

The South Canadian Amateur Radio Society

WERE U THERE?

The club held its monthly meeting on Saturday, September 13, at the Red Cross. The meeting was called to order at 9:40 am by president Jeff, KE5EB. The meeting was attended by 30 members and two guests: Gene Halley, KF5FW, and Bob Guthrie, who is interested in getting into amateur radio.

NOT MUCH LEFT

Monte, WB5RZX, reported that the club treasury held \$85.82. He had paid three bills during the month: \$68 to CORA for C&E subscriptions; \$64.02 to Dean Waddell for repeater parts; and \$56.72 for crystals for the backup repeater project.

TAKE IT BACK

Jeff, KE5EB, noted that the campaign contribution voted by the club at the August meeting was not made after discovering that the candidate could not legally accept the donation from a corporation. Upon a motion from Frank, W2OCM, the offer to donate \$75 to Gordon Jones was rescinded. (This action had nothing to do with the shortage of funds, I promise. ed)

DID U GET URS

The list of amateurs in the Norman area and a repeater user's guide was mailed to all club members recently. If you did not receive a copy, contact WB5RZX or KD5IT.

SHOW & TELL

Ken, N5BEW, displayed the Motorola transceiver to be used for the battery backup

system being installed on the club repeater. The project, when completed, will allow the use of the repeater and controller even if the commercial power fails, a plus for emergency communications.

SO WHAT'S NEW?

A discussion of the shortage of funds in the club treasury and what to do about it was initiated by Jeff, KE5EB. After several suggestions of how to deal with the problem, Jeff appointed Andi, KA6PKJ, to chair a committee which is charged with bringing recommendations for raising funds to the next meeting. The other members of the committee are Ken, KA5EFJ; Dorinda, N5IUA; and Monte, WB5RZX. If you have a suggestion on how to raise funds for the club treasury, contact one of the members of this committee.

A LOT OF CLASS

A class to help newcomers (and oldcomers) to earn a novice and/or technician license will be held this fall at the Norman Red Cross. The class will be held on Wednesday nights from 7-9:30 pm. Monte, WB5RZX, and Davis, KD5IT, volunteered to do the theory and CW. There will be a \$15 fee for the novice-tech study materials. A 13 wpm code study group will be held at the same time using a computer to generate the code. Mark, N5HZR, is providing the computer.

Past experience has indicated that most of the people taking these classes learn about it through personal contact. So pass it on to anyone who wants to get into amateur radio. We have had success with all ages, 11 to 75+, all sexes (are there more than 3?), and a diversity of occupations.

NEXT QUIZ

A VE exam is in the planning for this fall. It will be held

after the Novice-tech class probably during the week of December 1 in Kaufman Hall on the OU campus and will be in the evening. Watch for the details in next month's C&E.

POT BANDIED

Gary, WB5ULK, raised a question about planning for the club's annual Christmas dinner. After several suggestions were bandied about, the group seemed to like the idea of a pot-luck affair at the Jack Santee lounge in the OU stadium. Ken, KA5EFJ, volunteered to see if the lounge could be used for that purpose.

HEAR YE NOW

From Gary, WB5ULK- A meeting of amateurs interested in forming a packet radio club was to be held at the OKC Red Cross at 1 pm on September 22.

Also from Gary, WB5ULK- A UHF repeater is being planned for Moore(city of) by Moore(Bob, aka KA5ETA) et al. It will be on 442.2 MHz and will eventually have links to 2 meters and to the 220 MHz band.

MOORE HOTLINE

At the request of Steve, N18W, and Andi, KA6PKJ, the emergency auto-dial number 918 on the SCARS repeater (output on 147.060; inputs on 147.660 and 146.460) will be programmed for the Moore(City of) police and fire departments (They have the same phone number). Add this to your repeater user's guide.

918 Moore Police/Fire Dept

WE' LL MEET AGN

The next SCARS meeting will be on Saturday, October 11, at 9:30 am in the Norman Red Cross building at 1205 Halley Drive on the OU North Campus. See you there! KD5IT

GREAT PLAINS A.R.C.

WSHGH Repeater 146. 13/73

H U M - D R U M

What's that? You say you're tired of reading about the same old club minutes in every month's article. Relax! There won't be any report on the September 1986 club meeting because there wasn't any. Once again, we planned a picnic at Woodward's Crystal Beach to try to get rid of the last of the Sloppy Joes left over from August which were in turn left over from an earlier date. The food was excellent and the fellowship even better. Our club constitution requires ten members be present to have a meeting, and we fell one short of the magical number. At any rate we had a great time and just about did away with the Sloppy Joes this time.

TAKES ONE TO KNOW ONE!

The OM, WB5OVT, couldn't attend the September club meeting because he was previously committed to ride in a donkey baseball game sponsored by the Gage Chamber of Commerce. Supposedly the Gage group was to play a group from neighboring Arnett OK, but the donkeys were to have their say about the final outcome. It seems the animals were very well trained, were quite docile and seemingly uninterested until the ball was hit. Some bucked when the ball left the bat, some wouldn't let the rider back on after he had dismounted and picked up the ball, and others were trained to buck when the rider attempted to throw the ball. The donkeys used to ride the bases weren't any easier to handle. A couple would go almost to first base and then stop, only to remain almost immovable. Probably the highlight of the whole evening was the large gray mule who managed to throw every batter at least three times before reaching first base. The OM strongly maintains he wasn't thrown that much but I've heard from several reliable sources that if he would have taken his talkie with him he could have transmitted as aeronautical mobile on several occasions.

See 6 P A R C, Page 4

VOLUNTEER EXAMINER PROGRAM

V.E. tests are held the third Monday of each month at 6:00 P.M. at the Oklahoma City Red Cross at 10th and Hudson. These sessions are conducted under the W5YI Program and are sponsored by C.O.R.A.

Before reporting on this month's test results, I would like to caution those of you who are studying for your Extra Class, that the examination question pool has changed and that you should make sure that you are studying the latest information. If you are not certain that your study material is the latest, call Don Kelly (KASUOS) at 348-1669 and he will be glad to confirm your material.

Scheduled test dates through June 1987 are as follows:

1986	
October 20	November 17
December 15	

1987	
January 19	February 16
March 16	April 20
May 18	June 15

In our September test session we had a total of 5 candidates with Len (KA5ZZK) going from Novice to Tech; Phil (KA5WAX) going from Novice to General; and Martha (KA5ZPE) taking home a 13WPM Code Certificate.

We would like to remind you that these test sessions are for all license grades; from Novice to Extra Class. Walk-ins are accepted.

If you do not have a form 610, one will be provided. A \$4.25 fee will be charged, and this fee covers as many elements as you successfully continue to pass (you lose nothing by aiming for the highest license and it gives you the opportunity to see what you may be in for at future tests).

Novice tests are available and are free of charge.

We hope to see you at the next test session.

Ron - ND5S

CIMARRON

It's time to play catch-up in this column -- past time as a matter of fact. Your reporter must plead guilty to neglect but this has been a very busy summer.

Let's see what has transpired in CARA since my last reporting.

The August picnic probably was the stellar event. That occurred August 21 and was well attended. Home made ice cream, baked beans, potato salad - everything that makes a picnic except the ants.

Those attending included Fred and Ruth Simpson, Denny and Nadine Painton, Ray and Sue Barnes, Ernie and Wilma Martin, Bill and Helen Simpson, Bill Pool, Terry McColl, Steve and Karen Schoonmaker, Dede Bailey, Brad, Major Jr. and Blaine Bailey, Jack and Betty Day and special guest, Mary Esther Martens. Mary Ester, a retired missionary after 17 years in Paraguay, and 7 years in Mexico is well acquainted with Ham radio, having used the AM radio networks many times while out of the country.

I can attest to the appreciation the missionaries have for Ham radio. I just returned from Honduras where Hoyt Roberts, HR3HMR, La Ceiba, and David Harms, HRODHX, Tegucigalpa, carry the mail to the states for missionaries in the country. Steve Baillio, KA5HIK and Carl Rees, N5ETH, are also busy hams down south but I do not recall their Honduran calls.

Ham Holiday in OC was well attended by CARA. I saw Denny and Nadine Painton there. Fred Simpson, N5FUO and Ruth N5FUR, Ed Arnote, N5GOR, Major and Dede Bailey, KI5P and N5FUN were also there. My XYL Betty, KA5RTW, and I stayed over for the Sunday Morning windup.

Word has it that Leo Peil, KE5TP, has been having health problems. Leo has completed his summer job with the Canton Lake Authority and we are hoping to see (and hear) more from him now. Leo, we are concerned about you and hope that you will be better soon.

See CIMARRON, Page 4

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 IMAN, WBSVN 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, KDSIS 524-5080 VP HUGH BENSON, KASDGY 946-0023 SE JOE BUSWELL, KJSB 732-0676 TR ELLARD FOSTER, WSKF 789-6702 EDITOR: JOE BUSWELL, KJSB 732-0676
3 MID-OKLA REPEATER MEETS: 8:00PM FIRST TUESDAY, OKLA CIVIL DEFENSE, WILL ROGERS BLDG., STATE CAPITOL PR TIM RAUSCHER, KASU6 848-9910 SE MIKE SANBUCO, KASTSD 672-9176 TR SID GERBER, WSKDZ 737-1050 EDITOR: MIKE SANBUCO, 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, NSFNU 340-4468 VP DAVE HOLDER, NSG0Y 524-4711 SE DAVID CARAM, KFSEB 751-5672 TR ART HERNANDEZ, KFSOK 354-9724 EDITOR: DAVE HOLDER, NSG0Y 524-4711
5 OKLA UNIVERSITY ARC MEETS: 7:30PM SECOND TUESDAY (SEP-MAY) 119 WILSON CENTER, 1334 S JENKINS PR FRANK DONALDSON, NS10J 329-4172 VP JOHN MUSTENBERG, KESN 325-2382 SE PETER RICHESON, KASCOI 329-3217 TR GREG SMITH, KASLZN 366-1641 EDITOR: GREG SMITH, KASLZN 366-1641
6 ALTUS ASSOCIATION MEETS: 7:30PM SECOND THURSDAY NORTH MAIN FIRE STATION (CD) ALTUS PR DWIGHT DENNIS, WBSKRH 482-2498 VP S/T MIKE SCHENKLE, KBSXN 482-1797 EDITOR: MIKE SCHENKLE, KBSXN 482-1797
7 BICENTENNIAL (76er) ARC MEETS: 7:00PM SECOND TUESDAY, OGAE BLDG, SE 3RD & E. K. GAYLORD BLVD. PR DONALD DUCK, AESN 691-4199 VP TED VANLANINGHAM, WDSJNT 262-1675 SE JERRY SPROUL, NSAUH 354-2061 TR EDITOR: JIM SEALS, KBSXN 381-2005
9 WHEATSTRAW ARC MEETS: 2:30PM SECOND SUNDAY. LOCATION VARIES. SEE CLUB SECTION FOR DETAILS. PR JOE GARLAND, WASFLT (CALUMET) 893-2660 VP JOHNNY FISH, K56BN (CALUMET) 893-2227 S/T GEORGE MASCHIND, K56GL (OKARCHE) 263-7614 EDITOR: VIRGINIA BENEDA, N5END (WATONGA) 623-7935

10 CENTRAL OKLA COMPUTERS MEETS: 9:00AM SECOND SATURDAY, RED CROSS BLDG NW 10 & HUDSON, BACK DOOR. PR SAM MURR 324-6443 VP TOM MANGHAM, KSLDI 677-5291 S/T MARTIN SCHIEL 670-6891 EDITOR: MARTIN SCHIEL 670-6891
11 EDMOND AR SOCIETY MEETS: ODD MONTHS, 3RD SUNDAY, 2:00PM EDMOND ECC. DINNER, EVEN MONTHS, 3RD FRIDAY. PR BOB MCCOY, NSBUJ 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 NAILON, KSDLE 341-8289 S/T HOWARD BAKER, WSAS 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, KOSFX 762-8616 VP STEVE SCOTT, KASSEK 762-0117 S/T HARRY BEATTIE, WDSOPR 765-3862 EDITOR: CHARLES NORTH, NSEYD 762-8136
14 CIMMARON ARS MEETS: 7:30PM THIRD THURSDAY, NSFUD SHACK 827 S 13, FAIRVIEW PR STEVE SCHOONMAKER, NSFUP 886-3274 VP BILL SIMPSON, NSHOK 883-5523 SE MADINE PAINTON, NSFHH 764-3599 TR BETTY DAY, KASRTW 227-3462 EDITOR: JACK DAY, NNSZ 227-3462
15 SOUTH CANADIAN ARS MEETS: 9:30AM SECOND SATURDAY, RED CROSS BLDG NORTH OU CAMPUS, NORMAN PR JEFF WYKE, KESEB 329-6762 VP FRANK RIZZO, W20CH 321-2899 TR MONTE BATEMAN, WBSRZI 329-7485 SE LINDA BRANDT, NSDWN 321-5081 EDITOR: DAVIS EGLE, KDSIT 321-7570
16 EDMOND AR CLUB MEETS: 7:00PM SECOND MONDAY. SEE CLUB SECTION FOR LOCATION AND TYPE PR MARK NORTHCUTT, WDS0YI 755-4672 VP BOB MOORE, KASETA 799-1765 S/T KAY NORTHCUTT, WAS0YJ 755-4672 EDITOR: MARK NORTHCUTT, WDS0YI 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 MELTON 789-0280 EDITOR: WILLIAM COOTER 360-2141

18 GREAT PLAINS ARC MEETS: 7:30PM FIRST TUESDAY WOODWARD PUBLIC WORKS BLDG. PR WINDLE HATCHETT, WASPLN (FT SUPPLY) 766-3561 VP LEWIS PATTERSON, WSKFK 256-2111 SE LOIS FORD, KASPYA 923-7683 TR FREIDA PATTERSON, NSEDX 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, MNSLUI 765-5707 VP VERNON TREIBER, NSAMV 767-1571 SE GLEN BISHOP, JR, KASPU8 767-1031 TR BIZ MICHY, WDOHCO 762-3297 EDITOR: DOUG EVERITT, NSDUB 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, WBSMPC 226-1950 SE ROBERT GRIFFIN, WBSVKA 223-8741 TR JOHN MERLYN, WDSFZO 223-9543 EDITOR: JACK GANT, WSGM 223-2619
21 TRI-CITY ARC MEETS: 1ST THURSDAY OF THE MONTH. PLACE: PR LLOYD WILLIAMS, KASUKG 382-3231 VP RON PHILLIPS, WBSUPU 382-1856 S/T J. B. BILLS, KESNU 379-3992 P.O. BOX 655, HOLDENVILLE OK 74848 EDITOR:
CENTRAL OKLA RADIO AMATEURS MEETS: 7:30PM FOURTH TUESDAY, RED CROSS BLDG. 10 & HUDSON OKLA CITY (BACK DOOR) PR DON SAUNDERS, WDSISS 751-0404 VP JIM BUSWELL, NSBED 236-0368 SE KATHY WHITED, WBSNDO 799-1457 TR SUSAN ST LAURENT, KFSLG 324-8180 COM/COM: CHARLES HOFFERBER, NSFNU 340-4468
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CIMARRON Continued

We are proud of Nadine for going back to college after 22 years. More and more people are realizing that education is a life time experience and it is never too late. She and Ruth, who is working on her Extra Class ticket at seventy plus are an inspiration to all of us.

Steve, N5FUP, (our Prez) and Ed, N5GOR are battling the Advanced barrier and hope to upgrade soon. Ed had the misfortune to have a pick-up burn up. Rumor has it that he did not mind losing his pick-up but losing his radio was almost more than a man should be asked to bear. Ed has had some hard luck but he is resourceful and I'll bet another radio, like the phoenix will rise from the flames.

One of the high-lights of my trip to Ham Holiday was meeting and talking with Joe Harding, WA5ZNF and wife at the banquet. Joe, it was a privilege to meet you. We appreciate the work you have done so well on the C&E. Take care of yourself.

All Ham Holiday comments I heard were good. CORA is to be congratulated on a good job. I would like more seminars for the younger Hams...perhaps beginning kit construction, etc. Basic stuff! Hi-Tech may some day eliminate the kids, if we don't watch out. Otherwise...great stuff, CORA.

Bill, N5HQQ, and XYL Helen, N5HQL were to have the group out for Field Day but the illness of Helen's mother prevented the outing. At this reporting, her mother is still having difficulties and we are concerned for her and Hellen and Bill. Our prayers are for you Helen and for your Mother.

Well, I think that's a wrap for now. I will close with an offer to sell some really nice equipment by our electronic whiz-kid, Major Bailey, KI5P.

ICOM 1C745A Less than ten hours on this rig. Like New. Complete with keyer and FM module installed and a HAMKEY paddle. \$755.00 takes it all.

ICOM 1C2AT, with BP3, BP4 and drop-in charger. \$175.00.

KENWOOD TR 7400A, 2 meter mobile. \$150.00.

PACE LANDMASTER, 2 channel synthesized 25 watt UHF commercial mobile. Also covers 440-450. Brand new. \$250.00.

Major Bailey, KI5P, (405) 227-2349.

MORE Q R Z

abilities with a 35 mm camera are legendary, under his professional name of Ansel Adams. And everyone knows how he helped Willie out with Farm Aid 2.

Still, radio is his first love and we are happy to report that he was back at Honor Roll by presstime, firing up the linears and creating interesting endfire coronas off the big Yagis. He was last heard on the low end of 20 CW, working Russians even W5NUT couldn't hear.

"I had to get back to one of my true loves, Charlie Whiskey," Zedd told us. "My code speed had fallen off real bad from non-use. Why, I worked a computer out of Spokane the first night I was back on, and I almost had to call the operator and asked him to QRS the controller chip a mite.

"I mean, it was humbling, boy. I was having real trouble getting solid copy, and that sucker was only pumping out...oh...sixty, seventy words a minute."

-- KU5B

Television is a great aid to education. A teacher asked a pupil, "What is one and one?" The youngster replied, "Aball and a strike."

GFARC Continued

MORE HAMFESTS

We were able to attend the Golden Spread Hamfest held this year at the convention Center in Amarillo TX.

Everyone seemed to have a great time and it appeared that a substantial number were in attendance. Bart, NZ5T, wife Patsy and son were able to make this affair. We were not personally lucky at the drawings but Bart did take home a box of floppy disks. All he needs now is a computer to go with them. The OM had the packet radio fever that weekend and came home with an AEA PK-64 Pakratt. I love that name, because it fits so well with all his "goodies" cluttering up "my" utility room. At any rate hopefully the packet communication will catch on in this area and be as useful as we have heard.

By the way, the score was 5-4 (I think in favor of the donkeys).

73 Lois, N5JGQ

++ EDITORIAL ++

On October 8 Oklahoma City will be presented with the first of a series of Technical Programs that will mark a change in the way OKC and area clubs will conduct their regular meetings.

If you will notice it is being held on a WEDNESDAY night, that is so that it will not conflict with any other club meeting in the whole state. Most clubs have stayed away from Wednesday night because of the conflict with church services. This will give amateurs a choice between going to church or going to Will Rogers Park for a first rate Technical Program.

Now what will this accomplish? It means that every club can have its regular meeting, as usual, conduct its business and socialize and leave the technical programs to this new idea. If this idea goes over Will Rogers Park may not be big enough to handle the crowds. Try it, you may like it.

Look at your last club meeting. What percentage of the membership were present? Why has attendance fallen off? Can the Oklahoma City and area amateurs get together? Will it work? The only way to find out is for YOU to attend this first meeting.

After two meetings CORA will be requested to take over and present a program each month.

The program will be held at the Will Rogers Garden Center, I-44 (Grand Blvd) & NW 36th. Wednesday October 8, at 7:30pm. Please use the South parking lot.

I believe it will work. I am going to attend that meeting on October 8.

EVERYONE IS INVITED

JOE HARDING, WA5ZNF

Last week we got a perfumed QSL.

PENITENCE: The remorse code. The police caught a streaker but had to let him go, they couldn't pin anything on him.

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Minutes of September Meeting

Meeting was called to order at 10:00 A.M. by President Jerry, KD5IS, with nine members and guests present.

Ellard, W5KE, was at the Ponca City hamfest so we lacked the Treasurer's report.

It was announced that two of the club's long standing friends became silent keys this week; Winston Northcutt, WD5ETB, and Paul Kovar, W5CDG. Winston, who lived in Cement, was Mark, WD5DYI's, father. Paul, a retired telephone company engineer was 85 years old.

Preliminary plans were made to have a weiner roast at Will Rogers park at 6 P.M. November 8. Yum!

Jerry, KF5MB, and Ron, N5IRJ, advised the group of plans for the novice class to start second week in October. It is being sponsored by CORA and Jerry (Boyd), is the coordinator. It will be taught at the Red Cross headquarters, will last 10 weeks and wind up around Christmas. If there is interest, there may be a Technician and General class starting in January. Jerry can be reached at 677-7251 after 4 P.M. for additional information.

It was mentioned that O.J., WB5SRX, has a PK-80 packet controller to sell.

One of our visitors, Joe, KA5ZPN, had dropped in at Jerry's house, attracted by the antennas, and introduced himself. Jerry was relieved that it was a friendly visit (no TVI, or nuthin like that) and invited him to the club meeting. Welcome Joe!

President Jerry appointed K5JB to be trustee of W5LOW, the club's station at Red Cross and the members present approved.

There were several announcements about hamfests, EARS classes, SET, etc. and the meeting adjourned at 10:35 A.M. so we could pile into the donuts. Joe, K5JB, Sec'y

PK-232 Manual Errors 'n Hints

Dave, KD5FX, in Ponca City, filed the following report via packet radio with me. He is one of the early owners of an AEA PK-232, which does CW, RTTY, AMTOR, Packet, etc.

Page 2-4, Paragraph 2.1.5.3, doesn't really say how to read the tuning indicator. I have found when operating RTTY/ASCII it is best to get the second from the left LED illuminated with the mark tone. The space tone should illuminate the LED located third, or so, from the right. On CW, tune so the illuminated LED moves left in time with the code. Adjust the threshold so it doesn't quite read noise.

On Page 2-5, Paragraph 2.2, use 1200 baud, 7 bit, even parity, 1 stop bit, for the first try to communicate with your TNC. (This assumes that your terminal is using 1200, 7, E and 1. JB)

Reference Page 2-16, Paragraph 16. Put the threshold all the way counter clockwise for packet. This seems to work best. (Mine agrees with the book, probably depends on RX audio level. Filter performance could be affected by setting..JB)

On Page 3-1, Paragraph 3.2.1, the STA (status) LED is not mentioned. It should be illuminated when in packet mode and there is an unacknowledged packet outstanding.

On Page 4-6, Paragraph 4.3, it is not very clear that you must always type Ctrl-C to get into the command mode and then X to transmit. You can't shift to transmit from within converse mode. This applies to ASCII and Morse too.

On Page 4-19, Paragraph 4.6, again, it is not very clear how to switch between HF and VHF packet operation. To go from VHF to HF issue the commands:

VHF OFF
HBAUD 300

To go back to VHF, use the commands:

HBAUD 1200
VHF ON

(You can use the abbreviation HB for HBAUD.)

On Page 4-21, Paragraph 4.6.5, reference to the STA LED is missing. When illuminated, it means you have an unacknowledged packet.

Page 4-35, Paragraph 4.6.12.7, MSTAMP should read:

Monitored packets can be time stamped if DAYTIME has been set. To enable this function, set MSTAMP ON. You can also time stamp connect and disconnect messages with the command "CONSTAMP ON".

* If DAYSTAMP is ON, the DATE is included in CONSTAMP and MSTAMP.

* If DAYSTAMP is OFF, CONSTAMP and MSTAMP show only TIME. Set DAYSTAMP ON when you want a dated record of packet operation.

On Page 6-38, in reference to CMSG ON/OFF, they don't tell you that if you have CMSG ON and connect with yourself it will not send CTEXT. Only if someone else connects will it send it. (If it follows the TNC-2 convention, it is sending the CMSG if you connect with yourself. When it is received it doesn't display on the console that sent it...JB)

On Page 6-39, the abbreviation for COMMAND is "COM", not just "C".

There is a critical omission on Page 6-65. Don't use the HOST command unless you have access to the advanced applications section that is mentioned. I couldn't find it in my manual. The HOST command appears to lock up the TNC completely. It takes a cold boot (i.e. unplug the batteries with the power off) to get it going again.

Here are some things the manual doesn't tell you at all:

1. Do not connect any lines on your RS-232 connector except lines 1 through 8 and 20. The TTL level signals are brought out on the other pins. If you are good at reading schematics, you could figure out how to hook up a Commodore 64 or VIC-20 to this since they use TTL signals on their serial ports. (Only if the PK-232 has inverted logic levels required by the Commodore equipment...JB)

2. You must install your own battery backup. I suggest three alkaline AA cells. Open the cabinet and you will see where they go.

3. One thing I suggest, since this thing has so many commands that you may forget how you have it customized, do a DISP Z and print that out. Keep a copy in the back of your manual. (Good idea for all TNC owners. I prefer to do them in groups like DISP A, DISP L, etc. That way I can review commands, a screen at a time, to more easily find ones I scrambled...JB)

73 and have fun! Dave, KD5FX

Is the Dealer a Good Guy?

Last month I Dropped into EGE in Woodbridge, VA, which claims to be the third largest amateur radio equipment dealer. (Covering what area? I dunno.) After standing around looking for someone to talk to me for about 15 minutes I started lurking around the office door where a bunch of employees were chit chat-

ting about an automobile purchase. (I presume they were waiting for the mail so they could get on with their mail order business.) I finally got someone's attention and asked if they had the PK-232. The person I asked, (I was later told his name was John, the owner of the place) flushed and said something about not having any of that company's junk on the place. Sensing that he was really angry about something, I started pumping him for information.

I asked if AEA's stuff had been causing a lot of trouble or something. "No," he said, "the stuff is OK but if you ever have trouble with it and try to get AEA to fix it you will have a lot of trouble." I asked him to give me an example of someone who has had warranty problems, or something. He said that one guy sent in piece of equipment and it was returned without repair because the owner had not properly completed and submitted the warranty card.

I mentioned that I had met Mike Lamb and he seemed like a nice enough guy. Well that just made John's face got redder and he said that Mike was the chief jerk. Since it was obvious that I was not going to get a PK-232 at EGE so I thanked him and left.

Incidentally, a friend of mine, Ed, K3KA, who lives in the area, advised me not to do business with EGE because they were a bunch of jerks. Question, how do jerks like these run successful businesses? This business of calling people jerks reminds me of the story:

A guy had just arrived in town, being relocated by his job. He asked a long time resident what kind of town it was. The resident said, "What kind of town did you come from, son?" "Well," the newcomer responded, "it was kind of a nice town and the folks were really friendly. In fact, most of the people were wonderful!" The old timer then advised the newcomer, "It is kind of like that here too! I think you will like it."

A second guy then arrived in the same town, also being relocated by his job. He asked the same long time resident what kind of town it was. The resident said, "What kind of town did you come from, son?" "Well," the newcomer responded, "it was kind of cold and unfriendly. In fact, most of the people were jerks!" The old timer then advised the newcomer, "It is kind of like that here too!"

Regarding the reputation of AEA, I thought it would be a good idea to

present them with an owner problem and see how they handle it. I have a PK-80 TNC that I picked up in a flea market. It is identical to the late mode TAPR TNC-2s and has a problem with spurious emissions on 80, 40 and 20 Meters. The early TAPR TNC-2 I have had that problem and TAPR advised a fix for it. It involved adding two 0.1 uF capacitors in the charge pump circuit that generates the negative voltages. The PK-80 has the capacitors but it still makes noise. I thought it would be in order to drop AEA a note before finding the problem and fixing it myself, just to see how they respond. I sent the note but AEA hasn't had time to respond yet.

At the Gaithersburg hamfest I did manage to glom onto a PK-232 from EEB (no relationship to the EGE mentioned above). It had an errata sheet included that addressed the presence of TTL signals on the DB-25 connector and gave the same advice Dave did about not hooking up pins other than 1 through 8 and 20. I doubt I will get a chance to wring it out before I have to submit this material to Joe for the C&E so we will save it for the next issue or two.

I did get to operate it enough to find out that it worked really well on RTTY, seems to work on AMTOR, does a fair job on CW and works very well on HF packet at 300 bauds. The latter was a real surprise to me. I haven't used it on 2M FM yet, and may never; it is so complicated.

Dave is right about the manual errors, and he only hit the high points. I know the guy who wrote the manual and I am going to climb on him about the sloppy work. Next month I will figure out if one of the PK-232's irritations are my fault or AEA's. (It sends linefeed, then C/R to the terminal, instead of the reverse one normally expects, harrumph! I had to create an emulation table in the communication program to straighten it out.)

My first transmission on HF packet really surprised me. I pinged a packet off of a station in California (UNP CQ V W6AA) and immediately got two simultaneous connections from CA and WA. I was sure in a dither because I had not figured out the details of doing multi-connects with the thing. They were kind to me and I really enjoyed my first HF contact. More after I get some experience. Joe, K5JB

Meanwhile, During the Thunderstorm

Here is a little tidbit that Dave, WD5G, dropped on me one day while we were chatting about lightning pro-

tection. This was lifted right out of the packet conversation:

(upper case is Dave, Lower case is me. We often do that on packet.)

HUNZICKER BROTHERS, ONE OF THE LARGEST ELECTRICAL DISTRIBUTORS, HAS A DEVICE CALLED A JOSLYN VALVE TYPE SURGE PROTECTOR. HUNZICKER'S CATALOG NO. IS J9200-10. IT IS FOR "Y" TYPE INSTALLATIONS WITH PIGTAILS AND THREADS FOR MOUNTING ON A BOX VIA THE KNOCKOUTS.

ok. i saved that little tidbit to disk. is joslyn a brand?

DON'T HAVE THE COST, BUT IT CAN'T BE MUCH.

YES.

I SUPPOSE PYRAMID ELECTRIC WOULD ALSO HAVE SOMETHING SIMILAR.

A short while later, my cousin Charles, an electrical contractor, gave me a specification sheet on a General Electric device called TRANQUELL. I showed it to my genius Electrical Engineering friend, Transphobic Phil, and he produced additional literature from GE and some specification sheets from Unity Power Systems and Approved Lightning Protection Co.

I really can't tell from the specification sheets which device would be the most effective for controlling transients caused by our Oklahoma thunderstorms.

The TRANQUELL arrestor complies with ANSI C62.1-1981, which Phil says is the appropriate specification for transient protection. It comes in three models which differ in the number of legs of a polyphase circuit they are designed for. The single pole version, Model 9L15E-CA001 is intended for single phase circuits, 9L15ECB001 for single phase three wire or delta connected three phase with one leg grounded. Most of our homes are wired with single phase, three wire, 120/240 Volt circuits so this is the model we would use. The third model, 9L15ECC001 is a three pole device for three phase circuits.

They are designed to be mounted with an attached bracket or into a knock-out using the 3/4 inch nipple provided. Overall, they are about 3.1 inches tall and about 2 1/2 inches square (actually triangular shaped).

The only concern I had was about the voltage rating of the thing. It is designed to handle circuits having up to 650 Volts and the same model is recommended for 120/220/440 volt circuits. I wonder if this isn't a bit excessive overhead when it comes to clamping transients. True, it would protect the 600 volt insula-

tion in your house's wiring but at the 600 Volt point, it may be a bit late in providing protection to the equipment we are interested in protecting.

Phil provided another specification sheet from GE that described a similar arrester called "THYRITE". It is shaped a little different from the TRANQUELL, consisting of a 3 inch diameter can. The two pole version with knockout hole mounting is 4 7/8 inches tall, including the nipple. The two pole version we would use in our residential applications is model 9L15BCB002. This list gave a list price of \$43.00 each.

The specification sheet explained that each pole of the arrester contained a series gap and a THYRITE valve disk, whatever that is. It listed some performance values that meant little to me but made me realize that when we are dealing with lightning, we are dealing with some big numbers. For example, it showed a crest voltage with 8 x 20 microsecond current wave of 3.6 kV at 1500 Amps, 3.1 kV at 3000 Amps, 3.5 kV at 5000 amps and 4.2 kV at 10,000 Amps. It had a discharge capability of 40,000 Amps! Those are pretty big numbers folks!

Also recommended in the specification sheet, that to reduce the rate of rise of surge voltages, capacitors should be installed and recommended a three phase one for \$67.30.

I suspect that to get a high degree of protection from lightning caused transients one would have to install these babies to protect the lower voltage protection devices you would also need to keep the voltages below what your radio and computer equipment could handle, like the 150 Volt MOV varistors we sprinkle around in the power supplies. You have already done that, haven't you?

By the way, the multiple outlet, switched, power strips are handy places to put those MOVs. Put three in each strip. One across the line and one between each lead and the grounding (green) conductor. This is no place to skimp to save a few cents. Also, since the MOV sacrifices itself by shorting across the line, it is a good idea to fuse the black and white wires rather than relying on the branch circuit breaker. You can size the circuit protection closer to the load you expect to put on the power outlet strip rather than the 20 Amps of the typical branch circuit breaker.

The next device Phil provided the specification sheet for comes a little closer to my idea of the

voltage levels where I would want it to start clamping. It is called the ZEUS-Lightning and Surge arrester and is manufactured by Approved Lightning Protection Co., Inc. It is about 2 inches tall, including nipple, and 2 1/2 by 2 1/3 square. It comes in only a two pole model suitable for out 120/240 Volt circuits. (Two or three of them are required for 3 phase circuits.)

The ZEUS specification sheet claims that the device begins to protect at the 350 Volt level. It is a bit vague, stating that the heavy-duty gas discharge devices in it have discharge voltages of 350-650 Volts maximum and claims that the air gap devices (e.g. the GE devices) discharge at 1,800 to 2000 Volts.

I feel the ZEUS is a little closer tailored to our residential requirements since it states that it can protect three phase circuits where the line-to-ground voltage does not exceed 175 Volts. This is right in our 120 Volt ball park. (Remember that the peak voltage of a 120 VAC circuit is 170 Volts.)

Since I do not have the specifications of the device Dave found and have not seen any other GE (Square-D, or other manufacturer's, for that matter) specifications, I am not sure what I would recommend but I would look into the ZEUS for the time being. There was no indication of the price so the next step would be to write to, Approved Lightning Protection at 439 Meacham Ave, Elmont, NY 11003, or call them at (212) 895-2560 to find out what they cost and where to get them.

The last item Phil gave me was a specification sheet on a line of transient suppressers manufactured by Power Unity Electronics in Casselberry, FL. A couple of the models are designed to be installed near the equipment to be protected. These models are boxes containing some kind of mysterious stuff that solves all your transient problems and looks like it performs much like MOVs installed as already mentioned. However, it says that "These superior devices are of solid state silicon technology and contain no degradable components (no MOV's, zener diodes or the like are used)." But the information doesn't tell me what ARE used. It claims 6 nanosecond response time and then claims "...our unique soft clamping operational characteristic..." Hmm, 6 nanosecond response, soft clamping, and ability to handle thousands of Amperes, sound mutually exclusive to me.

(Editorial/Engineering comment) I guess I am supposed to believe in

"black magic" as the explanation on how these things work, but I don't. I guess this marketing style is used because it works, sometimes. Somebody buys this kind of snake oil line, some of the time, but it really turns me off, I am sorry, Power Unity. You picked the wrong style if you were writing that spec sheet for this kid.

Some of Unity Power System's devices are designed to be installed in branch circuit breaker enclosures and some are designed to be plugged into the convenience outlet near the equipment, and then the equipment plugged into them. The specification sheet covers 31 models. There are some models designed to handle 8-12 Volts, 13-24 Volts, 24-36 Volts, and 37-60 Volts.

There were no prices included in the Unity Power System's literature.

The Washington Apple Pi magazine for September notes that Square-D Company makes what it calls a secondary surge suppresser, part number J9200-10. I have no information on it except that it is designed to be installed in the junction box near the service entrance to the house.

We need some experience with some of these things so if any of you have used any of these models, or others, let the rest of us know. Joe, K5JB

Ahh! Another Hamfest

Mike, N5MS, said that Ham Holiday marked the end of the hamfest season but he is wrong! They are still going on all around him. He failed to notice the Mena AR, Amarillo TX, Ponca City, Wichita Falls and Wichita activities. Fortunately, I have a little larger radius of operation, har! har!

This month I had an opportunity to visit the Gaithersburg, MD hamfest along with Hoss, WA5ZAI; Chuck, N8ADN; Chuck, KCOJP; and Burt, KOJIH. (Burt, like I, was in town on business, har!) The only thing I set out to find was a connector for the PK-64 that Bill, WA5FWD, is using on packet radio. (He is in a good position to put in orders for those kinds of things since he works at the airport and can catch me on the way out to these excursions.)

I didn't find one but I did get a lead on one and was able to pick it up from one of the local dealers before I went home. I left it in his 'IN' box when I returned to the airport on my way home.

The Gaithersburg hamfest is considered one of the biggies in the Washington D.C. area and draws folks

from PA and NJ, as well as the locals from MD and VA. There was a fairly large crowd "tailgating", the term used in the area for fleamarket trading. My buddy Ed, K3KA, was tailgating so I used his car for temporary storage while I scurried around to see all I could see.

In the flea market Hoss picked up another Icom antenna tuner for his HF mobile installation. His previous one (can't remember the model numbers) is the one that we spent a weekend last winter moving taps on a coil so it would resonate on all bands with his antenna, as installed on the car. This model is a "smart" tuner that tunes itself according to preset frequencies and warns the operator if he has to take some kind of action after making too great a frequency excursion. I told Hoss he was on his own with this one, but I have to admit that I am curious enough to do a little tinkering with it if needed. Once we had made our big purchases we headed to Hoss' house to check out our loot.

One difference between hamfests in strange towns is that I don't know anybody there and I get more "rummage" time. Not that I prefer rummaging to visiting but it is really difficult to have the cake and eat it; solution - go to all different kinds of hamfests, the more the better!

One thing I picked up were flyers for the next two hamfests in Richmond and Howard county...Hmm, let's check the calendar. Might be able to work something out here...

Joe, K5JB

Weather Meeting

This is a report of the meeting, requested by US Weather Service staff and attended by several packeteros. This dandy report was submitted and transmitted via packet radio by J, KBOQJ:

Sometime during August, Ralph/N5JMG of the Pittsburgh Civil Defense agency and Dr. Ken Crawford of the National Weather Service began a discussion of ways to integrate the needs of NWS and civil defense agencies. This discussion culminated in the meeting of September 8th at Will Rogers Field.

The attendance was expected to be around 10 people, but over 30 attendees turned up from all parts of the state. This necessitated a postponement of a half-hour and reconvening in a classroom at FAA.

The meeting was chaired by N5JMG who had each person introduce themselves and stated the purpose for the meet-

ing. He then called upon KBOQJ to give an explanation of packet radio and the network. (And KBOQJ had introduced himself as an interested observer, hah!) The chalk-board discussion proceeded with care as several among the attendees were not amateurs, and only represented their respective CD agencies. There was a lively question & answer session which, hopefully, clarified the more difficult aspects of the protocol and networking.

The next discussion was by Dr. Crawford, who explained what NWS was prepared to deliver as a product. And explained what the NWS would be interested in as data from the field. There was also an in depth discussion of the transmission rates of different products, e.g. intensity maps, lightning stroke data, etc. He also queried the audience as to what they would like to see from NWS. (In my opinion, the ultimate user is not the amateur, but rather, the civil defense agencies. I may be wrong in this view.) Since there is a practical limit of transmission rates of 1,200 baud, even on unused networks, there is a definite possibility that the system could be overloaded by the volume of data available from NWS. This caused Dr. Crawford to suggest that the next test be limited to advisories, bulletins and statements as required by different parts of the state.

There was considerable discussion of the use of the national calling frequency of 145.01 MHz. I suggested that there were additional frequencies set aside for the exclusive use of packet modes which consisted of 145.03, 145.05, 145.07 and 145.09 MHz which were relatively unused at this time. Since all of the current digipeaters were set up to operate on 145.01, the other frequencies were now relegated to point-to-point communication. There was no reason, given the strategic tower sites and space that equipment could not be acquired to make use of the other frequencies. This notion stirred the interest of Dr. Dave Rust of the National Severe Storms Laboratory in Norman who also would be very interested in making use of packet for the collection and reporting of data in that field. Both Drs. Crawford and Rust stated that they were prepared to go on record with memoranda of record to specific businesses requesting assistance in this regard.

The remainder of the discussion was centered on the lack of organization of the amateurs operating the packet radio mode. It was suggested that a meeting of the amateurs would certainly be in order to organize and plan for this type of operation. The

date of September 27th was proposed and adopted as the target for such a meeting and Gary Skaggs (WB5ULK) of NWS and J. Frank Fields (KBOQJ) were charged with site selection and publication and/or notification of that information to the amateur community. The meeting lasted almost two and one half hours. If there was any significant topic of discussion omitted in this brief report, the fault is mine as I did not take notes and have relied upon my memory of the ensuing discussion in drafting this article.

(I hope that U do not have to do too much editing!!! I guessed at the formatting of 40 columns, which may not be correct, if this is too wide and too much trouble to reformat, I can easily re-do it and send it again.. 73 & C ya)

*** DISCONNECTED @09/20/86 16:12:19m

I didn't have to do any editing, I let the machine do it. Jay did a super job but it was too wide so I let the word processor do it for me. He had right and left margins justified so I had to do a global search and destroy on the double spaces after it was reformatted but that was quick as a wink! Thanks a bunch J!

Winding Down

When I came in from the VHF Club meeting I checked the packet radio system and saw that there had been a net conducted by using the unprotocol forwarding feature. Ron, WB5TTU, in Hugo, spark plugged the thing and rounded up the available packeteros in Eastern OK to participate. By including WA5BQX-1 in the unproto call chain I was able to get the gist of it and J, KBOQJ, was able to participate.

(The way it is done is this: Pick one or more digipeaters everyone in the round table can hear reliably and send unprotocol packets via all the digipeaters. Some of the packets might not get received by all stations, but what the heck! Ten percent never get the word anyway!)

The folks were getting their thinking together about how they would like to approach the organization meeting scheduled for Sept 27 at the Red Cross headquarters in Okla City. Not all of the active packeteros who are interested in networking and emergency traffic handling will be able to attend the meeting so those folks were being given an opportunity to express their views. I won't be able to attend either so I will have to leave my thoughts with J, or one of the other movers and shakers.

Joe, K5JB

Salem

HAMFEST FOLLOWUP (IC-2N ?)

One of the exquisite pains of attending a hamfest is finding equipment that you know you don't need, but just can't live without. It is not that the device is something that commands respect, just merely attention. I find hundreds of items at Dayton that, but for money or weight, could follow me home. I experience Dayton and the Hamvention in sort of a sensory overload capacity. So much that I adopt a fleamarket scan technique that I rarely use anywhere else.

To enjoy the luxury of a leisurely walk through the Dayton gathering is to find yourself in the "too little, too late" category. For it is the early ham who gets the bargain. Actually, I have applied a short statistical analysis to hamventioning. I know that there must be some bargain "needle" in that haystack and it very well may be something that only I and maybe a few other hams might appreciate. In the acres and acres of the fleamarket, the statistical probability of me finding the bargain "needle" before anybody else is not just me against all the other people in the fleamarket, but rather me against those people who identify the same bargain "needle" such as the \$100.00 HT-220 or the fifty cent trimmer capacitors or whatever.

This is, of course, highly dependent upon the item that I am looking for. The more esoteric the item, the greater the chance that I will find it before it is gone. A high demand item like a cheap radio will have a corresponding high amount of interest and hence a shorter half-life in the fleamarket. Generally, these are items such as radios at a good price or expensive parts in high demand. Trimmer capacitors don't really fit in that category. People are looking for them, but they

don't get excited when they see them. And some people get excited over nothing. The rare find may be gold only in the eyes of the beholder. I have heard other fleamarketeters bleat for joy over a Harvey Wells Bandmaster, if you can believe that, and they grab it and covet it like somebody is going to immediately armwrestle it away from them. In my mind, the odds of that are fat chance.

I have employed a technique of "scanning" that would put Spock to shame. It is part Harry Houdini and part Vulcan "Mindmeld." It involves coming into equilibrium with your environment and wasting no energy on nonessential functions. It requires a high level of concentration and a good breakfast. Sometimes it is so distracting to others that they let me wander off on my own. Few people walk with me through the fleamarket for long. Mostly they soon wander off muttering under their breath about what a rude SOB I have become.

The long range scan is necessary at Dayton. There is simply too much to see and it can barely be done in one turn around the fleamarket in a day. I have a plan to generally get through the fleamarket the first day and then start combing more carefully the second day, then attend a program or two and finally hit the fleamarket hard the last day and drive the vendors into the ground with unmerciful dealing. Ham Holiday does not require a technique of such sophistication. Primarily, the size of the fleamarket is the reason. But that doesn't mean the pickings are lean. I usually find something in the fleamarket at HH to build a project or two around. And available time to search being what it is, I usually scan a little more carefully and occasionally can even be talked into a project.

A case in point was the fleamarket at ham holiday this year. I saw a couple of really neat items that I thought long and hard about and before it was over, I spent more money than I did at Dayton. That is not really a surprise this year since I did not spend a lot of money this year. But Ham Holiday is really a good place to sell equipment. There are really a couple of reasons for this. First, people do

come to Ham Holiday with money in their pocket and they are willing to spend it. A perfect example of this is Darrell WA5TOO although Darrell would really rather trade you out of it. He brings a bunch of stuff from his vaunted collection, sells it, and after converting the collection into money, sets off on a plan to gather new moss for his collection. At Dayton, there are even more people with money, but if you have a high dollar item, they will be reluctant to spend it with you because of the fear that just around the next flea will be the same item, brand new and \$50.00 cheaper. That is why many items don't sell until the last day and by then, the best deal may come out because a vendor has been staring at the item for three days and it is getting heavier and heavier to think about carrying it back home.

At ham holiday, your transceiver for sale will more likely than not be the only one of its kind in the flea market and one of only a few transceivers in the entire flea market. That citizen ham with the money burning a hole in his pocket will give strong consideration to your item because of the general scarcity of similar items in the flea market. What you then have is a serious deal in the making. So, the item sells.

Vendors who have popular items would rather sell them at the small fleamarkets because there is less competition for price. Vendors who have esoteric items probably are better off at Dayton where the fruitcake who likes that weird blivet you have (people like me in other words) might just wander by.

A case in point. I walked by one display at Ham Holiday and saw a couple of Icom radios. Ordinarily, I would not get excited about these, but I found after talking about them to the owner that they

were a specialty item. The radios were designated as IC-2N. I had never seen this number on any of the Icom literature I had come up against and I asked what were. In deference to the seller, I don't mention his name since he said that they were made by Icom for import to Red China and were simplex radios with a prewired fixed frequency and a limited dialup frequency. (That OK, Leon?)

I didn't really need a couple of these radios, but I was intrigued by what they were. I popped the back off and saw that they had a bunch of the parts for the duplex switching missing, including the two bottom switches on the back. They were also minus the crystals and coils for duplex switching and some diodes and stuff. "What can you use these for?" I questioned. Well, "with just a couple of jumpers, they can be made to cover the entire range of the two meter band and would make a perfect packet digipeater or simplex station." Humm, now that's an idea and the price is less than \$100.00. Well, now is time to really stare at them. The radios had no 5 Khz switch, the switch was used to switch between a fixed frequency and the thumbwheel switches. The radios did transmit, but God knows where. The price dropped to \$75.00. Well, this is really getting interesting.

About that time another fellow wandered by and wanted to know if the owner would sell the back of one of the radios since he needed a new one. He offered \$15.00. Ahah, a chance to lower the basis in the radio. So I bought it, and sold the back off of it. We had to fiddle around with it to pull the escutcheon off his old radio and put it on the new back, but it worked. I took the radio home and began to study the schematic. After some comparison to the board drawing and another IC-2A that I have as a spare, I made up a list of parts that I would need. These radios did not have touch tone pads. But, I thought that they would work as an auxiliary transceiver for my Shackmaster and as the aforementioned Digipeater. It suddenly struck me that I might want both of these radios. I called Leon (oops, I mean the seller) and negotiated a trade for a

radio for an amplifier that I had bought at Dayton several years back. It was just about an even up swap. I called Icom and ordered up two sets of coils and parts. After some thinking, I called Icom again and ordered up all the parts to convert both radios to full duplex operation. Then I sat down to try to figure out what the radios did.

A quick check with a frequency counter indicated that the radio transmitted on 145.000 Mhz on its fixed frequency. When the switch was placed in the dial configuration, it would transmit between 144 and 145 Mhz. No more. The Megahertz switch was fixed wired for 144. First I removed the fixed diodes and wired the 5 khz back in the circuit. I removed the jumpers where the 5 khz coils had been and plugged in the additional coils. Well, they seemed to work, but the main coil was a little hard to tune. It seems that Icom had to use a different coil in this radio since it was fixed wired and not made to put a different duplex mode. I had an extra coil, so I replaced it and the radio and coil tuned up right on frequency. Now, I had 5 Khz.

After some doodling around, I found that Icom had strapped one of the inputs to the divide by N high so that it disabled the divider on all frequencies except 144 to 145. I cut a resistor and added a part and the radio's range opened up to 144 to 148. I now added several switching diodes, coils and crystals to make the plus and minus 600 khz mode. This actually took several hours and another couple of hours figuring out what to retune. Finally, I got the radio together and tacked a battery on it and after a couple of false starts, it played.

I set it on frequency and calibrated the receiver, transmitter on both the main channels and the 5 khz. It was so fun that I carried the radio around for awhile. I found that it really didn't matter too much that the radio did not have a touch-tone pad.

Now, see what I mean about flea-markets? My problem was that I didn't find a ready to wear radio in the market, so I had to build one. I now have a IC-2N radio which is functionally identical to an IC-2A

and all it cost me was about \$75.00 a radio and another \$25.00 in parts. Not bad, but then throw in the four or five hours of labor. I expect that the next radio will go a little easier since I have already figured out most of the tricks about the radio. The problem is that I probably could have bought two of these radios if I had gone out and worked for that 10 hours or so that I spent. But, that is not really point. It was time-consuming, yet, entertaining. Complicated, yet educational. I think that I know a little bit more about the radios. I even went to the trouble to order all the parts that it would take to put a touchtone pad (except the pad, I have a spare). Now, that is silly, because if I bought the pad, that would be about \$40.00. Sooo, for about \$130.00 or so I would have a complete IC-2At. Except that it would be an IC-2N. And nobody gives me change for the extra three or four hours it would take to add a touchtone pad. Well, I may only do it to one radio.

Well, everybody needs a hobby. It kept me off the streets and out of the bars. But, Leon, no more IC-2N's please, they are no bargain. (Unless you still got them and they are cheap).

Micheal Salem N5MS

QEX QSL from QST

One of the things I did this year at Dayton was buy a subscription to QEX. This is the new (to me at least) publication from the ARRL that is an Experimenter's Exchange. I wanted to buy a subscription when it started several years ago, but really forgot. Anyway, after the subscription, Gordon W5OU brought me his past issues to look at. It is kind of interesting.

QEX was intended as a forum for articles that might just be a little too specialized for QST. It has focused on speciality items such as Xerox 620 boards or other short subjects. It is edited by Paul Rinaldo W4RI and follows the QST style and format.

For \$6.00 a year for 12 issues, I think that it is useful to have some of this information.

For example, the September 1986 issue has an article on how to tailor your signal coverage with beam tilt. There are several ways to beam tilt a signal down toward the horizon, including mechanical and electrical phasing methods. The article shows a simple method of calculating how much beam tilt you want. It also features a short article showing how to calculate padding capacitors when constructing a VFO. The rigid calculations are useful, but something like this would have been a real pain in the kazoo when I was retuning and padding down HT-220 from the commercial bands.

From the earlier days, QEX has evolved from typewritten pages and hand drawn schematics to the full QST format. I think that it loses something in the process. But, I have spent some time reading the few issues that I have received since Dayton. Subscription address is the ARRL, 225 Main Street, Newington, Conn. 06111.

Micheal Salem N5MS

WEST GULF DIVISION DEPT

While looking through QST the other day I noticed that the election for the Director was coming up. Actually, I was a little glad to see that because I had received a cryptic mailing from the current director grousing about a variety of things, but most importantly that he was really too busy to write letters to members and that it was expensive. But in any case, he would sure appreciate your vote.

The other day I got a mailing from another candidate. I read it briefly and noted that he had been active as an expert witness in court trials pertaining to ham radio tower problems (Hey, we call them antenna support structures in court, not towers). He also had apparently supplied the wording for the current Dallas antenna-tower (oh, that word again) ordinance.

I am glad to see someone inter-

ested in the problem of, ah, well, towers, take an active interest in amateur radio. It will be an increasingly difficult problem and the recent passage of PRB-1 by the Commission is not a stopping point. Actually, it is only the beginning. In PRB-1, the Commission entered an order of limited preemption. It will depend heavily on how it is interpreted by the courts. It may be easy for a Court to rule that the reasonable accommodation of antenna support structures is sufficiently met by towers of only 35 or 40 feet. Thus, it becomes very important to carefully address tower cases in the future and to make sure that they are adequately and fully presented. The arrogance of the local municipalities is shown by a recent article in the W5YI Report which indicated that the John Thernes case in Kentucky is being challenged by the City in light of PRB-1 by an argument that the FCC usurped local authority and exceeded its jurisdiction by its order of limited preemption. A poor presentation at this point would severely jepordize the effect of the FCC's ruling and throw us all back in the pot at the mercy of the Cities.

Here in Oklahoma is a case in point. While nobody is really looking for trouble and the City of Oklahoma City does permit 50 feet (with a special use permit), there is still a little money left over that was donated for N5SW's case in federal court. This was a pre PRB-1 case and was essentially a washout. The Tenth Circuit said simply that the FCC had never actually acted to indicate their intention to preempt local regulation of antennas. To some extent, it might seem that the ultimate result of the Guschke case, although a bad result, was to communicate to the Commission the need to issue some kind of order of preemption. A copy of the Tenth Circuit's decision was delivered to the various authorities in the Private Radio Bureau within days of its issuance. The result was PRB-1 a couple of months later.

The ARRL was some help with the Gushke case, including some cash at some strategic times. But the help always seemed to be

coming from the top down, never from the director up. In fact, it seemed like the local s were almost opposed to the Guschke case because it started with a permit for 50 feet and a tower was subsequently constructed for about 70 feet, as if this should have made some difference in the subsequent litigation. The only real problem it created was the fact that an injunction was needed to prevent the City from issuing a ticket every day the tower stayed up and that problem was solved when the City attorney readily agreed to leave the antenna alone until the local District Court ruled. If anything, the fact that the tower in excess of 50 feet existed strengthened the legal arguments because it made it clear that Chuck, by virtue of the existence of his tower in excess of the limit, had standing (a legal stake in the outcome of the litigation) to challenge the ordinance. He could be put to expense to remove the tower to a height below 50 foot.

Besides, Chuck did what several others had done before. He ran into problems when his neighbors complained. There is another tower in excess of 50 foot in town and it is legal. The owner got a variance and there were no neighbors to complain. This tower is exactly like Chuck's. Chuck tried to get a variance and it was refused. He didn't put his tower up with the intention of making a federal case out of it. If nobody had complained, it would not have made any difference because the City admitted that they seldom checked towers, if at all, unless they got a complaint.

It may happen again. This time, there is a clear statement from the FCC that establishes a federal interest in amateur radio towers. I am sure that the League will help. Maybe the director will take an interest in helping instead of expressing "reservations." Maybe he might even call and get the facts

Micheal Salem N5MS

DIS AND DATUM

As I peruse the magazines, I find announcements of publications of interest that are available from various government and private sources. A lot of these come out of the National Bureau of Standards. The NBS is not only a maintainer of our measurement standards, but a source of useful information about a variety of technical subjects. Their standard on Yagi antennas is a big hit and now out of publication, I think.

The NBS just recently published a Bibliography of the NBS Electromagnetic Fields Division Publications (NBSIR 85-3040) which lists all of the division's publications from 1970 to September 1985. Order by PB #86-191947 from the National Technical Information Service, Springfield, Virginia 22161. The costs is \$11.95 prepaid.

Want to know about how the NBS establishes its standards and on what basis? Get a copy of Precision Measurement and Calibration: Electricity (SP 705). This publication compiles 66 key papers by NBS authors on electrical measurements over the past two decades. It can be ordered by stock number No. 003-003-02699-9 from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. The cost is \$23.00. Postpaid.

These aint cheap. Whatever happened to the good ol' days when you could buy a publication from the Superintendent of Documents for a buck or fifty cents. Perhaps inflation has finally caught up with them or perhaps they finally quit subsidizing the GPO and finally started charging what the publication costs the government or what the traffic will bear.

For the more esoteric, there is plenty of stuff churning out of the NBS. The Bureau makes its living (maybe not a living) by developing programs to develop improved methods and standard procedures for measurements. This can just be about anything

that might come into the commercial market. Recently, the measurement of near-field intensities for communications satellite antennas has been the subject of a publication from the NBS. This is found in their publication Development of Near-Field Test Procedures for Communications Satellite Antennas, Phase I, Part I (NBSIR 85-3031). This is a general survey, definition, description, and evaluation of several near-field and compact range measurements methods, as they apply to satellite antenna measurements. The study revealed that the planar near-field method was best for this specific application, and a detailed presentation of its theory is included. This is the first of a study in this area and dealing with the planar technique. Additional information will be published later. This report is available from the National Technical Information Service, Springfield, Virginia 22161 (Order PB# 86-1643577).

Since the demise of the First Class Radiotelephone by its abandonment by the FCC, several private organizations have stepped in to provide technician certification for fun and profit. One of the more prominent of these is the National Association of Business and Educational Radio (NABER). They have just recently published a study guide for the examination certification that they offer, The NABER Two-Way Radio Technician Certification Examination Handbook, Second Edition. The book contains a sample full length 150 question exam, step by step instructions for examination preparation, a detailed outline of each exam section and a list of industry related study references. The cost is \$12.95 plus postage and handling. If you a member of ACT (Association of Communications Technicians), you can get a 20% discount on the cost of the handbook. Contact National Association of Business and Educational Radio, 1501 Duke Street, Suite 200, Alexandria, Virginia 22314. NABER hasn't really been doing badly since the privatization of the FCC licensing programming. They collected some money from people by charging you to convert your present FCC license to one

of their certifications. Here they are charging \$12.95 for an examination handbook, not a study guide which is nothing more than an instruction guide to taking their test. I find it funny that they provide a list of study references. Compare this to W5YI who sells study materials as a part of his VEC duties at what seems to be rock bottom prices. I wonder if NABER offers a training seminar for their licensing program? If so, it probably costs several hundred dollars. Naber seems to be in the business of making money from this program. Of course, it does cost money to set it up.

For all you junior G-Men out there, I ran into a recent publication called "Police Communications Guide: For Dispatchers" Second Edition. The document is intended as a classroom text with space on each page for additional notes. It covers a multitude of different situations for dispatchers from attitudes to automated dispatching. The cost is \$22.00 and is available from Dispatch Publications, P. O. Box 21138, Castro Valley, California 94546. I don't know anything about this publication. I just saw a blurb about it in a magazine.

Actually, the growth of specialty publications is an interesting phenomenon. I get subscription offers from just about every conceivable kind of publication with just about every kind of topic represented. I got a subscription offer on a magazine devoted entirely to electronic testing. Also another one on VLSI (Very Large Scale Integration). Both of these were freebies. The manufacturers who buy the advertisement pay for the subscription. I don't have an interest in either of these topics, so I declined, but there are a lot of others on two-way and cellular that are interesting to read and they are free.

Micheal Salem N5MS

If in a QSO about standards, the acronyms get confusing. At least to me. What's this ECMA, EIA and ANSI all about? And there are others. The ISO stands for International Organization for Standardization and is made up of participating members (countries, really) and observing members which are non-political. Divided into technical committees (TC) and subcommittees (SC). Remember the Camel! SC16 has about 14 voting members, including most West European countries, the US, Canada and Japan. The subcommittees are divided into working groups (WG), and the key ones are in architecture, system arrangement, presentation and application, transport and session layers, data link layer, network layer and physical layer. (Layer must be Greek for beaurocracy.) Then we have ANSI (the American National Standards Institute) and it is the US agent for the ISO. And it gets to vote.

ANSI X3 addresses info systems; X3S3 is data commo, X3T1 is encryption (more of this?), X3V1 is electronic mail and messaging, X3L2 is videotex and X3T9 is 10 interfaces.

Working papers and documents are sent to the ISO after majority approval obtained from the appropriate committee (another flap). The good old CCITT is familiar to us all, but what do the letters stand for? It's the International Consultative Committee for Telephony and Telegraphy. The bit freaks haven't chewed into this one (yet). This outfit is a treaty organization representing primarily the postal, telegraph and telephone authorities of member countries, called PTT's. The US had no PTT so the State Department serves as official liason. It receives info from common carriers and US Standards Organizations.

The ECMIAS, the European Computer Manufacturers Association and is composed of guess what?--computer makers in Europe. Some European divisions include IBH, DEC and Honeywell. ECMA serves mainly as a non-voting contributor to both the ISO and the CCITT.

The National Bureau of Standards (NBS) develops Federal Information Processing Standards (FIPS) within the Department of Commerce. Vendors have to obey these birds in order to sell DP and Data Commo Gear to the Federal Government. The Defense Department does not have to adhere to NBS standards, by the way, and sometimes, in fact, does not. NBS contracts much of its computer oriented specs to Bolt Beranek and Newman (BBN). BBN is the prime contractor for most of the developing Hi-level protocols.

And, last, we have the EIA (Electronic Industries Association) who, together with the IEEE, dabble in the standards process. Both EIA and IEEE work with the physical and data link of the OSI. EIA has two groups working on interface and signaling specs for broadband and fibre-optic cable transmission. The IEEE has its 802 Committee developing layer 1 and 2 standards for local data networks.

By now, if you are not cross-eyed and tongue-tied, you are prime candidates for a tour at sea with the U. S. Navy who started all this business. Perhaps they belong at sea. Lots of GI's served under SCRAP for thirty months and never knew who it or he was. But I did. I found the answer floating in a bottle in Yokohama Bay, marked for OSI, ANSI, ECMA, ANSI eyes only. A slip of paper inside said, "Scrap General Douglas MacArthur, commanding the USS Missouri."

Anchors aweigh. All we need is to transmit this whole mess on CW.

Bert Bailey, W4BNB, Raleigh, NC

I guess that that time of the year has rolled around again because fellow hams, those that I have seen lately have told me to get ready to stay indoors for the next couple of weeks. Turkeys are fair game at this time of the year and I am told that I shouldn't get caught outdoors. So I'll just deliver this during the dark of night and hope that no one sees me.

I don't suppose that any of you have done the stupid things that I have done during the past year (of course you haven't), but if you will pause and reflect for a few moments I think that, indeed, you have. The only difference is that I admit it (in print no less). So here we go.

In tuning around the bands one day I came across a new country for me. There was a pile-up of course but I decided to crack it anyhow. I tried for a solid half hour. Sheer frustration. Why couldn't, or didn't, he hear me? The power was on, the amplifier was on, the correct antenna was employed, the heater --- oh, oh --- the heater was not on. I didn't read the dials. (Some day I'm going to learn to read those d--- dials). By the time I had gotten the heater on and the finals warmed up he was gone in the abyss of the non-existent hams, never to be found again. So much for the new country.

Not wanting to let the CW that I had worked so long and arduously to learn go to waste I went to the CW portion of 20 meters one day. (The heater was on this time). There, sending out a CQ was this ham, just as nice as you please, at about 17-18 words per minute. I decided that I would go back to him, I responded, fool that I was. (Thank heavens he sent his call about six times giving me ample time to write it down. (Six times, six different ways). After the usual TNX FER THE CALL ON I knew I was in trouble. His name was either Frank or Fred or Prem (no typo) and his K (no typo)TH was either Grand Forks NB or Grand Island MN. His rig was a Kenwood (I got that right) 520S, 820S or a 920S. I'm not sure. To this day I'm not sure. His antenna was either a dipole at 60 feet or a vertical at 10 feet.

The WX was not es sunny (or hot es stickey). (This struck me as rather strange since it was February at the time). I made so many mistakes copying that I thought that I was taking another code test again. But I hung in there, breaking two pencils and a pen in the process, and completed the shortest QSO in history. (you can look it up in Guinness).

After that ordeal I thought I would go to the Novice portion of the band. (Novice my foot) there was this fellow sending about 6-7 wpm. Real easy for me to copy, even in my head. I copy his call correctly (smart rascal that I am) and go back to him. Oh, lord, the keyer is still set for 17-18 wpm. Frantically I set the thing for what I think is 6-7 and wind up at 2-3. Panic sets in. Finally I get the keyer at about 6-8 and proceed to make a mistake in my call, no less. Completely mortified I am sending like I have the paddles between my big and second toe (with my shoes on). But I manage to muddle through the whole thing making mistake after mistake; first my call, second my K(no typo)TH, and third my antenna (who ever heard of a TX6DHH?)

So again this year I am proud to wear the badge, "Turkey of The Year". May you proceed to try and wrest this coveted award from me - it will never happen. God bless you for



Oct. 17 Dinner Meeting
at Pepe's. 6:30 pm.

Oct. 18-19 Simulated
Emergency Test.

Oct. 18 Scouting
Jamboree on the Air.
To be held in Guthrie.

Oct. 19 Cross-Country
Motorcycle Event. Lake
Draper area.

Edmond Amateur Radio Society continues its pace of excellence ! Hopefully you will find the opportunity to participate. You will have a chance to be part of a different type club activity. The focus of the above mentioned functions reflect the expanding scope of EARS. This seems to be occurring in geography as well as function.

It is indeed exciting to see our club attractive to those outside the Edmond city limits. In this fashion we grow in diversity as well as numbers. I suspect growth in diversity is more long-lasting and meaningful than mere increased numbers of club members. For those who are joining our club we say THANK YOU ! When you join EARS you are giving the club the highest possible compliment. There are a multitude of our members working daily in a dedicated fashion beyond belief to make EARS attractive. Attractive to new as well as current members Larry Traub, N5IXV is to be commended for his efforts. He has sought out students for our classes. In doing so he has located loaner amateur equipment and helped set up a station. Does that make a difference in the quality of our students and club ? You bet your sweet talkie it does. He also encouraged ham-friends to join EARS. These are folk who are nearly as proficient in CW as Larry. This type effort helps bring EARS a more broad based interest. Larry thanks for your work on behalf of EARS !

We also have heavy participation in ARES and RACES. Phil Wolfenbarger, N5HIP, and Lee Ward, N5HIR are a part of the net-control operation for the ARES net. This net meets each Thursday evening at 8:00. Check in on the 146.94 machine. Both are also active on HF nets. HF Traffic is now being handled on our Monday night net. Frequency is 147.135 + for the net which commences at 8:00 pm. Be a part of our net which is managed by KA5WGS-Frank Tassone. I think you will be pleased by the quality and quantity of information.

As of late many of our members have signed up for and received ARES and RACES memberships. This effort seems vital to providing emergency communication. EARS has been active in the ARES and RACES nets. John Callison, KB0OU, is the Radio Officer for RACES. This includes coordination for all of RACES communication including HF and VHF nets. The RACES HF net meets each Sunday at 3:00 pm on 3996. KB0OU's responsibilities are State-wide in scope. Should you desire membership in ARES OR RACES please contact Ken Stepp, N5DBM. Speaking of Ken..... he has just received an appointment from the ARRL. Ken is an Assistant Emergency Coordinator for Northwest Oklahoma County. Congratulations to Ken. His positive contributions to Emergency Communications via EARS are being recognized and cultivated through this appointment. He now should have additional tools and resources by which to enhance our club's capabilities in the public service arena. Ken is working to increase our public service effort by designating and developing HF interface with our vhf emergency system. In addition, we hope to have amateurs located at certain community centers to assist in public shelter operation as well as hospital functions. This type networking is vital to a community - in terms of coordination, amateur radio exposure and recruitment. Ken we are all proud of your movement in these directions. We look forward to the challenge as well as the result.

Moving right along into the

area of classes. Our Fall '86 classes have begun ! With bountiful recruitment which the community has seen over the past year and a half a good group of potential hams is assured. The most significant recruitment has been provided by students of our past classes. In this regard the quality of amateurs provided by our classes has been exemplary. Whether in public service, public relations or recruitment the graduates of our classes are there to contribute in a substantial way. To each one of these graduates: THANK YOU !! Your untiring YES to the EDMOND AMATEUR RADIO SOCIETY is appreciated.

Therefore, the beginning of another class is an exciting time. Many many EARS members work diligently to make the classes successful. Successful in the sense of:

*Numbers of amateurs licensed.

*Fun during class.

*Friendships developed.

*"Going the extra mile" to get someone licensed who otherwise would not have made it.

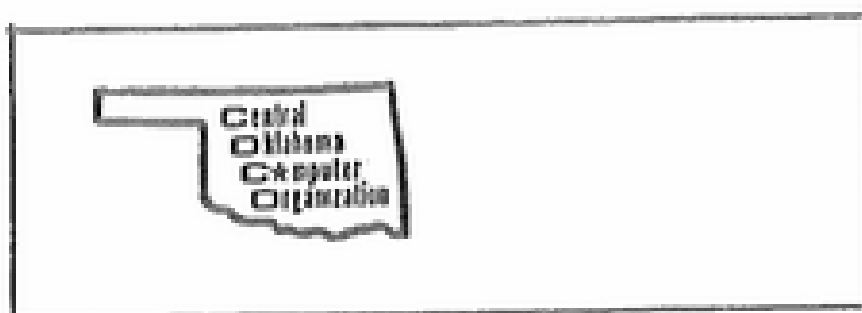
*Public service capability.

*Enhancing the pool of available energetic instructors.

Quite a contribution isn't it !

Recently I noticed one of those "pearls-of-wisdom" which said something to the effect: Weeds grow on their own but flowers need cultivation. Ya think that might have something to say to us? I think you agree that it could be EARS motto. I see a whole lot of cultivation done by EARS. Now, I would like to focus on two-areas which illustrate EARS cultivation. These are: Amateur-Radio Seminar of Aug. 24 and Special Service Club Status.

Television and radio announcements preceded the seminar which resulted in attendance by some whom otherwise would not have known of our efforts. Approximately 15 folk committed to attend our amateur class as a function of the seminar. The club supported the seminar in a big way by



Meetings held at Red Cross
NW 10th & Hudson
2nd Saturday of each month
9:00 AM -- Come early
Club dues: \$10 per year

President Sam Murr called the meeting to order at 9:05 AM on August 9, 1986. 90 members and guests attended.

New Business

1. The manager of the Radio Shack store at 50th and Meridian wants to attend a future COCO meeting to demonstrate the new CoCo III and two new Tandy 1000s. Maybe CoCoFest has had an impact after all because Radio Shack is courting us now.

2. In the future, RAINBOW on Disk will be a floppy. The regular programs will be on one side and OS9 programs will be on the other.

3. Someone mentioned that the RAINBOW has dropped COCO Inc.'s entry from their club listings. I'll write a letter to RAINBOW to reinstate us. To drive home the point that this club has many subscribers, we would like you all to bring a mailing label from a recent RAINBOW to next month's meeting. I'll enclose all the labels with the letter I send. We'll teach them to trifle with us.

4. MEI, Inc. is selling diskettes for \$29 per hundred plus \$4 shipping. Caveat emptor! Dial 1 (800) 642-3475 if you're interested. Tom Mangham observed that these diskettes are appreciably thinner than higher quality diskettes.

5. Harold Todd cautioned against submitting hard-sectored diskettes for the swap disk. Those diskettes won't work with the Color Computer.

6. It's nearly time to elect officers again, so think about running for something or, at least, consider who you'd like to nominate for office.

7. Let's welcome new members Bill Beamer, Jeff Jones, and Curtis Rush.

Old Business

Most of you know Bob Helms, a long-time valuable club member until recently, when he transferred to Alaska. His new address is P.O. Box 773834, Eagle River, AK 99577. Bob's phone number is (907)694-5821. Bob is a hardware and software expert without equal. His articles have appeared in such distinguished publications as 80 Micro and the Collector and Emitter. We think about you often, Bob.

Hardware Problems

1. Sam Murr unwittingly touched off a very interesting discussion on the pros and cons of cleaning the heads on your disk drives. While admitting that abrasives could damage the heads, Paul Pape, who does this sort of thing every day, maintained that the oxide buildup on the heads can ruin your diskettes. The bottom line on the debate appears to be this: Clean your heads every 40 hours of disk use, or more frequently if you smoke. If you have single-sided drives, use freon to clean them, and remove the excess with a chamois. If you have double-sided drives, use a special head cleaning diskette. Thirty seconds of contact should suffice. When using a head cleaning diskette, READ THE INSTRUCTIONS. Otherwise, you'll irreparably damage your drives.

2. Jay Fields had problems with his Disto Super Controller. Jay has the "loaded" model with an 80-column display, internal clock, and parallel printer port. Supposedly, the controller has destroyed his CPU chip on more than one occasion. Daniel Jamet has experienced problems with the printer driver, but that's more of a software problem. (That doesn't make it any less aggravating, however.) Mine has never missed a beat, but I have a plain vanilla version. I enjoy the flexibility of choosing between four resident DOSes.

3. Bob Pace discussed some technical matters pertaining to the CoCo III. Evidently,

the new computer is using some memory locations that were available to previous DOSes. The consequences are uncertain at this time, but the prospects aren't too rosy for those of us who have modified versions of RS DOS. The 128K of RAM is 4 bits wide X 64 bits long, just as in the models A & B of the CoCo II. I hope all that made some sense to you tekkies.

Software Problems

1. Marc Bosley had problems running DL Logo with OS9 while interfacing with a speech synthesizer.

2. David Coburn and Chuck West were unable to save files using MUSICA or COLOR KIT on a machine running BASIC 1.1 or higher. They had to load BASIC 1.0 to save anything.

3. David Coburn was also having trouble with an adventure game called MAJOR ISTAR. He wondered how to save it. The program counsels the user to save the game regularly. However, whenever he typed "SAVE", the program would respond "WHAT?". One recommendation was to type CSAVE. Someone else, with a bit more certainty, suggested typing "SI".

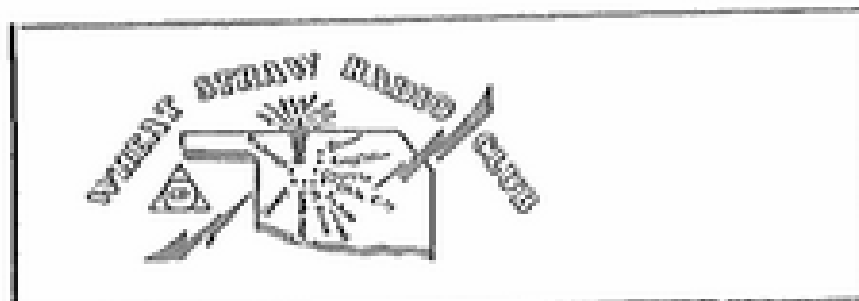
Doorprize Winners

OS9 & PASCAL - Mike Parsons
Model I game - Raylon Rogers
500 Peeks, Pokes, & Execs - Bob Striegel
paper punch - Brian Lowderman
stapler - Marc Bosley
stapler - Francis Doling
used disk - Howard Wilson
head cleaner - David Culp
Flip-N-File 10 - Charles English
power strip - Allan Atwood
Assembly Language Programming book - Cecil Borin
Assembly Language Programming book - Jeff Little
Assembly Language Programming book - Mark Swickey
Color Graphics - Mike Holland
Color Graphics - Al Jakubowski
Flight Simulator - Marty Fisher

Program

Once again, our beloved president was in the limelight during the monthly program. This month's topic was tele-

See COCO next page



The Wheatstraw Club held our Sept. meeting a week later than usual this month. We had a good turnout at the park in Weatherford with approximately 33 members and visitors present. We noticed the absence of KE5TP who is resting up in the hospital and a few others who we know have good reasons but wonder what kind of story some of the others will come up with. Our membership is higher than it has ever been. We now have 51 licensed members and 14 associate members.

Several months back we made application to ARRL to become an affiliated club. That was approved and this meeting it was made official by NJ5Y Bill Foster, when he presented our 1st president, K5RLM and our current president, WA5FLT with our Charter of Affiliation. The code practice on 146.01-61 was discussed. It is on Monday and Thursday nights at 9:00pm until 10:00 or so and covers 5WPM to 20+. We invite anyone interested in upgrading or new to listen in. The meeting adjourned to the watermelons brought by Perry W5MGZ. He even brought some yellow meated ones just to fill a request that WD5JNT always makes. We had an out-door meeting and I sure enjoyed it. The next meeting will be in Calumet 2nd Sunday at 2:30 See you there...

de K5GGL via packet radio

MORE EARS

promotion, setting up an amateur station, handling many details and by attending. Bob Thomason, KA0CVK, pioneered the project. The presenters and topics are as below:

John Callison -KB00U
World Wide Communication

Harold Wells- WA5ZKX
Amateur Radio and the Family

Donna Guinn- KA5YSF
"What is a lady like you
doing in a hobby like this?"

John Thomason- WB5SYT
Public Service

A nice effort in hoeing the weeds and fertilizing the soil! The recognition for the seminar was substantial. Refer to QST October '86 issue page 130.

SPECIAL SERVICE CLUB UPDATE

Since my last contribution to the C&E our club has become an SSC. Just for review you will recall that SSC is a status given to ARRL affiliated clubs who go beyond mediocrity. Application must be submitted which indicates club effort and commitment to achieve excellence; not just enough to get by. In subsequent C&E articles I will attempt to explain the specifics of our commitment to maintain SSC. Thus far the club is doing a fine job in meeting the requirements to maintain SSC. About April of 1987 EARS will submit application to be re-certified as SSC. This will be an audit type process which will require the same approval as the initial SSC.

REPEATER UPDATE

Bob McCoy, N5BUJ, our club president requested I pass along some info. A good bit of work is underway to improve our repeater's performance. According to Bob the remote receiver should be operational during the "first-half of October". The Edmond Amateur Radio Club has made available an 1100 foot location for our remote receiver. THANKS to EARC! We are all excited about this project: To all involved in the direct effort we appreciate ya!

In closing

To EARS members I hope you are proud of your club. To benefit individually we must work collectively. When you are asked to contribute your time to EARS you are given an opportunity. This is an opportunity to cultivate the soil and grow more flowers. which do you prefer flowers or weeds?

To those who are not EARS members yet: Your interest, input and initiative are being requested. Requested in the form of an invitation to visit the EDMOND AMATEUR RADIO SOCIETY. To activate your interest in EARS telephone

478-5760
Amber Thomason
EARS Secretary.

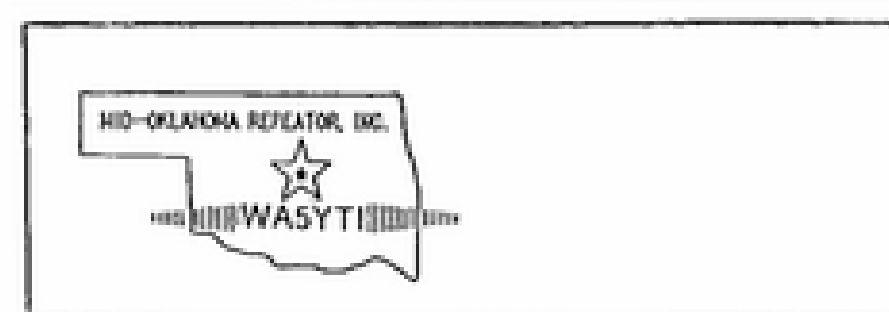
COCO CONTINUED

communications. Sam dialed up CoCoNet (376-1494) and demonstrated the major commands. He successfully used the auto-dialing feature of his modem, and then he showed off a new, high-resolution version of Mabel, which allows 32 to 64 characters per line.

Chuck West followed by attempting to log onto his own bulletin board (751-5359), but he had problems. Instead, he dialed into Jim Mosier's board (946-7634), Mystical Utopia. The crowd was buzzing about Jim's BBS. He did an excellent job setting it up, according to the BBS cognoscenti.

CompuServe was the next item on the agenda. David Coburn dialed into the CoCo SIG and listed all the messages on the bulletin board portion of the SIG. Good job, everyone. See you next month (if I'm not out of town, that is).

-- Martin Schiel, 670-6891



DEADLINE Oct. 1st- CALLSIGN PLATES. Get the form at a tag agency near you! Only costs two dollars more, so be proud of your alpha/numerics and display them where they can be easily recognized by your neighbors, co-workers, fellow hams, local officials, and PROSPECTIVE NOVICES. Act now - they'll pay for themselves quickly.....

Speaking of prospective novices, please spread the word that Novice classes will be held starting Oct. 9th at the Red Cross located at 10th and Hudson at 7pm on Thursdays.

** It's nearly time for election of club officers again. A nominating committee is needed, so come to our next meeting so we can have enough people to choose from. The entertainment slated is an ARRL film "The First Ham In Space." Please make plans to attend. Club participation has been minimal in past months, so let's change that at the Oct. 7th meeting.

HAM RADIO HISTORY

4 Billion B.C.: Earth is a swirling ball of flaming gasses. Propagation is extremely poor.

1 Billion B.C.: First dry land appears. It is divided up into squares. County Hunters Club Formed.

500 Million B.C.: Second patch of dry land appears. First DXpedition. Credit disallowed because of questionable licensing arrangement.

400 Million B.C.: Flowering plants and grasses evolve. Telerec invents first beam antenna but sales are slow because of lack of suitable structures.

300 Million B.C.: First tree appears. Telerec sells first beam.

200 Million B.C.: Second beam sold. Installer falls from top of tree. First safety belt sold.

100 Million B.C.: First mountain appears. Repeaters invented.

50 Million B.C.: It is decided by WARC that "seek you" is too cumbersome, so abbreviation "CQ" is adopted.

4 Million B.C.: Humans replace swine as dominant species. The name "Ham Operator" hangs on, however.

2 Million B.C. to 1790 A.D.: Nothing much happens for a long time.

1790 A.D.: Benjamin Franklin invents long receiving antenna. Ground switch invented.

1961 A.D.: Second repeater erected. First repeater group refuses to change frequency. First frequency coordinator appointed.

1986 A.D.: Amateur Radio Humor sinks to a new low.

Joe White, KOCNV Reprinted from Charro Newsletter

The DXpedition went into the deep jungle and was met by a cannibal who said, "I have always wanted a HAM sandwich."

The Silent Key editor of the C&E is not one to admit mistakes easily. One day he got a call from a lical ham complaining his listing as a silent key. "Really!" was the calm reply, "Where are you calling from?"

My hamming airs, my OH bears, but says he sometimes wishes, That I would spare time off the air, to help him do the dishes.

Did you hear about the Technician they call "Jig Saw"? Every time he went up for General he went to pieces.



ALTUS AREA AMATEUR RADIO ASSOCIATION

The Altus Area Amateur Radio Association held its regular monthly meeting on September 11 at 7:30PM at the North Main Fire Station meeting room.

In attendance were Loren WA5 CBT, Ann KA5WDY, Evert KB6FLG, Joe W5CCV, Dwight WB5KEH, Herb N5FJR, Clyde W5EDI, Charlie N5DKZ, George KA5TFJ and Mike W5VXU as well as Laura Collmer, a visitor from Hobart.

After the financial report by Mike the Club's Secretary, Dwight, Club President brought the members up to date on facts, stories, tales and rumors reference the National Weather Service, as well as the fact that plans are already in the making for this spring's weather training sessions in various places.

There was also some talk about the possibility of putting packet on the local 70 repeater. Nothing definite was decided but the discussion was very interesting.

A letter from Ray Wengler was passed around. In it Ray is soliciting votes for his upcoming race in the Directors election.

The meeting finally terminated around 9:30PM with more members in attendance than we have had in a very long time. Good show and lets do it again next month.

This fellow is writing a book "How to commit suicide safely". He is waiting for someone to try it out before he sells it.

The YF is outspoken, but we don't know by whom. (She became a ragchewer years ago and still doesn't have her license.)

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9-5

I just did it !!!, and it was so easy, too! -- I called the Special Tags Office (521-2468) and requested an application form for special tags with my Amateur Radio Callsign embossed on them. Two tags - for only one vehicle - will be delivered after January 1, 1987, if I turn in the application accompanied with a copy of my Amateur Radio License and a check for \$2.00 by Oct. 1. (Technically, the vehicle the tag is used on is required to have a two-way radio installed in it; but they aren't very strict on the matter.) That's all there is to it, folks; they'll even send automatic renewal forms in mid-year; of course one does have to maintain the regular tag requirements and keep those tags on-board the vehicle that the special is used on. Try it, you may like.

I did it (because I've been meaning to do it for quite some time but just never did it) as I re-read last month's C & E to find a 'pony to ride' as I prepare my first newsletter ever for the OCAPA Club. I picked this as a means to gently enter into a task that got 'dumped on me' after last night's monthly membership meeting. AND ITS DUE FOR PASTE-UP, NOON, FRIDAY????!! THIS FRIDAY !?; oh, well, here goes...

Now that I've rewarded myself by responding to the special tags 'blurb', I'll get on with the topic I really intended to lead off with:

The September Membership Meeting was opened by Vice-president Dave - NSGQY, at 7:30 PM at the Golden Corral Restaurant in Yukon and about 18 members were present to hear a very fine and interesting talk by Don McDown - NSENO, about a very intriguing digital electronic device that his employer, IBM, sends him carrying around as he services their equipment. Its a computer; a 5 watt, 900 Mhz transmitter; a pager; a locator; a message storage device permitting repeated display; and a great many other features that I won't attempt to recall them all...; but many capabilities!!! Additionally, new applications are continuing to be discovered!!!. Communications through-out the IBM System are achieved with this device which is about the size of a textbook, carried in a case and can be attached to the waist band of the bearers clothing. It transmits to repeater(s) and then enters IBM's Computer Controllers, next to telephone land lines, ... etc.

A thought-provoking subject and fine presentation by Don McDown, folks. If you would like to know more about it, I'm sure Don would be pleased to field your inquiry. Thanks again, Don. Pres. Charles - NSFHU conducted the business meeting that followed. I didn't make notes as I was unaware that I would be required to write this column; but as I recall, the following are the significant parts:

- the Treasury Report was given by Art - KFSMK
- the Board of Directors' Report of their Sept. 11, 1986 meeting was read by David - KFSEB
- the above reports were approved by the membership present.

- a motion passed to implement Reverse Autopatch capability on the repeaters.
- a motion passed pertaining to the retrieval of antennas and other club property from the Warr Acres Police Department facility and be stored.

Back to the subject of a place to have our monthly meetings... tentative long term plans have been made with the Golden Corral, 23 and Rockwell, for the meeting room there. We have reservations for the 3rd Tuesday of each month at 7:00PM beginning October, 1986, forward. Those who would like to dine are encouraged to do so; the manager has offered to provide your beverage at no charge; ... his only stipulation is that we 'take care of his waitress', which means a gratuity between 10 to 15 percent of your tab. Many members approve of this arrangement: Fellowship / Dinner 7 to 7:30; 7:30 we can start the meeting as usual. Remember, you are not required to make a purchase to attend. Lets try these arrangements for a while, at least until a more attractive prospect is discovered.

Now that we've survived our first out of town (at least to my knowledge) meeting, I hope to see a larger turn-out to our October Membership Meeting and, through each members' contributions, the OCAPA Club continues into another year as one of the OUTSTANDING LEADERS of CORA affiliated clubs.

An anecdote of interest for many of you: It seems that David - KFSEB, had a puzzler on his hands the evening of the last directors' meeting. He, in the course of his strenuous workday, returned to his auto (golf course parking-lot) and turned his 2 - Meter rig 'on' (as most of us dedicated hams do) to enjoy a favorite past-time. This proud and treasured, recently acquired, very sophisticated rig began behaving strangely! He reached down to grasp the microphone/control head and noticed it felt unusual - also wouldn't work properly. Also the spiral cord possessed gaping holes as missing segments of insulation revealed its' white innards along several adjacent stretches of the cord! "Have you guys ever seen anything like this?", he asks of us as he donates a very distressed mike and cord in front of us.

Now, your fine 'members of the board', being the astute sleuths that we (may think) are, and after analyzing the facts that were presented, concluded someone had done a 'number' on our friend, David. He, too, had thought of this possibility; but did not discover any evidence of entry by force. We, or at least I, were convinced that some ham friend had arranged to get a set of his car keys, and, knowing his where-abouts for the day, exchanged mikes on his rig. (We even searched the car for the good one in its hiding place!) Well, fellow hams and members, the jokes on us (me), not David!

David explained to the membership that he had fashioned a section of sheet aluminum into a rather handsome 'over-the-hump' platform to place his HF rig, 2-meter rig and turner upon (all held in place with an elastic cord). A power cord connector had developed a problem and the auto battery positive potential had been applied to this platform. The metal 'hang-up' button on the mic, which possesses encoding capabilities, is wired to the braid of the cord. The assembly acted as a resistor, heated up, melted the plastic and finally the shield had taken all it could and burned itself up sufficiently to break the conn-



Boy, talk about the response of the readers of the C&E. Remember last month we ran a front page article about Ham Holiday? It requested that readers contact us with their opinion about how Ham Holiday was run.

Well, here it is the 22nd of September, I put a 10 September cut off date on responses, and I have received exactly six (6) comments or rather I should say six (6) commentors responded.

They had an assortment of ideas which will be presented at the next CORA meeting. Almost all of them were approvals. I guess CORA will have to go on the next Ham Holiday "on their own".

Hey, that wouldn't be such a bad idea seeing what they have done for 13 years. Was just sitting here reflecting on what has been accomplished by a lot of people, about 50 per cent turnover each year. That's a lot of free time to donate to a worthy project. I bet next years Ham Holiday will be better than ever.

ection to the power source.

WHAT WE DO BY LEARNING WE CAN LEARN BY DOING !?*&!

As you can tell, folks, I need help in writing these articles: YOUR help. I've rambled along far beyond where I feel comfortable with this article. Here's what I want you to do for US, you and me: Tell me about the things you would like to read about in this space. Tell me your thoughts, ideas, hopes, special interests areas of your own or of others. Remember, the article goes to press on the Friday after our Monthly Membership Meeting and that doesn't provide much time !

You do that for me and I'll do this for you:

1. I'll do my best to provide what you ask for in as timely a manner as I can. If your request is not immoral, illegal or improper; and/or if I'm able to tell the difference; I'll do it.
2. I'll refrain from talking about myself if you provide subject matter.
3. I'll provide answering machines at two places to make it easy to contact me with your information: Home: 524-4711 and Work: 491-3673 so you can communicate your ideas to me even though I may not be available to talk with you when you do make that valued call to me; and I'll return your calls if I need additional information.

ENJOY REJOICE es 73 de NSGQY

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SUN	MON	TUE	WED	THU	FRI	SAT
OCTOBER			1 ↓	NO MEETING AERONAUTICAL (SEE WED) 2	3	4
5	6	GREAT PLAINS MORI 7	FAST SCAN DX'ing (See page 4) 8 ↑	ALTUS AREA OKC/PM 9	10	ARDMORE SCARS COCO 11
WHEATSTRAW 12	EDMOND CLUB 13	76'ers OU OIDAR 14	SCARS NOVICE CLASS 15	CIMARRON KAY COUNTY 16	EARS 17	VHF CLUB 18
G C W A 19	VE EXAMS Red Cross 6:00 pm 20	AUTOPATCH 21	SCARS NOVICE CLASS 22	23	EDIT NIGHT for C & E 24	25
26	27	CORA 7:30 28	SCARS NOVICE CLASS 29	30	The managing editor assumes no responsibility for the data contained herein. 31	

Q. R. Zedd

ZEDD WORKS NUCLEAR SUB FLEET

Ah, that Q. R. Zedd. He's a sly devil. You never know what he's going to be doing next.

The world's greatest DXer and holder of our only 1x1 callsign, A5A, left Honor Roll Ranch, just a hoot and a holler south of town, and went on a quick fishing trip last month. It seems the Walleye were running in Lake Erie -- site of the Perry Monument (who was another of Zedd's ancestors on Momma Zedd's side) -- and he not only limited out every day he was there; he got in some DXing of an unusual nature.

Zedd chartered a boat out of Port Clinton, on the southern shore of Lake Erie west of Cleveland, and was out on the lake every morning by 7:30, when the drawbridge goes

up. He cleverly planned his trip to coincide with both the end of the Walleye season and the start of the perch season, so he could catch a lot of both.

The fish naturally were overjoyed, and we are happy to report that the great man released his limit catches in both categories with the exception of record trophies for each.

More to the point, however, was Zedd's wonderful DX work while on the lake.

"I didn't want to drag along a bunch of bulky ham gear," the great one told us, "so what I did was, I had Tony delayo cob up a QRP hf rig and a little tuner. I carried the whole thing in my lunch bucket. Power was supplied by my nuclear-energy wristwatch."

Once on the lake, Zedd cleverly combined his fishing and DXing in a unique manner. Using a fine wire line for trolling operations with a Ryobi reel and six-foot Shakespeare rod, he alligator-

clipped his antenna lead to the fishing line every time he had his bait at full depth and distance. Then, using a boom mike, he called CQ DX and worked the world underwater.

"It was pretty successful," said Zedd. "I believe it is safe to say that I am now the only holder of the underwater DXCC loading a longwire terminated with a Mepps spinner, QRP."

"In addition to working 288 countries, I also worked seven nuclear submarines and the Andrea Doria."

Zedd said his expedition illustrates his long-held belief that a man, to be a man, has to be well-rounded. He hunts as well as he fishes, and of course everyone knows of his world trophies in ballroom dancing and canasta. He has not missed a Sooner football game in 29 years, with the exception of the time not long ago when his DXpedition to southeast Asia got caught in the middle of a war. His

See Q R Z page 4

WA5CZN says,

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