a list and in compiling that list decisions must be made and some collective wisdom applied to the selected frequency and its use. So, some-people get turned down. If you are turned down because there is a repeater in Cleveland, Oklahoma (not county, its a town west of Tulsa), or the band plan has changed, well, somebody has to make those decisions.

I was also surprised to find out that the Oklahoma Repeater Society does not coordinate 1.2 Ghz repeaters because the ORS Bylaws limit the group to the VHF/UHF spectrum. I always thought that 1.2 Ghz was UHF and I guess that I need to get a new edition of the Howard Sams "Reference Data for Radio Engineers" Fifth Edition which makes the same mistake that I do in identifying the UHF spectrum as running between 300 to 3000 Mhz (See Page 1-2). But you really are not in jepordy up there. There are no frequencies coordinated at this time or, there are plenty of frequencies left.

I also wonder about a statement that Dan is not interested in coordinating frequencies on the UHF 440 Mhz band. I have a couple of those frequencies coordinated myself and Dan recently reported that he has coordinated over 50 frequencies in the 440 Mhz band, up from 19 in 1979. There is even one frequency coordinated in the 900 Mhz band. Perhaps this rapid growth in UHF use is deceiving, but it seems to me that anybody seeking a 440 frequency should really have his pick of the litter at this time.

But a frequency coordinator is not a person, it is an organization. And I thought that the issue of the parliamentary procedures at

last had come to rest, but not so. In my mind, the ORS meetings are conducted in substantial compliance with Roberts Rules. These are designed to provide a structure for an orderly procedure. The mere fact that an election occurs demonstrates compliance with a structured order. Everybody got to nominate somebody they wanted and everybody got to vote. ORCC can't even claim that. Besides, I don't remember seeing any meeting announcements. For that matter, neither did one of their directors.

I also can't emphasize enough that it is not the job of a coordinator to assign frequencies. It is simply not in the job description. Nor should it be expected that a coordinator would maintain a list of "available" frequencies. As Einstein might put it, "available" frequencies is a relative term. The "availability" of a frequency is a time, space, power, antenna height and receiver sensitivity term. Not to mention adjacent channel interference. Repeaters and others are coordinated not in relationship to their availability, but in relationship to their interference potential. And that interference factor, actual or potential, is a complicated factor. An "available" frequency in a town 15 KHz away from a powerful repeater might only be available as long as the other repeater is not transmitting. Move it 10 miles away to the other part of town and it might become more available. Can the ORS or the ORCC tell anybody all the "available" frequencies? They would have to keep an available list for each of the 77 counties and several lists for various areas around the larger metro areas. So, is that really a useful way for a coordinator to spend his time? Not really, especially since the FCC places the responsibility for proper operation on the individual operator. The suggestion to an FCC inspector that a frequency that doesn't work was part of the available frequencies provided by the coordinator probably will not be grounds for tearing up the pink slip.

A coordinator simply cannot be aware of every adjacent channel or potential intermodulation product in town. He does not have an obligation to solve your interference problem, but only to offer assistance in minimizing interference potential. The more reasonable approach in these days of decentralization is

to let the local "expert", that is, the repeater trustee, find a frequency that satisfies his criteria for the operation that he plans, then allow the coordinator to assist in the placement of that frequency in the larger context of coordination with other systems. An available channel for a low power system would not be appropriate for a high powered station located on a tall television tower.

Plus, if everybody has the right to coordination, then why do we call him a coordinator. A "right" is something that a person can enforce legally and expect a particular result. But not everybody has the right to a coordinated frequency in the two meter band, for instance. There are not just enough to go around. So, everybody has a right to a coordinated frequency until we run out. Then decisions must be made that exclude some and may permit others. The criteria used for that selection process are the coordination standards. And those standards must be determined in accordance with accepted engineering criteria governed by the laws of physics. It is also helpful to have those criteria applied by someone with practical experience and knowledge of the subject matter. A little bit of diplomacy probably wouldn't hurt, especially in light of the heat that denied coordinations generate.

Besides, coordination is merely a cooperative effort. The FCC has said that it will recognize a coordinated repeater over an uncoordinated repeater, but that doesn't mean that two repeaters coordinated by different coordinators are equally legal. The Commission will look to the coordinators to see which one is the recognized coordinator. If both coordinators are recognized, then the question of coordination becomes moot and it is one of simple interference. This means that a repeater operator who patronizes a nonrecognized coordinator subjects himself, not the coordinator to any sanctions. The December 1, 1986 issue of the W5YI Report recounts just such a situation in Kansas City and then quotes Ray Kowalski of the FCC in response:

"Two active coordinators in the same large metropolitan area which do not take each other's

coordinations into account may soon cause repeaters in the area to experience interference. And it is the licensees of these repeaters - not the coordinator - who risk sanctions if interference occurs."

"The FCC decided against a national coordinator in PR Docket 85-22. . . also decided not to assume the role of a super-coordinator itself, in the process choosing not to set up any appeal process to the FCC on coordination matters. But the FCC recognized that exactly the situation you describe could arise. Thus the FCC said, "We encourage local coordinators to participate in a regional or umbrella entity."

"The FCC intends to rely upon state and regional councils to recognize legitimate coordinators. . . . Revocation of regional and state council recognition of the other local coordinator is prima facie evidence that that coordinator no longer has the support of a majority of those eligible to establish repeaters in the area it claims to coordinate. Stations which operate with illegitimate repeater coordinations do so at their peril."

The statement tells us two things. You ain't a coordinator just because you say you are. Second, if you chose the wrong coordinator, you may have to accept sanctions if you go astray.

I think that the Commission is saying, you are a self-regulating service. So do it and don't bother us unless it is important. Two other amateurs recognizing you as a coordinators just doesn't make you a coordinator. The operator who wants to be safe will probably secure coordination from both coordinators. If they both assign him the same frequency, then why do you need two coordinators? If one grants the frequency coordination and the other denies it, then you still are unsure. Two coordinators will only decrease the chance that a system will get on the air, not help it. And that will slow the growth of the proper and legitimate use of radio frequencies. At this time, only the Oklahoma Repeater Society has the depth of experience, acceptance and service to the amateurs of this State.

Micheal Salem N5MS

ZEDD AN ELMER

everyone in the room was thrilled and delighted. Especially after somebody took the microphone long enough to footnote Zedd's remark with the explanation that Zedd didn't mean he was going to change his name, but rather act as teacher, advisor, and all-around savant for some poor boob just getting ready to start down that long and arduous path toward the Amateur Extra Class and maybe even the coveted Yodar Kritch.

"How," somebody in the crowd asked, "will you pick the lucky soul you'll Elmer?"

"I figure," Zedd replied, "that I'll let fate and good old red-blooded American competition decide who I help along the way to ham radio immortality."

"In other words, the first guy or gal that asks me, I'll take on and make an A-1 operator in record time."

Some of the boys who teach novice groups regularly on the North Campus were heard to remark that teaching CW and electronic theory is not as easy as it looks. Zedd smiled down on them and reminded them of who he was.

"I can teach ANYBODY because of my brilliance and vast experience," Zedd said. "And besides, it can't be all that hard. Look at KU5B. Even he got a license."

Well, of course your reporter was transported with delight, as always, to be noticed by the great man. So thrilled was the undersigned that several other complimentary remarks dished out to others in attendance by A5A in the next few minutes were missed because my vision was blurred by tears of gratitude.

It was possible, however, to witness the historic meeting of Zedd and the new candidate for an amateur ticket later that very evening.

As the club members and guests wended their way toward parked cars at the conclusion of festivities, several of us were yipping along at Zedd's heels, slathering over the possibility of getting another morsel of wisdom or pat on the head. So we saw and heard what happened.

Zedd was helping Tondelayo into the Toyota Land Rover for the ride back to

Honor Roll Ranch when suddenly a tall, skinny, long-haired weirdo, wearing a Grateful Dead tee shirt and cutoffs, loped out of the icy night. Said weirdo had some kind of a piece of gear on a length of clothesline around his neck, and a microphone clipped to his left earlobe beside his garnet dangler.

"Mr. Zedd! Mr. Zedd!" the weirdo cried. "I am your man! I have arrived! Oh joy, oh rapture!"

Zedd pulled a sixshooter out of his pants and might have blown the nerd away right then and there if several pals had not intervened.

Calmed somewhat, Zedd faced the lank dork.

"What do you want, boy?" he demanded.

A burst of sound came from the piece of gear on the weirdo's chest. The gear was a CB radio. The burst of sound was kind of unprintable, right off Channel 19.

"I wanna be a radio armature!" the dork screamed. "I am ten-eight and ten-six and ten-fourteen and tentatively ready to start work raht NOW! I wanna be a HAM, you gotta copy, good buddy?"

Somebody had to hide the sixshooter.

Zedd, you see, was clearly trapped.

He had promised to teach whoever asked him first. He had said he could teach anybody.

"Q.,," Tondelayo said softly from the seat of the Toyota, "you promised...."

Such is the courage under pressure of great men that

Zedd saw his duty in a flash, and composed his handsome visage into granite.

"Son," he said, putting on a rubber glove and then putting his hand on the dork's shoulder, "you come out to Honor Roll on Saturday. I'll start your first lessons in how to become a ham."

"Wow! Alakazam!" the nerd screamed. "Thank you! This is plumb bodacious! Ten four, good buddy! Keep the pedal to the metal! I'll see you on the flip side! I'm outta here!" And he raced off into the night, trailing his twin truckers.

A strange silence fell over the parking lot. You could hear the growling of W5OU's stomach. Clearly, this was going to be one of Zedd's greatest challenges. We could hardly wait to see what would happen next.

-- KU5B

A teenager was so shy at school dances that his friends nicknamed him "The Shundance Kid."

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JANUARY		The managing editor assumes no responsibility for the data contained herein.		1	2	3
4	5	GREAT PLAINS MORI	7	AERONAUTICAL ALTUS AREA OKC/PM	9	ARDMORE SCARS COCO
WHEATSTRAW 11	EDMOND CLUB 12	DIDAR OU 76'ers 13	14	CIMARRON KAY COUNTY 15	16	VHF CLUB 17
EARS 18	VE EXAMS Red Cross 6:00 pm 19	AUTOPATCH 20	21	22	EDIT NIGHT FOR C & E 23	24
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Q. R. Zedd

ZEDD TO BECOME AN ELMER

Our own great Q. R. Zedd, A5A, made a number of wonderful New Year's Resolutions. One of them is likely to change world history and shake amateur radio to its foundations.

Zedd, the world's greatest DXer and holder of all records in the sport, sprang his new plan on the boys and girls of SCARS at the annual Christmas pigout early in December.

It was terrific that Zedd had the news to brighten the party. The gathering had been somewhat sadder than normal during earlier portions of the evening because the annual high-speed CW demonstration and tap dancing entertainment had been cancelled.

Tondelayo, Zedd's long-time QSL secretary and more recently his bride, could not do the CW or the dancing as usual due to the fact that, while still young, she is not quite as nubile as she once was. As a matter of fact, she is in the family way, and demurely took a back seat this year to Zedd's announcement and the Santa Claus impersonation given by KA5EFJ.

The regular club secretary for the South Canadian Amateur Radio Society will no doubt provide a full report of the EFJ doings. Here we are thrilled to get to report Zedd's announced New Year's resolution, and first results of same.

After giving the folks a few insights into how he became so wonderful, along with tips on DXing, Zedd turned more serious.

"People," quoth the great one, "over the years I have of course done many brave, intelligent, and even heroic things. Like when I activated

Atlantis a year ago, or the time I heard AF5X calling CQ, and answered him. You all know how incredible I am.

"I have been thinking, however, that it is time for me to return to our beloved hobby a little of the pleasure it has given me, and therefore I have made a momentous decision.

"I am going to share some of my expertise and knowledge with someone less talented and fortunate than myself."

Zedd was interrupted at this point by shattering applause, and a rumor promptly shot around Norman that Zedd was finally going to share his inside knowledge of linebacking technique with the Boz, something No. 44 has been begging him to do for more than two seasons. However, Zedd quickly clarified the point.

"What I aim to do," the great man said, "is become an Elmer for some new aspirant to our beloved hobby."

Well, as you can imagine,

SEE ZEDD INSIDE

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