

HAM HOLIDAY

ARRL WEST GULF CONVENTION

CIMARRON

The June 8th. meeting of CARA saw ten faithful members gathered around the snack table. Our most heart-felt thanks to the thoughtful soul who provided the low-cal salad plates. We who are weak salute you!

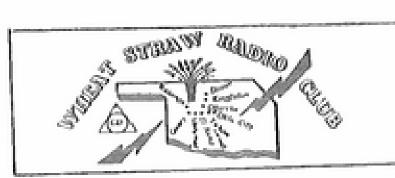
Jack N5LBN, called the meeting to order, and the first item of business, a report on the health of David Rumsey was given. David N5MZP, suffered a light stroke but is reported to be back in fighting trim and ready to go! We are happy about that! David told Leo that he would put a bid on the trailer that we hope to use for Civil Defense communications. Keep your fingers crossed...we need that trailer!

David is Civil Defense Director for the city of Canton. We have two now in our club, which should be a great advantage in organizing our Public service efforts. Jack, our President is Civil Defense Director for the city of Fairview, as well as our Police Chief. The weather events of this month should spur our organization efforts. The state of Oklahoma will have a lot of web-footed citizens if this keeps up!

During the meeting, our treasurer Nadine N5FMH reported the amount of \$429.21) So nice to be solvent!

Field Day was the main topic of conversation. Denny WK5V, our host for the event, reported that all grass burs had been mowed, and the Donicker in good condition. Brush up on your CW boys...we need all the help we can get! Lets hope the Lids with the high blood pressure and the short fuse has learned what Field Days are really for by now!

A good many of our club are working a lot of DX these nights. Terry N5MLT has been visiting Kiev in Russia and Leo WZ5H has a long list of DX...including Russia and Sweden. Leo is the only Ham I know who whould get up at 1:30 A.M. to work DX. It has certainly paid off though, for Leo is up for his WAS in CW, and has enough QSL cards to paper his radio shack!



The May reeting regularly meets on the fourteenth but was postponed until the twenty first, due to Mothers Day. That was too late for the Collector & Emitter in May. Meeting was held at the No. 4 shelter, thanks to N5KCO Neal, in the Red Rock Park at Hinton.

A delicious covered dish dinner was enjoyed by about forty. Then we had some visitors late for dinner. As usual, as K5GBN would say, there was not a bad cook in

Vern KA5SZD, is working on his antenna these days. Dont forget that the Club specializes in antenna parties Vern. We're always ready to help!

CFRA's next VE exam will be held at the Vo-Tech, July 8th. Ten a.m sharp! Bring your license copy and your checkbook. We like WALK-INS!

Denny reported that he has his 440 antenna up and hard-line to the top. It looks like we will have a 440 repeater in the area soon. He says it will operate at 433 mh... up five!

Jack N5LBN, has certainly been busy with his weather-watch this month. We have been fortunate not to have lost a few antennas or other equipment. Our farmers are not so lucky as the hail and rain has been pretty disastrous for them.

There was a lot of good Ham talk and snacking and I think Leo WZSH, Ray ABSZ, Denny WKSV, Nadine NSFNH, Betty KaSRTW. Steve KFSSW, Vern KASSZD, Terry NSMLT. Jack NSLBN, Jack NNSZ would tell you that Ham Radio meetings are fun and worth attending. Oh yes, we had one visitor...a pretty little future teeny bopper named Amber Merrill.

Next meeting ... FIELD DAY! BE THERE OR BE SQUARE!

73's....NN5Z

the bunch. At 2:30 pm we had a good meeting conducted by our President, W5MGZ Perry. After the meeting we enjoyed the fellowship with our guests and members.

The June meeting was held the eleventh in the City Hall at Calumet. Sorry Goldie and I missed the meeting. I was under the weather. Naturally Field Day was discussed. work day will be Friday before Arrangement for a Field Day. portable rest room was made by N5KCO Neal. We hope the weath- ' er will be great for Field Day week end. Looking at the calendar, field Day will be over before the C&E hits the news stand, we will hope for some good news on it next time.

K5GBN Johnny read a letter of a brick layers Accident a few laughs. for Report WASFLT Joe presented a tape by RCA who make two models of controlled repeater voice controllers. NGCL Joe Lynch SM of Oklahoma gave a report on Ham Comm recently held in Arlington and of the happenings with the FCC. K5CPL Carol, the State Assistant SM, was in attendance with Joe.

The July meeting will be a caravan picnic to Roman Nose State Park. A covered dish dinner will be served at 1:30 pm. KA5WHJ Harold and KB5FOR Mary will make arrangements for the location in the park. WA5PFK Ralph will be Net Control for the next month, backed up by N5IKN Tom.

An outspoken person is one who doesn't know what his mouth is going to say next.

"73" Ralph

FOR SALE: Heath SB-104A 100w solid state transceiver with noise blanker, 400 hz CW filter, remote VFO and matching spkr \$350 - HY GAIX 14-AVQ vertical antenna \$10 - Drake twins T4X, R4, AC-3 and matching spkr \$250 Charles W5HQM 685-6768

Don't Delay!

Pre-register Today!

Ham Holiday

CORA HAM HOLIDAY '89 WEST GULF DIVISION CONVENTION JULY 28-30, 1989

LINCOLN PLAZA HOTEL AND CONVENTION CENTER

4445 LINCOLN BOULEVARD OKLAHOMA CITY, OKLAHOMA

GRAND PRIZE: YAESU FT-757GX

PRE-REGISTRATION PRIZE: YAESU FT 2700

MANY OTHER HOURLY PRIZES

IMPROVED FLEA MARKET AREA
TECHNICAL PROGRAMS FEATURING HAM - SCIENTISTS AND ARRL FORUM
BAR-B-QUE BANQUET ON SATURDAY EVENING

Programs begin on Friday evening and continue through Sunday morning. New this year will be a Wouff Hong. VE testing will be conducted on Saturday & Sunday, so come ready to upgrade. We will have our public access demonstration room featuring the latest technology in Amateur Radio, as well as the old favorites. Also this year, child care will be available at Ham Holiday. To reserve a place for your youngster, since space is limited, contact Dorinda Skaggs, 799-5363. As usual, the ladies will have a fabulous program. In addition to technical and non-technical programs, there will be the yearly meetings of the various organizations common to Amateur Radio -- Packet, MARS, Oklahoma Repeater Society, Inc. Sunday Morning Worship will be sponsored by the Oklahoma Baptist Hams. Again this year some of the largest dealers in the Southwest will be at HH89. The Flea Market will again be upstairs in the BIG convention area. Plan now to be ready to buy that rig or antenna that you've always "needed". QCWA will host a breakfast Sunday morning. Talk-in is on 147.03 +.

HH 89 IS BIGGER AND BETTER SEND YOUR PRE-REGISTRATION IN TODAY!!!

PRE-REGISTRATION FORM							
LAST NAMEFIRST NAME							
ADDRESS CALL SIGN							
CITYSTATEZIP							
ADDITIONAL REGISTRATIONS (NAME & CALL SIGN)							
DECITORD I PROMO							
REGISTRATIONS @ \$7.00							
RESERVE FLEA MARKET TABLES @ \$2.00							
RESERVE BANQUET TICKETS @ \$7.50							
(DECISTDATIONS) UILL DE MAILED TO VOILLE DECEMBE DECORE VILLE ACCO.							
(REGISTRATION(S) WILL BE MAILED TO YOU IF RECEIVED BEFORE JULY 17, 1989)							
SEND PRE-REGISTRATION FORM WITH CHECK OR MONEY ORDER TO: HAM HOLIDAY '89 PO BOX 850625 YUKON, OK 73085-0625							
MUST BE POSTMARKED BEFORE JULY 24, 1989							
MICOL DE L'OSIMARIED DEFORE JULI 24, 1969							
Yes, I would like to reserve a room at the Lincoln Plaza at the HAM HOLIDAY room rate of \$42.00 per night							
NAME							
ADDRESS							
CITY STATE ZIP							
PLEASE RESERVEROOMS FOR: FRI-SAT-SUN (CIRCLE APPROPRIATE DAYS)							
I WILL ARRIVE BEFORE 6:00 PM OR							
I WILL ARRIVE AFTER 6:00 PM, PLEASE GUARANTEE WITH MY CREDIT CARD:							
AMERICAN EXPRESS VISA/MASTERCARD DINERS CLUB/CARTE BLANCHE							
CARD NUMBER EXPIRATION DATE							
DO NOT SEND MONEY FOR HOTEL REGISTRATION NOW!							
NOTE: TO RECEIVE THE \$42.00 RATE YOU MUST MAIL YOUR REGISTRATION BY JULY 14, 1989							

FEARF

The June meeting of SCARS was held on the 10th at the Red Cross in Norman. 25 members were present when the meeting was called to order. The president and secretary were both out of town. The minutes were transcribed from notes provided by the vice prez who also presided.

The treasurers report was unavailable but it was reported that about \$648 was spent on the new duplexer.

Old Business:

Field day was discussed and several matters were brought up for consideration. KB5ABS said he would bring a radio and the club radio will also be available. No one is sure where the club generator is and a search for it will take place. There is a plan to use a balloon antenna again this year. KA5EFJ will hold the picnic pavilion and everyone should show up to help set up.

The new duplexer has been ordered and should be delivered in late June. We have received a offer to buy the old duplexer and that will bring out total cost down to about \$400.

Some of the Olympic Festival volunteers have received their assignments from the organizers.

The emergency drill at Norman Regional Hospital will be on the 30th of June at 7am. KASEFJ is calling for volunteers to help with the communications part of the drill.

New Business:

There was some discussion about getting a TNC for the club station at the Red Cross. At the present time the club would gladly accept a donation.

Committee reports:

The technical committee reported that the duplexer has been ordered as stated above.

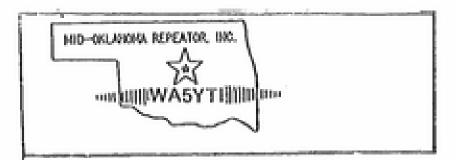
NWS - There were numerous storm days in June and the net was activated on 147.34.

ARES - Nothing new to report.

CORA - Ham Holiday will be the 28th thru 30th of July. Flea market will open at 8am and the dealers at 9am.

The meeting adjourned but the time was not recorded.

Ken, N5KUK



The June meeting was held on June 6, 1989 at The Homestead. A report on the repeaters was given. The new autopatch has been installed on .67 and is The lightning working now. damage to .94 and 4.1 and the 220 system was discussed. Since that time , the repeater system has been restored to service, with the exception of the 220 receiver. The 220 receiver still needs some work, but the maintenance team needs time and weather to cooperate with their efforts! Many thanks to Glen WN5J, KASTDA, Jerry KG5AA & Glenn Sr. KG5MA, also Bob K5KUE for spending many hours at the tower site repairing the damage.

Stu KD5DL, "volunteered" his services as Program Director. We look forward to his efforts in the near future!

On June 13, a request was made on the .94 machine for help with communication at a flooded trailer park. We thank Jerry KG5AA, and Hal WB9VMY, for dropping everything and going to the site and helping with communications. They spent about 3 hours of their day - and MORI appreciates it and thanks them for their prompt response. This is a fine example of amateurs at work in the community at a time of need!

Since the first Tuesday of July is July 4th -- the MORI meeting date is changed to July 6 -- at The Homestead, 32nd & N. Portland - 8 pm. We usualy start showing up around 7 pm for dinner -- come and join us for visiting and a good meal!

73 Bob, KASETA

ned wonthly by CORA, Inc. 1020 Arthur Dr. MIDWEST CITY OK 73110. Second Class Postage Paid at Gila City OK. Subscription: Members \$4.20 other \$7 year. POSTMASTER: Send Form 3579 to: CORA, 1020 Arthur Dr. Midwest City OK 73110 EDITOR: Joe Harding, WASZNF 737-1044 CIRCULATION: Bob Graham, WBSNSV 677-8685



GREETINGS FROM EARS

BY THE TIME YOU READ THIS, FIELD DAY WILL BE HISTORY. TWO YEARS IN THE CLUB AND TWO FIELD DAYS AND I HAVEN'T MADE ONE YET; OTHER COMMITMENTS OR GOING ON VACATION. THE JUNE BDARD MEETING WAS HELD AT THE OAK CLIFF FIRE DEPARTMENT. THE FACILITY LOOKED VERY GOOD FOR FIELD DAY. THERE IS LOTS OF ROOM FOR RIGS ON THE INSIDE, AND A BUNCH OF SPACE ON THE OUTSIDE FOR ANTENNAS. I HOPE EVERYONE WHO ATTENDED HAD A GOOD TIME.

OUR NEXT PROJECT WILL BE THE FOURTH OF JULY PARADE IN EDMOND. THIS PARADE REQUIRES SEVERAL VOLUNTEERS. IF YOU WOULD LIKE TO HELP, PLEASE CONTACT ONE OF THE BOARD MEMBERS AND LET IT BE KNOWN.

THE NEXT BIG PROJECT WILL BE HAM HOLIDAY IN JULY. EARS IS HANDLING REGISTRATION AND VOLUNTEERS WILL BE NEEDED FOR FRIDAY, SATURDAY, AND SUNDAY FOR TWO HOUR SHIFTS. CONTACT KASWIS, LEE VAUGHN, TO VOLUNTEER FOR REGISTRATION.

THIS IS ALL I KNOW FOR JUNE, SO "73" AND THE BEST TO EVERYONE.

MARLIN, NSLZF

Rms voltage:

Rms voltage = peak voltage multiplied by 0.707



WELCOME TO THE 1989 HAM HOLIDAY AND ARRL WEST GULF DIVISION CONVENTION

sponsored by Central Oklahoma Radio Amateurs

<u>Schedule</u>

Friday July 28th	Registration Skywarn Storm Spotters Training School	4:00 pm to 8:30 pm 7:00 pm to 8:30 pm
Saturday July 29th	Registration Flea Market Setup Flea Market Open Commercial Exhibits Programs Volunteer Exam Bingo * Banquet ** Wouff Hong	7:00 am to 4:30 pm 8:00 am to 9:00 pm 9:00 am to 4:00 pm 9:00 am to 4:00 pm 10:00 am to 4:00 pm 10:30 am 200 pm 7:00 pm 12:00 Midnight
Sunday July 30th	Registration QCWA Breakfast Flea Market Commercial Exhibits Baptist Hams Volunteer Exam League Forum Prize Drawings Convention Closes	8:00 am to Noon 8:00 am to 9:30 am 9:00 am to Noon 9:30 am to Noon 10:00 am 11:00 am to 11:45 am 11:45 am 1:00 pm

...... Submitted by WB5SYT

^{*} Banquet will be held at the Mayfair Center, 3200 NW 48th, OKC

^{**} gather near Registration for the Wouff Hong

Friday July 28th

Skywarn Storm Spotters 7:00 am to 8:30 pm Tiered Conference Room Training School Presented by: Bill Bunting Saturday July 29th Basic Antennas for 10:00 am to 11:00 am Tiered Conference Room Beginners Presented by: Bob R. Shaw Non-Technical Programs 10:00 am to 12:00 Noon Seminole Room 10:30 am Volunteer Exam Session To Be Announced 11:00 am to 12:00 Noon Packet Radio Tiered Conference Room Presented by: J. Frank Fields RACES/ARES 1:00 pm to 2:00 pm Tiered Conference Room Presented by: Bennett Basore & **Bob Tierney** Lingerie/Fasion Show 1:30 pm to 2:30 pm Seminole Room Presented by: AROUSE Oklahoma Repeater Society, Inc. Tiered Conference Room 2:00 pm to 3:00 pm Presented by: Joe Buswell 2:00 pm to ????? BINGO Stars Zoomobile (attendance limit...25) 2:30 pm to 3:30 pm Seminole 3:00 pm to 4:00 pm Tri-Service MARS Tiered Conference Room Presented by: Ann Tierney Sunday July 30th 9:30 am to 10:30 am Baptist Hams Seminole Room 10:00 am Volunteer Exam Session To Be Announced 11:00 am to 11:45 am League Forum Stars

Prize Drawings...

Convention Closes

Stars

11:45 am

1:00 pm



VHF Club NEWS

W51.OW The Fluer Goekler Memorial Station

June Meeting Minutes

... were kindly taken by Fred, W5NL, because I was still trying to get home from Charlotte, NC. Sigh, isn't modern air travel fun? Here is what Fred sent me:

Meeting was called to order by President Jack, WB5ZKZ, at 12:25 p.m. with 18 members and guests present. Ellard was off somewhere so there was no Treasurer's report. Charlie, WA5JGU, was off somewhere else (see below) so there was no video taping as planned. The group did make up a list of those who would be staffing the Ham Holiday club flea market table as follows:

Jim, W5JDH, 0900-1000 Steve, W5VCJ, 1000-1100 Hugh, WD5DGY, 1100-1200 Fred, W5NL, 1300-1400

As you can see, we still need volunteers to cover from 1400 until 1700 (that's 2 p.m. to 5 p.m., for you civilians).

Bob, W5HXL, is going to design a form to provide information for interested people and make it easy to apply for membership.

Charlie, WA5JGU, it was later learned, missed the meeting because he made an emergency trip to the hospital to take care of some kidney stones. We heard he was in quite a lot of pain. As of this writing, he is in room 928 of Baptist Hospital.

Jerry, KD5IS, was at the meeting and said he was feeling fine after the angioplasty job. He is expecting a release from the doctor to enable him to head off to New Mexico before the end of the month.

Fred wanted me to remind you that the club's meetings are family affairs and all are encouraged to join up with us. There were seven ladies at the June meeting. Also, remember that a membership in the VHF Club is the most cost effective way to get on the C&E mailing list!

Meeting adjourned at 12:40 p.m.

Joe, K5JB, Sec'y

TCP/IP Doings

I think this month I will ramble on a bit about TCP/IP since I have spent more time playing with it than about anything else in amateur radio. I have worked up the nerve to tackle the source code I received in Dayton and do some serious fine tooth combing of the MS-DOS version so it will look a little neater in the tracing and service filing department. It had to do with some errors in writing the correct end of line sequence to MS-DOS files. All is coming along fine and I am getting comfortable with Phil Karn's package.

I wish I could say the same for Doug, N5DUB who gave it a game try with an Apple Macintosh version of TCP/IP. It seems that the program does some really clumsy things to the Mac's operating system, causes some ugly crashes and prevents the operator from doing any serious other work on the machine for fear of losing work in progress. I am hoping that the Mac developers are working as hard on that version as others did on the MS-DOS version to make it as bug-free as it is. I have had no problem with mine in over a year. The early versions had some of the same problems that Doug experienced.

There was some grumbling from West Texas by a Net/ROM czar who threatened, and then removed some critical Net/ROM node from his area because he didn't like to see TCP/IP running through it. I lost his original message so I don't remember his call. (I remember his message well. It was ill formatted, having nary a single lineend, and uncovered a deficiency in my TCP/IP mail processor. It simply ignored and discarded all the text after 128 characters, I had Dave, WB5FWE, forward it to me three or four times before I got a programmed workaround to work properly

Anyway the gist of it was that, "If you guys don't stop sending TCP/IP through MY nodes, I'll take them off the air!" Reminded me of some of the complaining I heard when people couldn't cope with the non-printing characters sent by Net/ROMS, binary file transfers (YAPP), and TCP/IP. It was sending their terminals into tail spins with the screens going winkie-blinkie and the bells going ringie-dingie. My comment to that is, "If you don't know how to dodge cars, don't play in the street!"

I did save Dave, WB5FWE's message to the guy, and since I thought it was

a well reasoned appeal to think things out before pulling the plug on the network, I thought I would share it with you. This is the cc: he sent to me and I left the headers so you could see what SMTP (Simple Mail Transfer Protocol) looks to the user:

From wb5fwe@wb5fwe Tue Jun 06 13:56:13 1989

Received: from wb5fwe.okla.ampr by k5jb.okla.ampr with SMTP

id AA2733; Tue, 06 Jun 89 13:51:10 CDT

Date: 06 Jun 89 13:42

Message-ID: < 23846@WB5FWE >

From: WB5FWE@WB5FWE To: k5jb@k5jb.okla.ampr Subject: re TCP/IP

Status: R

R:890606/1342z @: WB5FWE NORMAN OK,IP-GATE #:23846 Z:73072

Hi B John! Sounds like you guys have reached the stage we in Okla reached "before" we trunked. When everything was on 01, it was easy to say that one single type of user, be it BBS or TCP/IP was responsible for network garf and therefore made it unfit for use. But the real story was simply that the time had come to upgrade the works. Since installing the trunk at a simple 1200 baud we now effectively deal with wx maps, BBS activity, and TCP/IP along with the ragchewers all going at the same time. The only problems we are hearing about are the the western Okla bunch, who didn't see fit to dual port their sites and join us, hence they get to look at it all. Now that they have finally realized you cant stop upward movements, they too are making plans to eliminate the problem by upgrading, not by pulling the plug or downgrading an already taxed part of the network. We currently are looking at 9600 baud trunking gear to further enhance our efforts.

73 de Dave WB5FWE @ WB5FWE 44,78.0.8

A Good Guy

Here is a related message from a fellow in San Antonio, TX, edited a little for brevity. I removed the headers...

From w5ifp@ka5ejx Sun Jun 18 10:13:27 1989 Subject: I Love TCP/IP

The following is an opinion of TCP/IP:

This opinion is supported by daily 24 hour operation of a TCP/IP gateway to a packet full service BBS. The BBS has been in operation for over 3 years and

the TCP/IP gateway for approx 18 months.

First I must admit the road was not an easy one...no one said it would be! But, neither was the acceptance of the "DONALD DUCK" mode of communications introduced in the early 50's...however it eventually caught on and look where it is today...the "no.1" mode of amateur communications world wide. For those of you not around in the 50's, "DONALD DUCK" was affectionately applied to the new "Single Side Band" operation.

I look upon TCP/IP as the wave of the future in networking of individual Packet Radio stations. We have proven that this network is a viable one and "CAN" coexist in the routine Net/ROM packet environment.

TCP/IP is not a new innovation...its been around a long time in the commercial world...what is new, is the application of TCP/IP to packet radio. This is an enhancement that was a natural to piggy back on packet radio.

What is unfortunate is that many do not understand TCP/IP and feel intimidated by it. I would encourage all TCP/IP users to prepare a DEMO of TCP/IP and its capabilities at local Radio club meetings. A picture is worth a thousand words to the uninformed.

One major misconception is that TCP/IP will replace the current Net/ROM nodes...this is farthest from the truth...actually TCP/IP is dependent on the Net/ROM nodes to effectively establish a long path. TCP/IP can and does effectively co-exist with AX25 protocol. We have come a long way in establishing parameters for both TCP/IP and AX25 where they can operate on the same network in a time share..non-interference basis.

I am appalled as the recent action to "pull the switch" on a major Net/ROM node in Texas just because the owner "did not like TCP/IP". Someone has failed in their job of acquainting that individual in the use and purpose of TCP/IP.

TCP/IP can offer a lot of advantages to the average packet user...just to mention a few:

TCP/IP can be used for delivery of personal mail and bulletins right to your home computer, without you checking into a local BBS. This is happening 24 hours daily. An advantage to this is reduced network loading dur-

ing prime time when everyone is trying to check into the local BBS.

TCP/IP can be used for STATION to STATION messages and its all "AUTO-MATIC" you don't have to keep trying to connect to the other station...TCP/IP timers do it for you. It will periodically try to connect to the target station until its establishes a connect and deliveries the message.

TCP/IP can be used for BINARY file transfers. The big advantage here is that you can establish a transfer action and go to bed and leave it. You don't have to BABY SIT it as in YAPP and some of the other protocols.

TCP/IP can be used for KEYBOARD to KEYBOARD QSO's..several sessions can be established at the same time with different HAMs.

TCP/IP can be used for ROUNDTABLE QSO's with several stations connected at the same time and ALL stations see what is being said all others. This function will support both TCP/IP and AX25 users on the same conference bridge at the same time.

TCP/IP has a monitor mode that allows you to DECODE and see Net/ROM node information in plain english instead of hieroglyphics (garbage). Believe me all that junk actually makes sense !!!

The frosting on the cake is that all of the above can be going on simultaneously and all with only 1 TNC, 1 radio, 1 computer, and 1 very busy operator. Try that with a regular ax25 setup. The time sharing and multitasking capability of TCP/IP is mind boggling to say the least.

I would hope that all packet operators and nodeowners would be cooperative and allow the advancement of this highly advanced digital technology. It's here to stay. Its acceptance is a 2-way street. TCP/IP users "must" make an all out effort to operate on a non-interference basis and insure that your playtoy doesn't mess up a another ham's playground! Non-TCP/IP users should investigate this technology. You may actually find it an enhancement to your existing operation.

TCP/IP can and does !!! operate on a major Net/ROM network. TCP/IP in San Antonio and points between here and Houston are using 145.09. This frequency is used for BBS check-in and forwarding to several cities; yet the TCP/IP usage is coexisting very well. The "secret" is proper parameters in

both the TCP/IP program and the network nodes; and, a lot of common sense!!!

I operate a full service BBS-TCP/IP gateway and process approximately 1200-1500 messages monthly...approx 30% of this activity is to/from the TCP/IP operators, a service I'm proud to provide.

We're all in this hobby for fun and technology contribution to our society! Please don't sell a new idea short just because you don't like or understand it. Let those who are interested pursue their goals.

I thank all of you for fistening. 73 Jim/W5IFP (44.76.2.1)

What Does It Look Like?

In case anyone is interested in what a TCP/IP session looks like to a computer that is capable of "playing in the street", I extracted part of a trace of an FTP session. In this session I was sending WB5FWE a fresh copy of the TCP/IP address list for his FINGER sub-directory. (Finger is a service that lets a user "put the finger" on someone. He sends "finger@wb5fwe" and gets a list of all the users who have information on file at host wb5fwe. The information is kept in a directory called, finger.

In the session that follows, I am using the Net/ROM transport layer. My system and Dave's are emulating Net/ROM so the transport layer actually starts in each of our computers. This session is routed through WD5HJL-2 and WB5FWE-3. I started it by simply typing. "Itp wb5fwe".

In the trace that follows, I eliminated all the AX25 acknowledgments and Net/ROM frames between WD5HJL-2 and WB5FWE- 3, since the information contained is the same as what I sent or received from WD5HJK-2 Net/ROM. First we make the connect, AX25 style and see:

ax0 sent:

AX25: K5JB-10- > WD5HJL-2 SABM(P)

and WD5HJL responds with:

ax0 recv:

AX25: WD5HJL-2- > K5JB-10UA(F)

Then we ask for a transport connection, requesting an FTP session at the same time:

ax0 sent:

AX25: K5JB-10-> WD5HJL-2 I NR = 0
NS = 0 pid = NET/ROM
NET/ROM: K6 ID 10> WD55W5 10 W 15

NET/ROM:K5JB-10 > WB5FWE-10 ttl 15 IP: len 44 44.78.0.2- > 44.78.0.8 ihl 20 ttl 15 prot TCP

TCP: 1001->21 Seq x86e2a3c0 SYN Wnd 1080 MSS 216

The transport connection is acknowledged and the TCP/IP ends set up a session, agreeing on things like max segment size, window size, etc:

ax0 recv:

AX25: WD5HJL-2-> K5JB-10 | NR = 1 NS = 0 pid = NET/ROM NET/ROM:WB5FWE-10 > K5JB-10 ttl 13 IP: len 44 44.78.0.8- > 44.78.0.2 ihl 20 ttl 15 prot TCP TCP: 21-> 1001 Seq x6381dc90 Ack x86e2a3c1 SYN ACK Wnd 1080 MSS 216

ax0 sent:

AX25: K5JB-10-> WD5HJL-2 | NR = 1 NS = 2 pid = NET/ROM NET/ROM:K5JB-10 > WB5FWE-10 ttl 15 IP: len 40 44.78.0.2-> 44.78.0.8 ihl 20 ttl 15 prot TCP TCP: 1001-> 21 Seq x86e2a3c1 Ack x6381dc91 ACK Wnd 1080

ax0 recv:

AX25: WD5HJL-2-> K5JB-10 | NR = 3 NS = 1 pid = NET/ROM NET/ROM:WB5FWE-10 > K5JB-10 ttl 13 IP: len 143 44.78.0.8-> 44.78.0.2 ihl 20 ttl 15 prot TCP TCP: 21-> 1001 Seq x6381dc91 Ack x86e2a3c1 PSH ACK Wnd 1080

Dave's system sends it's first information, a greeting that it is ready for FTP. From this point on, I'll edit out the TCP/IP acks.

0000 220 wb5fwe.norman.okla.ampr FTP version 871225.33 (alpha w9nk.4. 0040 2X) ready at Tue Jun 20 17:14:42 1989...

I log in with a user command:

ax0 sent:

AX25: K5JB-10-> WD5HJL-2 I NR=2 NS=4 pid=NET/ROM NET/ROM:K5JB-10 > WB5FWE-10 ttl 15 IP: len 51 44.78.0.2-> 44.78.0.8 ihl 20 ttl 15 prot TCP TCP: 1001-> 21 Seq x86e2a3c1 Ack x6381dcf8 PSH ACK Wnd 1080

0000 USER joe...

It asks me for a password:

ax0 recv: AX25: WD5HJL-2-> K5JB-10 I NR = 5 NS = 2 pid = NET/ROM NET/ROM:WB5FWE-10 > K5JB-10 ttl 13 IP: len 64 44.78.0.8- > 44.78.0.2 ihl 20 ttl 15 prot TCP

TCP: 21-> 1001 Seq x6381dcf8 Ack x86e2a3cc PSH ACK Wnd 1080

0000 331 Enter PASS command...

And I send my password:

ax0 sent:

AX25: K5JB-10-> WD5HJL-2 I NR-3 NS=6 pid=NET/ROM NET/ROM:K5JB-10 > WB5FWE-10 til 15 IP: len 51 44.78.0.2-> 44.78.0.8 ihl 20 til 15 prot TCP TCP: 1001-> 21 Seq x86e2a3cc Ack x6381dd10 PSH ACK Wnd 1080

0000 PASS k5jb..

And it tells me that I am logged in:

ax0 recv:

AX25: WD5HJL-2-> K5JB-10 | NR = 7 NS = 4 pid = NET/ROM NET/ROM:WB5FWE-10 > K5JB-10 ttl 13 IP: len 55 44.78.0.8-> 44.78.0.2 ibl 20 ttl 15 prot TCP

TCP: 21->1001 Seq x6381dd10 Ack x86e2a3d7 PSH ACK Wnd 1080

0000 230 Logged in..

Skipping a housekeeping frame, we now see where I checked the directory, "\finger" to make sure the file I want to send is not already there. (I don't have privilege of overwriting Dave's files):

ax0 sent:

AX25: K5JB-10-> WD5HJL-2 I NR = 7 NS = 2 pid = NET/ROM NET/ROM: K5JB-10 > WB5FWE-10 ttl 15 IP: len 54 44.78.0.2- > 44.78.0.8 ihl 20 ttl 15 prot TCP TCP: 1001-> 21 Seq x86e2a3ed Ack

x6381dd36 PSH ACK Wnd 1080

0000 NLST \finger...

It actually sends the directory to me as a file, so skipping the setup for that activity, we see the file actually arrive. Note that it prints on my screen just as you would actually see a directory. (None of this stuff is on the screen because I am tracing to a file and not to the screen. When you trace to screen it is messy indeed!

ax0 recv:

AX25: WD5HJL-2-> K5JB-10 I NR=5 NS=3 pid=NET/ROM NET/ROM:WB5FWE-10> K5JB-10 ttl 13 IP: len 72 44.78.0.8-> 44.78.0.2 ibl 20 ttl 15 prot TCP TCP: 20-> 1002 Seq x8b5e2d41 Ack xb91a2b61 PSH ACK Wnd 1080 0000 k5jb.txt..n5pt.txt..wb5fwe.txt..

It had three files, none called all.txt the file name I use for the TCP/IP address list so I will send him "all.txt".

ax0 sent:

AX25: K5JB-10-> WD5HJL-2 I NR=0 NS=1 pid=NET/ROM NET/ROM:K5JB-10 > WB5FWE-10 ttl 15 IP: len 62 44.78.0.2-> 44.78.0.8 ihl 20 ttl 15 prot TCP TCP: 1001-> 21 Seq x86e2a411 Ack x6381dd8d PSH ACK Wnd 1080

0000 STOR \finger\all.txt..

It does some things to open a data connection and gives permission to me to send "all.txt" and it is sent in the frames that follow. This is the first of those frames:

ax0 sent:

AX25: K5JB-10-> WD5HJL-2 I NR = 6 NS = 5 pid = NET/ROM NET/ROM:K5JB-10 > WB5FWE-10 ttl 15 IP: len 236 44.78.0.2- > 44.78.0.8 ihl 20 ttl 15 prot TCP TCP: 1003-> 20 Seq xd44bfdf1 Ack xa5034551 ACK Wnd 1080

0000 This is the total list of addresses I have assigned. K5JB....44 0040 .78.0.1 Bob, KA5MIZ, Inactive..44.78.0.2 Joe, K5JB, Midwest 0080 City..44.78.0.3 Dave, WD5G, Midwest City..44.78.0.4 Duane, K 00c0 A5WR

After the file was sent and the systems told each other that all was OK, I logged off with the quit command:

ax0 sent:

AX25: K5JB-10-> WD5HJL-2 | NR=4 NS=4 pid=NET/ROM NET/ROM:K5JB-10 > WB5FWE-10 ttl 15 IP: len 46 44.78.0.2-> 44.78.0.8 ihl 20 ttl 15 prot TCP TCP: 1001-> 21 Seq x86e2a427 Ack x6381ddd9 PSH ACK Wnd 1080

0000 quit ..

And, guess what, it said, "Goodbye", logged me off and closed the connection:

ax0 recv:

AX25: WD5HJL-2-> K5JB-10 | NR=5 NS=4 pid=NET/ROM NET/ROM:WB5FWE-10> K5JB-10 ttl 13 IP: len 54 44.78.0.8-> 44.78.0.2 ihl 20 ttl 15 prot TCP TCP: 21-> 1001 Seq x6381ddd9 Ack x86e2a42d PSH ACK Wnd 1080 0000 221 Goodbye!..

In a little bit, I did a "finger@wb5fwe" to see the file there, and later down-load it. I won't show the whole transaction but the request for finger looks like this:

ax0 sent: AX25; K5JB-10-> WD5HJL-2 I NR=7 NS=7 pid=NET/ROM NET/ROM:K5JB-10> WB5FWE-10 ttl 15 IP: Ien 44 44.78.0.2-> 44.78.0.8 ihl 20 ttl 15 prot TCP TCP: 1004-> 79 Seq x2ec2e00 SYN Wnd 1080 MSS 216

It didn't have to re-establish the Net/ROM route because it had been within the 15 minutes that Net/ROM keeps a circuit open.

The following two frames were in response to my finger request. Note that the file I sent, "all.txt", is now a "user" called "all".

ax0 recv: AX25: WD5HJL-2-> K5JB-10 I NR = 1 NS = 0 pid = NET/ROM NET/ROM:WB5FWE-10 > K5JB-10 ttl 13 IP: len 69 44.78.0.8-> 44.78.0.2 ihl 20 ttl 15 prot TCP TCP: 79-> 1004 Seq xdc2d47b1 Ack x2ec2e03 PSH ACK Wnd 1080

0000 Known users on this system:..

ax0 recv: AX25: WD5HJL-2-> K5JB-10 I NR = 2 NS = 1 pid = NET/ROM NET/ROM:WB5FWE-10 > K5JB-10 ttl 13 IP: len 97 44.78.0.8-> 44.78.0.2 ihl 20 ttl 15 prot TCP TCP: 79-> 1004 Seq xdc2d47ce Ack x2ec2e03 FIN PSH ACK Wnd 1080

0000 k5jb., n5pt., wb5fwe., all.,

I did a finger all@wb5fwe to see the list but I think you get the idea of what the trace would have looked like.

I have been very careful to keep TCP/IP traffic off of VHF but since it has not been getting exposure it should, it has not grown as it should. I will be thinking my previous position over and perhaps putting a VHF port on the air on 146.415. Most people with reasonable stations can hit me with a 40 mile radius when I am on the outdoor antenna (sigh! What a bunch of weather we've had!) I agree with Dave, WB5FWE. We have been playing with this stuff long enough without doing something different. If we just set back and do nothing different, we are doing nothing! After all, isn't 'advancement of the radio art" one of our commissions in return for using these bands?

Higher Packet Speed

Dave, WB5FWE, had been harping along the 'If we aren't doing something different, we aren't doing anything!" line and we have been trying to figure out how to get some experimenting going at higher baud rates on packet. I am really excited with the 56kbps WA4DSY modem but not yet excited enough to build two of the kits to play with them. I figure I have to build two of them for the same reason I got two TNC-1s when they were first available: It takes two to tango, er, packet!

4500 bps is the minimum I would consider fooling with because, with the overhead and turn-around delays. the increased performance would be negligible with anything less. I would really like to try 9600 or higher but there are some problems with some of the TNCs running 9600 on the RS-232 side. The DRSI packet adapter would not have any problem with the 9600 and higher but the 56k would require specialized hardware like the PS-186 card, or "Totally Awesome I/O Adapter". It seems that the easiest and most practical speed increase, the HAPN 4800 bps modem would be the easiest to get playing

Only problem is the distance between me and Dave. We can't work reliably on packet. Dave is talking of putting up a full duplex UHF repeater in the Norman area, tuned to handle packet audio. Now that opens up some interesting possibilities! Gone would be the "hidden transmitter syndrome" if the users have reasonable station performance and can hear the repeater's output. It wouldn't be able to handle more than normal voice bandwidth but it would enable us to play with some of the possible high-density poly-phase modulation schemes that would back more bits per baud.

If there is anyone else out there who is interested in doing some experimenting, let Dave or me know. I am eager! Joe, K5JB

OPRA News

I had not had any notes on OPRA (Oklahoma Packet Radio Association) lately so I asked J, KB0QJ what was going on lately. I told him that if we didn't hear something from time we might think it was dead! Here is his reply:

The Oklahoma Packet Radio Association is not moribund. There simply has been a significant lack of support from the hinterlands.

One amateur from SCARS has been most active and deserves particular mention, Dave Medders/K5PL. He has been of tremendous help in two especially important projects: the solicitation of outside funding and the systems operator of the OPRA computer system located at the National Weather Service in Norman.

Because of the tremendous usage of the latter, especially in the southwest part of the state during the past several weeks and the fact that the packet network is quite fragile, there has been some seemingly excessive loading of the system due to preemptory disconnects by the node firmware. Because of the nature of the traffic content coupled with an inability to transfer the desired information, the only recourse was to simply make another attempt.

The disturbance of this sequence of events has lead to the acquisition of equipment to create two UHF/VHF Net/ROM bi-nodes at Rush Springs and Altus to transfer traffic between Norman and Altus (and similar LANs in the southwest) via the UHF path. Because OPRA has no funds, a small number of amateurs with dedicated interest in this project have been most generous with their donations of time, effort, money and similar support.

Since RUSH will be reborn at the original site as a Net/ROM node the aliases will be #RUSH (UHF) and RUSH99 (VHF) and the latter will have a LAN frequency of 144.990 MHz. The Altus UHF alias will be LTS, however there has been no mention of the alias for the LAN node which will be on 145.090 MHz.

Because of the delays in the delivery of the RUSH crystals and Net/ROM chips (actually, the order will not be mailed until tomorrow), the projected startup date will be August 12.

The Altus group already has their equipment assembled and ready for path testing at this time. They had less trouble getting into a state of readiness because of local funding support and the donation of some equipment.

The use of this path will be similar to some metro OKC paths (e.g. ELRO and ELRO7 on 145.070 MHz). Users in the Altus LAN will simply connect to their node on 145.090 MHz and then connect with the OPRA node as always. How-

ever, users in the RUSH99 LAN must connect to their node on 144.990 MHz and the connect to the OPRA node. When connected to the OPRA node, then any weather information can be accessed via the OPRA computer system at WB5PWY located at the NWS.

There has been some widespread misunderstanding of the proper usage of the MAIL function of the OPRA computer system. This function was never intended to be other than a simple 'mail drop' and in no way resembles the current personal mailbox systems now popular TNCs, especially Kantronics. There are only THREE COMMANDS!

If a user is greeted with a prompt of: NWS > the command to enter the mail function, then simply enter the command mail or, more simply, m, where-upon the new prompt will be MAIL >.

At this point, one MUST enter a valid call sign, uncorrupted by any ASCII values such as BACKSPACE or unneeded control characters, and terminated with an <ENTER>, CONTROL-M, or <CR>.

If successful, the user will be prompted for the input of the message text. If the intended recipient is not a registered user, or if the call sign was corrupted by unknown ASCII characters, the result will be a rejection prompt.

After getting the prompt to enter the message text, type in the text in lines no longer than 80 characters. (It may be best to set your TNC to send no more than 80 data characters - length of packet or PACLEN.) (ed. note: AL-WAYS enter traffic to BBS systems and mail drops with lines no longer than 80 characters. Some systems can correct this ERROR, others can't. If your message is forwarded it will probably be TRASHED somewhere along the circuit if it has lines that are too long for the forwarding computer - JB)

The termination of the text of the message is quite simply to send the final packet as is normally done. This will put your cursor in column one of a new line. At this point type END, or end, and <ENTER> or <CR>. CONTROL-Z or /EX as is used on PBBS and personal mail box systems WILL NOT terminate the message. This will only result in adding these ASCII characters to the message text.

This having been properly done, the program will return the MAIL>

prompt. This is the only verification that the program has accepted and saved the message to hard disk.

If mail was being entered and there has been a Net/ROM system disconnect midway through the entry process, all text received up to that point will be saved to hard disk with the default termination prompt of: "ABNORMAL TERMINATION appended to the message by the system software. This will not appear to the user, rather to the intended recipient.

However, the user has no way of knowing at what point the message was terminated, nor exactly what text was saved to the hard disk. Sorry, that's the best we could do

The command to end the session depends upon how the user entered the mail function. If the user entered with the prompt NWS>, then simply type an N, or n, followed by < CR>.

If the mail function was entered with the prompt MAIL > , then the user simply issues a command to his TNC, usually a CONTROL-C, to re-enter the TNC command mode and perform the usual disconnect sequence.

There are no other commands! Sending a B, J, JH, or commands used by other systems will only get the default return prompt. Have fun!

Remember, OPRA needs your support if it is to continue to assist in the development and/or expansion of the existing packet networking system.

Oklahoma Packet Radio Association, 3820 N. Riverside Drive, Bethany, OK 73008 - J. F. Fields/KB0QJ

Band Opening

Here is a partial result of a 2 Meter band opening we had May 23. It was captured by my monitoring program on 145.01, and I stripped out all the identification packets from Net/ROM. Rip/ROM and even a TEXNET node. How many of these network nodes you see every day? Note that the TEXNET node is using AX.25 version 1 (no poll/final bit).

K5JB MONR version 1.27x: Following saved at: Tue May 23 06:33:33 1989

K5LGW-1 > ID{ui,c} Network node (WFORD)

KA0TTY-3 > ID{ui,c}

Network node (KSWCH)

KA5VKD-1 \cap ID{ui,c} Network node (PLVW)

WB5UDX-2 > ID{ui,c} TheNet 1.0 (AMA)

WN5LUI-1 > ID{ui,c} TheNet 1.0 (PONCA)

K0EQH-1 > ID{ui,c} TheNet 1.0 (GARD)

WB5FBU-1 > ID{ui,c} TheNet 1.0 (ELK)

WA0ZBL-2 > ID{ui,c} TheNet 1.0 (ARK)

WD5HJL-1 > ID(ui,c) Network node (OKC)

WA5TBB-2 \ ID(ui,c)
Network node (SMYER)

WB5AOH-4 > ID{ui,o} FTGIBSN OKLAHOMA! TEXNET NODE FTGIBSN

WJ5Y-1 > ID{ui,c} Network node (LAW)

WA5TBB-1 > ID(ui.c) TheNet 1.0 (LBB)

N5IMO-1 > ID{ui,c} TheNet 1.0 (HDLY)

N5KFN-1 > ID{ui,c} Network node (CEDAR)

N5DUB-5 \cdot ID(ui,c) Network node (POND)

W0BT-1 > ID{ui,c} Network node (BLC)

WA0UPB-1 > ID{ui,c} Network node (JLN)

KA5EJX-2 > ID{ui,c} Network node (DBL)

WA0D-9 > ID{ui,c} TheNet 1.0 (HUTCH)

N5OK-1 > ID{ui,c} TheNet 1.0 (CLR)

KA5BML-11 > ID{ui,c} Network node (SPD)

There was another band opening June 19th, or so, but I didn't think of making a note of it. I saw familiar calls from Omaha NE during that one. Joe, K5JB

O. R. ZED cont.

sometimes things look funny in print, and I don't want anybody to ever get the idea that I am not humble and modest."

The broken keyer, Zedd told us, is from his 1963 DXpedition to the Amazon Basin.

"It was so hot and humid there in the jungle," he explained, "that we just could not work phone. Our words would mildew between our mouth and the mike, so by the time they got through the rigs and out into the air, they was already 2 and 9 or maybe worse. So we had to unplug the mikes and go strictly CW.

"Well, I worked about 9K with that old keyer the first afternoon, and it was just fine. But sometime in the night I forgot myself and started sending as fast as I can, rather than what normal mortals might can copy

if they got a computer.

"Well, sir, sitting there in that tent, sending out the 5-9-9s as fast as I could paddle, imagine my surprise when all of a sudden I started getting feedback through my rig and a kind of orange glow around the contacts on the keyer paddles, and then an arc jumping around inside the keyer's electronics. And then a blue bolt of lightning flang itself out of the keyer and went to ground right at my feet.

"Well, it got my attention, fer sure, fer sure. I suspended operations for a few minutes and investigated. Pried the lid off that keyer and found

some fried chips in there."

We asked what had caused the

malfunction.

"The only thing I could figure then, or ever," Zedd told us, "was how fast I got sending that CW. I was doing about a hundred contacts a minute, give or take a few. The way I figure it, my signals got going faster

GREAT PLAINS A.R.C.

USHGH Repeater 146, 13/73

Isn't the warm weather nice? It's the time of year for picnics and homemade ice cream and enjoying your friends and family. The 4th of July will be here soon. In this area, Crystal Beach in Woodward and the city park in Mooreland have the best holiday celebration around. If you like hamburgers and watermelon and good music come on by. At our house we fly the flag on top of our break-over pole. It can be seen for several miles aroung Reger hill.

Andy Taylor, N5LRR, reports 14 sessions, 144 check it now has the new call of N5OKF. and 4 pieces of routine traffic handled for the month of May.

than the electrons could run around the circuit, and when the signals got ahead of the electrons, there started to be what you might call subatomic rear-end collisions in there. Naturally, the chips took the brunt of it because some of their channels are so fine.

"It taught me a lesson, boy. Since that day, I have never again forgot to slow down enough to let them electrons catch up on a real regular basis."

Zedd said the keyer is repairable.

Oh. One final note. As usual, because of his modesty and all, Zedd may appear at his table in a clever disguise. As is well known, he is a master of disguise.

"It keeps the crowd under control," Zedd told us. "And it's fun.

being anonymous."

Last year Zedd attended in one of his disguises. That ruse can now be revealed. He went as W5LFK.

The annual Road Runner Marathon was held recently in Gage, Oklahoma. The amateurs provided communications from 6:00 a.m. until the last person crossed the finish line. The people involved were Freida N5EOX, Lewis W5KFK, Bart NZ5T, Robert WB50VR, Rod WB50VT, Lois N5JGQ, Gerald WG5Z, Willis N500, Lorene N5LEP, and O.C. WA5OUV. The 24 plus miles marathon is in conjunction with the 10 K Run on the same day at Gage. This makes for a long day for everyone involved. I understand that Gerald may invest in a cot and some warm blankets. The chilly nights we have been having made for a very long sleepless night in his car before the marathon.

Saundra, formerly KB5FW0, eon, formerly KB5CZT, now has the call N50KE.

Windle, WASPLW, the president of the Great Plains Amateur Radio Club, is now out of the hospital and doing very well.

Another sports event was recently held at Crystal Beach in Woodward. It was the Harvest Days 10 K Run. This event draws a big crowd. It seems that people are interested in fitness and it's not just the youngsters either. Windle WASPLW, Bob WBOGAX, Bart NZ5T, Lois N5JGQ, and Rod WB5OVT provided the radio communications.

The Sooner State Games 10 K Run will be held on June 24 over the same Crystal Beach course. Try to attend.

Hope everyone has a fun 4th of July and most of all a safe one.

Leon N50KE

AT HAM HOLIDAY SUNDAY 7-30-89 0800

--KU5B

EVERY ONE INVITED BUT WE MUST HAVE YOUR MONEY BY JULY 10, 1989 TO KEEP THE CHEF HAPPY. HE SAYS "NO SSSS NO FOOD". SEND \$9.00 PER PERSON TO NORMAN WILSON (WSFLO), 601 EAST ARBOR DRIVE, MIDWEST CITY, OKLAHOMA 73110.

CENTRAL OKLAHOMA CHAPTER 63, QCHA, INVITES YOU TO JOIN US. IF YOU HELD A LICENSE THENTY-FIVE YEARS AGO (does not have to be continuous) YOU CAN JOIN OCHA. WE HAVE A SUNDAY MORNING NET ON 3855 AT 0800 HOURS. WE HAVE QUARTERLY DINNER MEETINGS WITH LOTS OF GOOD FELLOWSHIP. CONTACT MORM AT (405) 737-0258 FOR MORE INFORMATION.

SUN	MON	TUE	WED	THU	FRI	SAI
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9 WHEATSTRAW ARC	10 EDMOND CLUB	CIMMARON ARC	12	ALTUS AREA A R A KAY COUNTY A R K	EDIT NIGHT FOR C & E	CENTRAL OKLAHOMA VHF CLUE
EDMOND SOCIETY	VE EXAM 6 PM REC- CROSS BLDG	OK CITY AUTOPATCH	19	20	21 🕈	22
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Q. R. Zedd

A5A GETS FLEA MARKET TABLE

After an absence of several years from the flea market at Ham Holiday, Q. R. Zedd, A5A, has reserved a table for the upcoming event.

On hearing the news, several local radio amateurs fainted. NASA set plans to send three scientists early the first day of the ham convention, hoping to learn new science insights by studying some of the home-made junk Zedd might be throwing away.

Zedd, world's greatest DXer who lives just a hoot and a holler south of town, was characteristically modest and understated about his

"I don't often rent a flea market table," Zedd told C&E, because when I do, nobody else can get their stuff looked at. That's because everybody is over there at my table, wanting to touch the hem of my garment and get an autograph, and all.

"This year, though, I've just

got so much surplus equipment and everything piled up that I have got to put in an appearance. I figure it will sure simplify my life, as well as give some of the boys and girls a big thrill. So what the heck."

Pressed to tell us just a few of the goodies he planned to take to Ham Holiday, Zedd leaned back in his rocking chair on the porch of Honor Roll, propped his Roy Rogers boots on the railing, opened a Colorado KoolAid and package of Dingdongs, and let out a few secrets.

Zedd said he will try to unload four of the big Icom rigs which he has tested for the factory. These were not only furnished to him free of charge because it was known he would give them the ultimate test; Icom needed the sales boost Zedd's testing would provide, and the factory will soon announce the special "Q.R. Zedd Autograph" model, which will cost \$17,500. The all-band, all-mode rig is expected by Icom to become as famous in time as the Red Ryder carbine.

"These test models of mine are going to go at about \$15 apiece," Zedd told us. "Of course that's without an autograph."

In addition, Zedd says he plans to offer two slightly used power tubes out of his small walk-in linear "if I can get them through the door." These tubes are specially built for Zedd by Boeing in Seattle, and require considerable voltage on the plate. The city of Purcell tried to use one to heat its city parks, but the county did not have enough power to light it up properly.

There will also be the following on Zedd's table:

2 -- 807s.

1 -- box of assorted resistors.1 -- 1964 Philco AM radio.

1 - Zedd-built transceiver.

3 -- 100-foot tower sections.

1 -- broken keyer.

burnt-out microphone.
 assorted medals.

1 -- Boris Badenov dartboard.

Zedd assured us that each and every one of these items has great personal significance to him. "I hate to see 'em go," he said, "but even W5SQJ parts with a piece of junk every now and then. And I have just got to make room in my workshop and storage area for some of my new

Pressed for more information about his flea market stuff, the great man said he would tell us just one story. "I would tell you more, but

CONTINUED ON PRECEDING PAGE