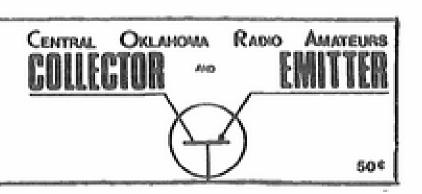
STOOND CLASS IS.

Volume 14 June 1988 Number 160



HAM HOLIDAY SET FOR AUGUST 5,6&7

GREAT PLAINS A.R.C.

W5HGH Repeater 146, 13/73

EYEBALL QSO 88

This year's G[ARC Eyeball QSO and related activities held the 9th and 10th of April were a huge success. The VE Testing conducted Saturday went very well with sixteen hopefuls present. Later that

night almost 100 were fed at the hamburger fry. Sunday's activities started bright and early and yielded 225 registered participants.

It seemed that more gear, both new and used was available than ever before. The meal was again excellent and if anyone left hungry it was their own fault. It's strange how there is always some left over but it seems to work that way every year. the Even dutied went better cleanup than usual this year and there was time for the quarterly Board of Director's meeting afterward.

Our thanks to everyone who participated - those who helped wth the testing, the dealers, those who bought swap gear, our own workers, and most of all everyone who attended. We enjoyed it and are planning for next year's event already.

MEETING NOTES

information available The from the April meeting seems to be very skimpy because it was to be held in conjunction the Eyball QSO. With with everything else happening, there simply wasn't much time available for a club meeting. meeting was more May The successful but because of the First sunday falling on the 1st, several of us forgot At the CORA Meeting the other night everything was affirmed, everything ready and everyone "panting at the bit" to get on with the latest, 15th or 16th HAM HOLIDAY, which will be held on August 5, 6 & 7 at the Lincoln Plaza Convention Center in Oklahoma City.

This years edition of the annual gathering of Hams from all over the state, Texas, Kansas, Arkansas, Colorado, New Mexico shapes up to be an outstanding gathering.

Plans have been made to have several programs covering all amateur the of spectrum. plenty of will. There be coverage. Time would not allow us to print the whole program but we expect to have all of the details in next months issue. Of course there will be a Flea Market replete with all the goodies you can imagine. All of the "old" Commercial Dealers will here as well as several new ones.

about it. Those present discussed the Eyeball QSO while it was fresh on our minds and made several recommendations for next yera's event. The club has also been asked to provide communications again this year for the Woodward Harvest Days and Gage Roadrunner Races to be held May 21st and 28th respectively. We were also glad to welcome Estel Smith, WB5NTH, as a new member during this meeting.

OLD GOLDEN VOICE
As may be recalled, Gerald
Bowman, WG5Z, embarked recently on a most successful
acting career with the
Woodward Fine Arts Troupe. His
success in recent theatrics
CONTINUED INSIDE BACK PAGE

CIMARRON

Well, this column report will be catch-up time for CARA NEWS! Due to circumstances beyond my control, I failed to get last months report in. Judge, I plead "Non compus mentis"! and also "Nolo contender" and I hope I never find out what those terms mean!

I am proud to report that the CARA upgrade exam at the Vo-tech was a success...at least for Terry McColl, KA5TVF, who after hine successive upgrade efforts, finally succeeded in achieving his General ticket and now sports a new call.... N5MLT. Terry, we are all very proud of you, and we fully expect to see you Extra Class in due time with WAS, WAC and a drawer full of QSL cards.

At the same session, Stanley Oakes, N5KTO, achieved his Extra Class, and XYL Ileta Oakes her Tech! Tom Worth, N5LWT, passed his general theory, and our own Olive Adams, N5IXN passed her Advanced exam. CONGRATULATIONS ALL!

At the unreported CARA meeting of 4/14/88, a good crowd turned out for Fairview CD Director (and also Fairview Chief of Police) Jack Kelly, N5LBN, who gave a general weather and civil defense program. Jack is another CARA member that we are very proud of! Through his efforts CARA may yet field a good group of weather spotters.

Attending that meeting was
Betty Day, KA5RTW, President Ray
Barnes AB5Z, Alvin Adams N5KQU,
Terry McColl, N5MLT, Ruth Simpson,
WX5Y, Olive Adams, N5IXN, Nadine
Painton, N5FMH, Dennis Painton, WK5V,
Dede Bailey, N5FUN, and instructor
Jack Kelly, N5LBN. Oh yes...I was
also present...NN5Z!

Whew! Now we are getting upto date in River City! CARA CLUB MEETING, May twelfth, 1988! CONTINUED INSIDE BACK PAGE

PRE-REGISTRATION FORMS INSIDE 1237



ELECT

TOM COMSTOCK, N5TC

DIRECTOR

WEST GULF DIVISION

- 11 YEARS OF DIVISION/SECTION LEADERSHIP EXPERIENCE
 - COMMITTED TO EXCELLENCE IN AMATEUR RADIO
 - ACTIVE IN ALL AREAS OF AMATEUR COMMUNICATIONS
 - RESPONSIVE TO THE NEEDS OF ALL AMATEURS

The West Gulf Division is at a critical turning point in it's existence. Now is the time for strong, experienced and dedicated leadership to take us into the 21st century, proudly!! There is only one man with the experience we need. There is only one man with the concerns of the future--our future--in mind.

Tom Comstock, N5TC is a "People" person--A Man of his Word!!

MEET Tom. TALK to Tom. VOTE for Tom.

For Additional Information, Contact:

WEST TEXAS

O. E. (Gene) Smith, AE51

Abilene, Texas, 79605

5343 Encino Road

(915) 692-3057

NON

NORTH TEXAS

S1d Goodpasture, AJ5K 10930 Cotillion Drive Dallas, Texas, 75228 SOUTH TEXAS

Alan Cross, WA5UZB 13918 Lillja Road Houston, Tx, 77037 (713) 874-9183

J. Parker, K5CVD 7703 Seton Lake "1009, Houston, Tx. 77086

OKLAHOMA

Sam Sitton, KV5X 1800 Jessie James Edmond, Ok., 73034

1 AERONAUTICAL CENTER ARC NEETS: FIRST THURSDAY, FLIGHT STANDARDS BUILDING. FAA, SOUTH MACARTHUR 7:30 PM PR JACK IMAN, MBSSVN MORK ARA-4603 WP HOME 677-8537 S/T BOB PACE, MASCJ6 MORK 686-2788 EDITOR: BOB PACE, MASCJ6 376-3569 2 CENTRAL OKLAHOMA VHF NEETS: 11:00AM THIRD SATURDAY, THE BRICKS RESTAURANT, 3100 N PORTLAND, OKC PR JIM WILLIAMS, KSVRL 789-0769 VP LAST OME TO ARRIVE AT THE MEETING PLACE SE JOE BUSMELL, KSJB 732-0676 TR ELLARD FOSTER, MSKE 789-6702 EDITOR: JOE BUSMELL, KSJB 732-0676	11 EDMOND AR SOCIETY MEETS: ODD MONTHS, 3RD SUNDAY, 2:00PH EDHOND EOC. DINNER, EVEN MONTHS, 3RD FRIDAY. PR PHIL WOLFENBARGER, NSHIP 789-0681 VP DEE MIZE, HDSFHR 341-6163 SE GLORIEA GUINN, KBSBGM 341-3886 TR EDITH VAUGHN, KASYPX 348-2961 EDITOR: DEE MIZE, MDSFHR 341-6163	18 GREAT PLAINS ARC INEETS: 2:15 PN FIRST SUNDAY NOODHARD PUBLIC WORKS BLDG. PR WINDLE HATCHETT, WASPLW (FT SUPPLY) 766-3561 VP RON TICE, MBOPGD (NOORELAND) 974-2138 SE ROD FORD, MB50VT (6A6E) 923-7683 TR FREIDA PATTERSON, N5EOX (MDMD) 256-2111 EDITOR: LOIS FORD, N5J60 (6A6E) 923-7683 19 OKLA INDEPENDENT ARC NEETS: 7:00PM SECOND TUESDAY SOUTHNESTERN BELL OFFICES, PONCA CITY PR LIN JACKSON, KASZJM 762-7299 VP BRUCE LEFEBURE, KASZKI NONE SEC BIZ MICHY, NOOHCO 762-3297 TR DAVE WHITE, WN5LUI 765-5707 EDITOR: GLEN BISHOP, JR., KASPUB NONE
4 OK CITY AUTOPATCH NEETS: 7:30PM, THIRD TUESDAY SALVATION ARMY, NN 50 & PENN PR GEORGE ABXINB, AD18 722-0074 VP SENNIS PATTERSON, NDSCBN 495-0769 SE BAVID CAREN, KFSEB TR NIKE CRENS, NSDDB 722-2638 TR NIKE CRENS, NSDDB 721-4926	13 KAY COUNTY ARC MEETS: 7:00 PM, THIRD THURSDAY, SEP-MAY, PIONEER VO-TECH, PONCA CITY OK PR MIKE MORGAN, NSLP2 765-9539 VP STEVE HUSTON, KBSDOR 762-4726 S/T HARRY BEATIE, HDSDPR 765-3862 EDITOR: DAVE LAAND, KDSFX 762-8616	21 TRI-CITY ARC MEETS: 1ST THURSDAY OF THE MONTH. PLACE: PR ROBERT DOLTON, KASRMU 379-2365 VP RON PHILLIPS, NBSUPU 382-1856 S/T J. B. BILLS, KESMU 379-3992 P.O. BOX 655, HOLDENVILLE OK 74848 EDITOR:
5 OKLA UNIVERSITY ARC MEETS: 7:30PH SECOND TUESDAY (SEP-MAY) 119 WILSON CENTER, 1334 S JENKINS PR FRANK DOMALDSON, N510J 329-4172 VP JOHN WUSTENBERG, KESN 325-2382 8/T JIM GREENSHIELDS, WDSHPU 321-9981	14 CIMMARON ARS NEETS: 7:39 PM SECOND TUESDAY MX5Y PLAYHOUSE, B27 S 13, FAIRVIEN OR RAY BARNES, AB52 274-3334 VP LEO PEIL, W25H 886-2998 SE NADINE PAINTON, N5FHH 764-3599 TR DENNIS PAINTON, HK5V 764-3599 EDITOR: JACK DAY, NH52 227-3462	CENTRAL OKLA RADIO AMATEURS MEETS: 7:00PM FOURTH TUESDAY. RED CROSS BLD5. 10 & HUDSON OKLA CITY (BACK DUUR) IPR JOHN THONASUN, NB5SYT 340-1798 VP SE YVONNE WARRIMER, NB5TYN 379-3149 TR MARK KLEINE, N5HZR 329-4285 COM/COM: CHARLES HOFFERBER, N5FMU 34G-4468
6 ALTUS ASSOCIATION MEETS: 7:30PH, NORTH HAIN FIRE STATION (CD) ALTUS PR JAMES HOLLEDALL, KB5LS 482-5308 VP NONE S/T LOREN SINKS, NASCBF 477-0921 EDITOR: LOREN SINKS, NASCBF 477-0921	15 SOUTH CANADIAN ARS MEETS: 9:30AN SECOND SATURDAY, RED CROSS BLD6 NORTH OU CAMPUS. MORMAN PR ANDI WOLFE, WUSW 799-5150 VP DAVID MEDDERS, KSPL 360-4292 SE DORINDA SKA66S, ASIVA 799-6727 TR MONTE BATEMAN, MBSRZX 329-7485 EDITOR: DAVIS E6LE, KDSIT 321-7570	
7 BICENTENNIAL (76mr) ARC NEETS: 7:30PH, SECOND TUESDAY. THE BRICKS RESTAURANT. NW 31 & PORTLAND PR BENNIS NUSSER, KASSTH 524-4760 VP BICK BAKER, WBSTHN 745-3877 8/T JERRY SPROUL, MSAHU 354-0017	16 EDMOND AR CLUB MEETS: 7:00PM SECOND MONDAY. SEE CLUB SECTION FOR LOCATION AND TYPE PR MARK HORTHCUTT, NDSDYI 755-4672 VP SANDY ORCUTT, KASONI 340-0034 S/T KAY WORTHCUTT, NDSDYJ 755-4672	
9 WHEATSTRAM ARC NEETS: 2:30PM SECOND SUNDAY. LOCATION VARIES. SEE CLUB SECTION FOR DETAILS. PR NEAL MSKCO WP PERRY JONES, MSM62 772-6063 8/T JOE GARLAND, MASFLT (CALUNET) 893-2660 EDITOR: JAM KUEHM, NSJUT (DKARCHE) 263-4480	### 17 OK CPM USER GROUP MEETS: 7:30PM SECOND THURSDAY OSU, ROOM 307 PR NILLIAN COOTER 360-2141 364-5289 789-0280 FDITOR: HILLIAM COOTER 360-2141 360-214	CORA COLLECTOR & EMITTER (USPS 116-150) IS PUBLISHED MONTHLY BY CORA, INC, 1020 ARTHUR DR MIDMEST CITY OK 73110. SECOND CLASS POSTASE PAID AT OKLA CITY OK. SUB: CORA MEMBER \$3.00 PAID SUBSCRIPTION: \$7.00 PER YEAR. POSTMASTER: SEND FORM 3579 TO: CORA, 1020 ARTHUR BR, HIDWEST CITY OK 73110 EDITOR: JOE HARDING, NASZNF 737-1044 CIRCULATION: BOB GRAMAN, NB5NSV 677-8685
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Minutes of May Meeting

Meeting was called to order at 12:25 p.m. by President Jim, K5VRL, with 19 members and guests present. Jim gave Treasurer's report for Ellard, W5KE, who was absent.

Charlie, WA5JGU, reported on results of discussion with Ken Fields, K5VFN, regarding the possible installation of the Club station, W5LOW, at the State EOC. Motion was passed that the Club station be so relocated. Charlie was nominated for and accepted the position of Club station Trustee. Charlic gave me a letter from Navy MARS to answer. He also distributed applications for Oklahoma Civil Defense / RACES

Bob, W5HXL, discussed Ham Holiday plans, particularly those relating to the Aero Center ARC's plans to conduct Bingo.

Steve, W5VCJ, told all about the cruise he and Clara took in the Caribbean. He was able to make 2M FM contact with hams in most of the ports he visited (San Juan, St. Maarten. Antigua, Martinique, Barbados, St Thomas). He got a royal tour of Barbados by hooking up with an amateur with whom he had previously talked on 6M from home. Clara commented on some of the social and economic conditions they found and some of the personal contacts they made. The talk and photos passed around were enjoyed by the assembled group.

After much fumbling for a current calendar, we set the next meeting for June 18, at the Bricks. Meeting then adjourned at 1:10 p.m. Joe, K5JB

Another Dayton Has Come and Gone

Sigh! It couldn't have been better! The weather was excellent, the crowds fairly well dispersed (because of the good weather), I didn't have any pressing wants that kept me on any serious searches, etc. Here is a Reader's Digest version. (Hoping N5MS will do the whole nine yards.)

I was wanting to buy a BP-21 battery for my little Icom u2AT and happened upon a fleamarket space that had boxes of new stuff that looked like a amateur radio store had been cleaned out. By rummaging around in the boxes, I found a couple and asked the

man how much. because of the principle of the thing; also didn't buy a \$28 one because that is too much for that little turkey!

The only thing I bought of significance was the Heath pocket TNC. I'll tell a little about it later in the packet section.

the Tulsa area) had a fire in their hotel, not the building they were staying in, fortunately. Mike, N5MS, lost a bag on the return trip. He said flea market the first day, so wasn't a big deal. He got it a couple of days after his return.

I Looked at the new MFJ multi-mode AMTOR. I was going to check out the but ran out of time.

Got the ROSE switch code for the TNC-2 and DR-200. (More on that later.) I attended some of the Packet forums but didn't hear much that hasn't already been covered in the Sixth Networking Conference Proceedings, and elsewhere. Two items that interest me are the Digital Signal Processing and PS-186 projects.

IBM-PC plug-in card that provides be good for the Division. two packet ports. There was a special \$99 show price but I didn't spring I managed to get away from the flea for it. I guess I am just swamped by market without carrying more than a much software support.

a fried chicken and Barbecue joint radio operation. located in a barn. It was a meeting spot for the packeteros where I got I guess the next hamfest will be in N8NN, (of Skipnet fame), etc.

I picked up 2 ROMS from PacComm, a monitor ROM (used for testing TNCs Heath Pocket Packet and switches); and, a ROM with TAPR TNC code as well as KISS code. No, I have been having a bang-up time expenses, sigh! Joe, K5JB

Green Country

Hamfest and picked me up for a little price...\$219.00. run up to the hamfest. By the time

"\$27.00". "Each?" we hit the Turner Turnpike we were asked I. "Yep", sez he. I put them in a caravan with WA5BQX, WB6DNE, back in the box. Inside I found new and K2GKK who were banging away one could be bought for \$28. No. 1 on the Chandler 2M repeater. With a didn't go back and get the \$27 one little pilotage and inherent ham aptitude, we were able to converge simultaneously on the same restaurant in Tulsa. After a little breakfast and coffee, we proceeded to the hamfest with renewed vigor.

It was small but nice. The flea market was held in the fairgrounds arena and was just about the right size to cover Tony, K5PJR and Pat, WA5BPS, (from in a couple of hours, while pausing to chat with many of the friends from around that part of the state. Oklahoma City area was well represented.

it contained things he bought in the Dave Cox, NB5N, introduced me to Tom Comstock, N5TC, who is campaigning for West Gulf Division ARRL Director. Dave had earlier written to me to ask if I would help with the campaign but I declined, replying TNC. It looks OK but it won't do honestly that I wasn't sufficiently versed, or interested in League polidata sheet a bit and comment on it tics and personalities to make a wise choice, much less try to persuade anyone else. However, I found Tom pleasant to visit with and well versed, and participative, in some of the current digital radio activities. picked up some of his campaign handouts and agreed to take them to the VHF Club meeting so the members could consider his qualifications. He seems to be taking a positive approach to the campaign, emphasizing his qualifications. He made no negative I visited the DRSI booth inside and remarks about the incumbent, or any chatted with the fellows about their other competition. I think he would

orphan circuit boards that don't have pocket full of trinkets. The only thing of significance I picked up was an assortment of ferrite cores to do some On Saturday night, Hoss, WA5ZAI, RFI choking on some of the junk and I went out to eat at McNasty's, computer noise surrounding packet

to chat for a bit with Norm, W2JUP, Dallas, unless I happen to hit one of Tom Clark, W3IWI, Andy Funk, the weekly fests in the Washington KB7UV, Phil Karn, KA9Q, WA9ZRX, D.C. area. See ya in the flea market! Meanwhile, let's see what is going on in packet radio, Joe, K5JB

we didn't get bumped on the return playing with the Heath HK-21 Pocket trip. Next year we will just have to Packet (P.P.) TNC I picked up in dig into the pocket book for the travel Dayton. It has the same command set as the more or less standard TAPR set, with the addition of some commands peculiar to its little mailbox. See last month's C&E for some of the Joe, WA5FLT, dropped by early Sat- technical details. One thing I didn't urday morning of the Green County know last month was retail asking

I did some customization that you might want to be aware of if you get one of these things, or know someone who does. The thing is equipped with two ways to connect to a radio. The HK-21 has a little four-pin modular socket (like a telephone handset) for connection to a regular FM radio, and a couple of phone jacks (miniature and sub-miniature) for connecting directly to Icom talkies. These circuits already have the required keying arrangements, as well as the transmit and receive audio connections. It has directions on how to modify the supplied cables to make it connect directly to the Kenwood and other talkies.

In my previous experience, I found that the IC-2/02/u2 series need a bit more audio drive than the IC-27 series mobile radios I normally use. When the P.P. is connected to the talkie with the supplied cables, the audio is just about right. However, when the IC-27 was connected to the modular socket the audio was too hot. I came up with a simple way to accommodate both requirements without having to tweak the internal pot every time I changed operation. Also, I solved two other problems. The manufacturer (Tasco) doped the transmit audio level pot with Glyptal. I sure hated to break through that stuff and risk damaging the pot, though it will probably have to be eventually done. The second problem is the scarcity of the little four pin modular plugs and suitable shielded cable required for this application. I don't know the proper designation for these plugs; they are smaller than RJ-11. (I found the modular plugs at RSC Electronics on I-35 and S.W. 82nd!)

The solution was in my junkbox. I had a female DIN plug with more than enough holes in it to connect a 5 pin DIN used by the TAPR TNCs (and others) so I simply connected it to the end of the cable supplied by Heath and experimentally selected a resistor for the transmit audio line. Mine turned out to be 4.7K, and maybe could be a tad greater but I stopped experimenting when it started sounding more like a TNC than a Crow. There was plenty of room in the female DIN plug to stuff the resistor without resorting to micro-surgery.

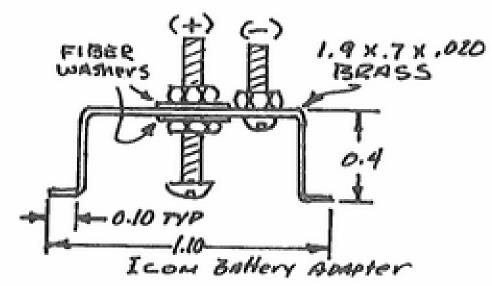
Only operational problem with having a mailbox in this thing is that it is seldom on the air; it is usually in my pocket, or in my briefcase.

I have been experimenting to see if there is any thing I can do to better isolate the talkie receiver from the RFI generated by the TNC and the portable computer I use. Neither the TNC nor the computer are noisy enough to cover up a reasonable signal, and I couldn't be heard by a station that had any less, but there is a problem with my colliding with stations if I can't hear them. In previous portable demonstrations, I either took along a good antenna that could be remoted, or hid a digipeater in my car so I could get a good shot at some stations for demonstration. On travel, I will have neither luxury, unless I make some kind of roll-up antenna that will fit in my already crowded briefcase.

Most TAPR TNC-2 types have some method for warping the microprocessor's oscillator a bit to move a trouspur off your favorite blesome operating frequency. This one has a spur on 145.0, or so, and it can be heard a little on 145.01. It isn't serious, but it is there, so I opened it up looking for a little trimmer capacitor. Oops, there ain't one. There are two 33 pF capacitors wired from each side of the crystal to ground. It will be trivial to do a little micro surgery and add a tiny capacitor (from my HT-220 junkbox). But, I think I'll contact Heath first. I have another question to ask them anyway. When I try my usual practice of using a transmit character other than a carriage return (\$0D) and turning C/R off, it sends my selected transmit character along with some of its messages where you would expect to find

a C/R. Again, no biggie, but peculiar.

The P.P. requires power. Heath provides an accessory rechargeable battery, which I will probably get later, but in the mean time I sought a way to power it without carrying a power supply, or a monster battery, along. I found a nifty solution that uses an extra Icom talkie battery that is always floating around loose in my briefcase. See the sketch for general details.



The hat section is made out of some brass shim stock, about 0.020 in. thick. The positive post is insulated with two fiber washers, one having a shoulder that fits in the centrally punched hole. I used No. 6 screws, which happen to fit the insulated shoulder washer. The jam nut on the battery side of the positive post permits adjusting the amount of pressure the post exerts on the battery.

The adapter is installed by squeezing the sides together enough to snap them under the metal rails on the battery. Simplicity.

I carry a 12V battery charger that is hefty enough to charge a BP-7 or BP-8, but is not well enough regulated that I would chance it directly on the P.P. This seems to be a good solution.

If you are considering portable packet operation, the Heath HK-21 is the pick of the lot if size is a premium but you will have to pay for miniaturization. It is a bit pricey when say the PacComm compared to, Tiny-2. On the basis of power consumption, it should be compared to the premium PacComm Micropower-2, which uses more expensive components to bring the power consumption down to 40 mA (similar to the Heath unit). The Tiny-2 sells for \$119, the Micropower-2 is \$159. Two of the devices in the HK-21 are surface mount critters so forget repairing it yourself if it breaks. Incidentally, for the extra cost of the PacComm Micropower-2, you get sockets for all devices. In the Tiny-2, only the big ones are socketed. I'll tell more about the HK-21 when I know more, Joe, K5JB

TCP/IP Address Change

Bob, KA5MIZ, called me last night and advised me that there had been a mix-up in IP address assignments and our Oklahoma address of 44.52,xx,xx had been assigned to New Hampshire. Now Bob is a Mister Nice Guy, you see, so he said, "OK, give us another, I wouldn't want those guys in New Hampshire to have to change!" So they did. Our IP address in Oklahoma is now 44.78.xx.xx. For example, Bob is 44,78.0.1 and I am 44.78.0.2, etc. All of you multitude of TCP/IPers out there go through those files and do a global search and replace now.

I am only kidding about the impact on our Oklahoma operation. There isn't enough TCP/IP operation going on to amount to a hill of Brapps. I got tired of leaving mine on weeks at a time without a connect so I put a connect message on a conventional TNC saying that I would turn TCP/IP on if requested. Then I got tired of tying up that TNC and quit even doing that. We put the TCP/IP over on 145.05 to keep the winky blinky effect off of .01, by the way.

If anyone out there has a yen to give it a try let me know and I will put mine on. You have to contact someone anyway and let them know you want to play TCP/IP because without an up" and run IP.

way for non-IP folks to be able to as well as geography. access a computer running IP. There is a Net/ROM interface now available, I understand but I don't have it. My version of net.exe is February, I able, at least in BETA test form. I think, so if you acquire a later ver- have it and I have been giving it my sion, let me know and we will give it best shot, but I don't have a lot of a shot. Joe, K5JB

The ROSE Switch

One thing that some of the Packeteros have been long awaiting is the "COSI" switch that was being developed by RATS, the Radio Amateur Telecommunications Society, a group in New Jersey. (See my June, 1987 column.) This group's goal was to create a layer 3, and higher, packet network environment, using available hardware, and make the results of their labor free and available to the digital radio amateurs at large. The first effort was to be a networking switch, called the COSI Switch. The control program was to run on the PacComm DR-200 dual port switch. (COSI was an acronym for Connection-Oriented, Open Systems Interconnection. Because of a similarity to the name of an organization called Corporation for Open Systems, RATS changed the name of their switch project to ROSE. for Rats Open Systems Environment.)

Last year at Hem Holiday, some of us compiler trying to work out the Interested Packeteros were discussing wrinkles. Finally, late Saturday aftwhich way we ought to go. Net/ROM erncon, he thought he had things far had just arrived and some of the group weren't comfortable in committing themselves to a proprietary system. Texnet was becoming available but it was going to require hand assembly, an art that is almost dead in the amateur radio ranks. Looking for hardware builders who happen to be interested in digital communications would be a job that even Diogenes would bypass. Thus, a low risk decision was to buy some DR-200 awitches and give them a shot. After all, there was some merit to the linkby-link ACK that the N2WX "Gator Switchⁿ code provided with the switches. If the COSI Switch panned out we would have had a nucleus around which a simple network could be started. RATS had made an announcement that the switch code would be available in September 1987 and we ordered the hardware in order to be ready when it arrived. The hardware arrived, some of it went on the air for test, but the RATS project languished for lack of a sufficiently inspired programmer.

with the others, it won't work. We sufficiently effective, particularly have to put your address in our files when backboned off the user freso our systems will recognize you; quency, and there was sufficient, no biggie, but you just can't "pop daring, spirit and imagination amongst us that one of the best working Net/ROM networks in the country was We are still waiting for an effective begun, and is growing in capability

> Now, about nine months behind schedule, the ROSE Switch code is availhope for it's future.

The code first became available on Compuserve's Hamnet in March but it was written for the TAPR TNC-2 de-TNC out of service to play ROSE two kinds of problems. Switch so I did not pursue it.

At Dayton, I met a couple of the guys who are working very hard to make the ROSE network a reality. I really had to like them because they seemed to be working so hard to make a contribution to the state of things.

Andy Funk, KB7UV, the evangelist and Tom Moulton, W2VY, the programmer, were there and were working to deliver what RATS had promised last year. As I mentioned, the code was supposed to be running in the TAPR TNC-2 design. Tom was still working on some problems that appeared when the code was run in the DR-200. He spent most of the Hamvention weekend working in his hotel room with the assembler and enough along to give away copies of the thing. Andy went to work, sitting at a borrowed space in the PacComm booth, copying disks to be given away at the RATS presentation the next morning. Tom found that a couple of hardware modifications were reguired to make the DR-200 work with his code (connecting a 1200 Hz clock to the 8530 SCC and connecting the 7910s' data carrier detects to the SCC) but he was still not comfortable with it.

programmed an EPROM with the ROSE code as soon as I got home and spent the next three evenings chasing problems around in circles. At first I thought the switch had gone deaf. Sometimes it worked so I knew the code wasn't completely worthless, but sometimes the switch simply went catatonic. I scoped out signals, rearranged power supplies, snipped ground loops, changed switches, etc. Finally I discovered that the code was simply spastic. There were some protocol errors. When the configuration

address assignment, and coordination That is all history now. Net/ROM was file was sent to the switch, it sent out some kind of a packet but the sending TNC didn't recognize it as an ACK so it sent a POLL. The switch would respond with the missing ACK and the transfer would proceed, humpty dump.

> After issuing a command to the switch to make a connection, it would sometimes sli there like a lump. Later, after the requesting TNC had given up and retried out, the switch would come to life and start burping up some kind of packet. I didn't figure out what it was doing until it made a long delayed connect to the target TNC several minutes after the requesting TNC had given up.

sign. I wasn't interested in taking a At this point I think I have identified

Protocol or state errors.

Connect requests to the switch are sometimes ignored, sometimes cause the switch to complete the link but with subsequent sllence, and sometimes cause the switch to send it's connect message. After a linkup, if it didn't send the connect message, I could jar it loose by sending a carriage return. Then it would sometimes disconnect after sending the message, sometimes not. The funny responses from it when loading it with the configuration file has already been mentioned.

Sliding window, or back-off errors.

After being asked to connect as a switch (c k5jb v k5jb-5 405732) it would act like it didn't hear anything. Later, it would issue the connect request to k5lb but the requesting TNC would be long since disconnected. After issuing a disconnect request to the switch, the 'transmitting TNC would either retry out, or I would stop it. Later the switch would respond with a string of DM packets indicating it heard the disconnect requests but didn't respond.

An additional problem was that I had to force the switch's RAM to forget everything when I switched from the original DR-200 EPROM to the ROSE EPROM. No amount of resetting would bring it to life. Apparently, it checks some RAM data on starting and if it finds something weird, it goes catatonic. I shouldn't have to short out the RAM power supply pin to get it to start. I don't have the backup battery in my DR-200 so I had some success with leaving it off for several minutes before starting with a ROSE EPROM. This peculiarity shouldn't be a problem once a switch is successfully started unless something glitches

the RAM. No amount of external speed and I suspect it might be a coaxing would get it to recover if the internal battery happened to be installed.

I tried the ROSE EPROMs in the Pac-Comm Tiny-2 prototype, which may not have all the modifications of the production models, and it would do nothing other than blink one of the LEDs and send lower case "x"s to the terminal in time with the LED blinking. I tried an EPROM with the April 28 code in it and LEDs alternated instead of flashing. I did disconnect the battery and wait for a period before trying again to restart but I didn't try shorting the RAM power pin though.

This one will be on hold until I hear someone else is having better success than I. Joe, K5JB

THENET - Net/ROM Clone or Copy?

There is quite a flap going on about THENET, a Net/ROM work-alike making its rounds. (See my column, April, 1988 C&E.) The question is whether its originators copied the Net/ROM and made a few cosmetic patches, or whether they independently wrote source code that happened to come out almost identical With Net/ROM. the help Compuserve's Hamnet, Mac, K2GKK, and Dave, WB5FWE, I have picked up Path: some tidbits regarding THENET.

From the WD4LPU PBBS:

Msg # 2386 Type:B Stat:\$ To: ALL @ MIDNET From: AGON Date: 18-May/0623 Subject: It's Here! Bulletin ID: ALAGON003392 From: AGON@AGON

The smoke is rising in the west from Software 2000, but it doesn't seem to be keeping the German "clone" of Netrom 1.3 from getting around. If anyone is interested in getting a copy of the "very close clone" of NR, contact me and I'll fix you up. I don't have a burner, but have a friend who does. You will need to furnish a 27C256 or 27256 EPROM and some parameters that need to be burned in for you. Password information will, of course, be kept confidential. If YOU have a burner, I can supply you with the file to dump in the chip. I can either premodify it for your use, or supply the unmodified German file for you to modify. There is one parameter that is a bit tricky though, so you might want to let me put it in. I have tried the chip in my unmodified MFJ-1274 and it works just fine. I ran the clock at stock speed and it is a 16k unit. Software 2000 has suggested 32k and the higher clock

good idea, even though I had no problem with mine as is.

This code will eventually be made available on Compuserve and is being advertised as being in the public domain. Whether it is an actual infringement on the Software 2000 copyright or not is still being hotly debated. Tune in to Compuserve for more on that. In the meantime, there are lots of them showing up on the air and the price certainly beats the ripping off that we have been experiencing from the Software 2000 folks.

Anyone interested in having one of these delectable goodies can contact me via packet @ AGON or via landline at 308-586-2608. The mail also works, but I am extremely slow answering mail. I will need some info that you wouldn't want to pass over the air anyway. Keep in mind that some parameters must be burned into the chip and they are not necessarily the same as what is burned into the original netrom. 73 - Gary

And from the WB5FWE PBBS:

Msg # 4076 Type:B Stat:\$ To: ALL From: WB9TPG Date: 20-May/2238 Subject: Concerns about THENET Bulletin ID: THENETO02

WB5FWE!WB8ICL!KI4UN!KF4NB!WB9TPG Hello everyone

Sorry for the delay in responding to the MANY messages that flooded into here but I was on vacation in sunny Florida. I will try to answer your questions the best I can.

Q. Is THENET legitimate? A. There has been discussion on Compuserve in which Software 2000 accuses the NORD><LINK group of stealing significant portions of NET/ROM code for use in THENET. The NORD><LINK people are providing their own C source code for THENET and say they reverse engineered NET/ROM and tweaked their code to

match NET/ROM.

2) Q. Is Software 2000 right? A. I did my own analysis and found out that 21K (65%) is a byte for byte duplication of the NET/ROM code and much more is just small changes. I therefore conclude that while the NORD><LINK group could have decompiled the C-source for NET/ROM, their resulting code would still be ruled a copy by a court of law. (My non-lawyer opinion). I took THENET off the air until some of the confusion clears.

Q. Are you distributing THENET?

A. I was, but I put it on HOLD until some of the above issues are settled. It went out to 4 people before I stopped. So do not send me any diskettes until the above issues are resolved.

Q. How was THENET being distributed?

A. As a binary file on an IBM/PC compatible floppy. Just program it into a 256K (32Kx8) EPROM. (27256 or 27C256 type). There was a small instruction file included.

- Q. How did I get it? A. Direct from Germany from a ham I know (he got it from NORD><LINK).
- 6) 0. What should we do now? A. Well, we have several options....
 - Use it and risk being sued (not me).
 - Wait and see (safe but not likely rewarding).
 - Start from scratch and write our own.

I started to do this a while back and received no help at all, nobody seemed to give a hoot. With the introduction of a possible clone, there was so much interest that I could not understand the lack of interest in the project.

I will ask again, if any "programmer type" wants to assist in this project contact me. Below is a quote from Mike Busch of Software 2000.

>Your comments about the methodology >used in developing the Phoenix BIOS >for IBM clones is absolutely correct >and to the point. However, in the >case of NET/ROM, we took pains to be >sure that the NET/ROM manual inclu->ded enough detailed documentation of >the commands, parameters, protocols >and routing algorithms so that a >software developer could create a >fully compatible networking product >without having to resort to disas->sembly. In fact, the fellow who >wrote the NET/ROM-compatible driver >for Phil Karn's TCP/IP package did >exactly that. And we are on record >as applauding that effort.

>NORD><LINK just stole Ron's code >and put their name on it...that's >all there is to it.

73 Gary Mitchell WB9TPG @ WB9TPG 220 E. Eagle Versailles, Ky 40383 606-873-8329 (before 10PM EST)

Well, there you have it on THENET. I'll let you know what I learn about it. If I get a copy I'll compare it to the Net/ROM code myself. Maybe next Joe, K5JB month.

CORA HAM HOLIDAY '88

AUGUST 5 - 7, 1988
LINCOLN PLAZA HOTEL AND CONVENTION CENTER
4445 LINCOLN BOULEVARD
OKLAHOMA CITY, OKLAHOMA
GRAND PRIZE: ICOM IC-735
PRE-REGISTRATION PRIZE: ICOM IC-28
PLUS MANY OTHER HOURLY PRIZES

NEW AND IMPROVED (LARGER) FLEA MARKET AREA. TECHNICAL PROGRAMS FEATURING SCIENTISTS/HAMS FROM THE NATIONAL SEVERE STORMS LABORATORY. BAR-B-QUE BANQUET ON SATURDAY EVENING (YUM!)

Programs begin on Friday evening and continue through Sunday morning. VE testing will be conducted throughout the day on Saturday, so come ready to upgrade. Again this year, we will have our public access demonstration room featuring the latest technology in Amateur Radio, as well as, the old favorites. Bring your license and operate from HH 88. Also this year, Child Care will be available at Ham Holiday. Space is limited, so to reserve a place for your youngster, contact Andrea Wolfe, WU5W, at 405-799-5150. Again this year, the ladies will have a fabulous program. Last years ladies' programs are still being talked about around the Southwest and this year promises to be just as exciting. In addition to technical and non-technical programs, there will be the yearly meetings of the various organizations common to Amateur Radio -- Packet, MARS, Repeater Society, and Suuday morning worship sponsored by the Oklahoma Baptist Hams. Again this year, some of the largest dealers in the Southwest will be at HH 88. And the Flea Market moves back upstairs into the BIG convention area. So plan now to come ready to buy that rig or antenna that you've always wanted. New for this year will be a "come as you are" informal breakfast at the convention center. No program, order off the menu, shoot the breeze.

HH 88 IS BIGGER AND BETTER THIS YEAR!!! SEND YOUR PRE-REGISTRATION IN TODAY!!!

PRE-REGISTRATION FORM LAST NAME FIRST NAME ADDRESS CALL SIGN STATE ZIP CITY ADDITIONAL REGISTRATATIONS (NAME & CALL SIGN) REGISTRATIONS @ \$7.00 RESERVE FLEA MARKET TABLES @ \$2.00 RESERVE ____ BANQUET TICKETS @ \$7.50 (REGISTRATION(S) WILL BE MAILED TO YOU IF RECEIVED BEFORE JULY 22, 1988) SEND PRE-REGISTRATION FORM WITH CHECK OR MONEY ORDER TO: HAM HOLIDAY '88 P.O. BOX 850711 YUKON, OK 73085-0711 MUST BE POSTMARKED BEFORE JULY 27, 1988. YES, I would like to reserve a room at the Lincoln Plaza at the special HAM HOLIDAY room rate of \$39.00 per night. NAME PLEASE RESERVE ROOMS FOR: FRIDAY - SATURDAY - SUNDAY (CIRCLE APPROPRIATE DAYS) I WILL ARRIVE BEFORE 6:00 P.M., OR I WILL ARRIVE AFTER 6:00 P.M. 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 \$39.00 RATE YOU MUST MAIL YOUR REGISTRATION BY JUNE 30, 1988. AFTER

THAT DATE, ROOM RATES WILL BE: \$42.00 - SINGLE, \$47.00 - DOUBLE.



ALTUS AREA AMATEUR RADIO ASSOCIATION

to code and theory test April. 8th of Loren Simms science classs at Southeast Loren. Junior High School. She was nervously awaiting their call have \$284.70 in the bank. signs.

his TV.

his own. He has a class of one stations including the more the merrier!

repairing broken radios and date in communications". playing with his weather radar impressive piece of gear.

News arrived of the passing packet father last Services were in Mountain View out.

Well the breakfast club of Bring your goodles. the AAARA met at Korner Kafe Cris Simms. A good time was scheduled for the 9th of June. had by all.

A special effort is being made by Loren, WA5CBF, the club secretary to bring our past members and friends "back to the fold." He sent letters containing news to aapprox-The only aimately 20 or so. way the club is going to grow is to let people know what is We have a lot of happening. summer activities planned. Hope to see you at the club meetings on the second Thursday of the month at the North Main Fire station.

Mike, W5VXU, has been coming up with lots of plans for some simple 40 meter transmitters. Some plans are for tubes and There is a great need IC's. for simple cheap equipment as we have five Novices new without gear. Mike also came up with a new booklet from the FCC. It is entitled "Interference Handbook - FCC".

for members to use. He also stressed that the booklets are free from the FCC, just for the asking.

The 12 may meeting of the Altus Area Amateur Association took place at the North Main Mindy Fire Station at 7:30 pm. She is another member WB5KRH Dwight; KB6GFLG Mac; CROSS AT 10TH AND HUDSON. grade KA5HUX WA5CBF and Frank;

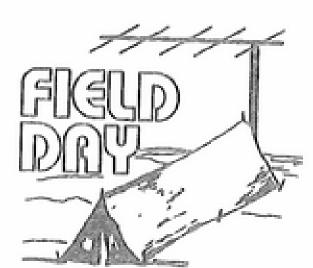
The meeting was opened by UNDER THE W5YI the fifth and final member of Jim and the club finances were SPONSORED BY C.O.R.A.

The big program was Frank, CERTIFICATES. feeling better. Last seen he lete station was set up at the NOVICE THEORY CERTIFICATE. was all propped up in front of Ham radio comminications slot 1 5 WPM CODE CERTIFICATE. in the Emrergency Operating ing some Novice instruction on several other VHF Packet GRADES; one and informative. Dwight said, BRING THE FOLLOWING: WB5KRH, Dwight was last seen "This will keep Altus up to

Dwight, WB5KRH, and Frank, display unit. It sure is an KASHUX, have been working on plans for construction of a at repeater of Ralph Shockley's (WBOWCB) 146.19-.79 site. Much work has Wednesday, to be done yet.

Frank brought up the idea of Friday 29 april, Our hearts go having a Swap Meet along with the Field Day at Lake Altus.

The meeting closed in Altus at 9:00 am Saturday 10:00 pm. Next Breakfast meet-FEE WILL BE CHARGED.



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OSL CARDS!

VOLUNTEER EXAMINER PROGRAM

We V.E. TEST SESSIONS ARE HELD THE Holmberg on passing the Novice had six members present. They 3RD MONDAY OF EACH MONTH AT 6:00 on 27 were: KB5LS Jim; KF5ME Shorty; P.M. AT THE OKLAHOMA CITY RED

ARE CONDUCTED THESE SESSIONS PROGRAM AND ARE Now everyone is read by Loren. We currently MAY SESSION WE HAD A TOTAL OF 6 APPLICANTS WITH 2 UPGRADES AND 3 1 FROM NOVICE TO KASKVU, Dennis has been down KASHU X, demonstrating VHF TECH. 1 FROM NO LICENSE TO TECH. with a cold. Hope he gets to Packet Communication. A comp-1 GENERAL THEORY CERTIFICATE. 1 AND

KASHUX, Feank has been giv- Center. He communicated with TEST SESSIONS ARE FOR ALL LICENSE FROM NOVICE TO THE EXTRA in CLASS. WALKINS ARE ACCEPTED. WHEN student working on his ticket, Kansas. It was very impressive ATTENDING A TEST SESSION, PLEASE

- 1. A FILLED OUT FORM 610
- 2. PEN OR PENCIL
- CALCULATOR (IF DESIRED)
- 4. DRIVER'S LICENSE (OR OTHER SUITABLE I.D. FOR MINORS)
- ORIGNAL HAM LICENSE (YOU KEEP)
- KEROX OF HAM LICENSE (WE KEEP)

YOU DO NOT HAVE A FORM 610. about ONE WILL BE PROVIDED. A \$4.55 30 April. Those attending were ing is the 28th May at 9:00 am PLEASE BRING THE CORRECT CHANGE. W5VXU; Anne, KA5YXY; at the South End Cafe in THIS FEE COVERS AS MANY ELEMENTS Jim, KB5LS; Loren, WA5CBF and Snyder. Next Club meeting is AS YOU SUCCESSFULLY CONTINUE TO PASS FOR THE HIGHEST LICENSE AND IF GIVE YOU THE OPPORTUNITY TO SE YOU MAY BE IN FOR AT FUTURE WHAT TEST SESSIONS).

> TO SEE YOU AT THE NEXT TEST HOPE SESSION.



73 DE JERRY--WRSG

EXTRA CLASS AMATEUR RADIO W5KE

FIRST CLASS RADIOTELEPHONE LICENSE

ELLARD'S EX EL

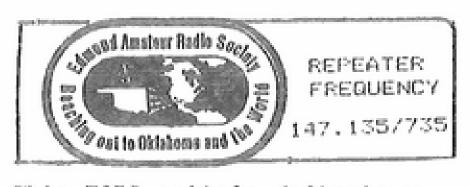
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EXCESS ELECTRONICS



This EARS article definitely has to start with an apology to a couple of hams for an error made in their calls in last months C&E article. here is the correction Sandy Orcutt's call is KASONI not KASONE and Linda Callison's call is WD0FTM not WD5FTM. My apologies young ladies and [hope I don't make the mistake again. I'll probably get flak those two real soon.

On May 19 a group of EARS members met at Hafer park for an informal "low-calorie" ice cream get together to pre-celebrate [ee Vaughn's,KA5WIS birthday and those who helped were Lee Vaughn, KA5WIS, Edith Vaughn KAYPX, Gloria Guinn and children Stephanie and Stephen, Allen Watson WSERY, Phil Wolfenbarger N5HIP, Donna Guinn KA5YSF, Joel Beasley KB5-FCF, Dee Mize WD5FHR, Shelby Forest and friend Virginia Litton, Bob Long N5KUE and daughter Robin, Jason McGee KBSEYE, Marlin McGee NSLZF and xyl Gayle, Mike Mize KB5BIX John Thomason WB5SYT and daughter Denise, Harold Wells WAS-ZKX, Mary Wells KASWHI and sons Jeff and Caleab I hope 1 did speld the name right Jim Yates N5KLH, Larry Traub N5-IXV and David Smith KB5DQZ. If you missed this one you missed a real goodie.

Field Day is around the corner--Dust off your rigs and get prepared for this big event to be held on June 25-26 at the Seminole Pavilion at Arcadia Lake. Time is from 1pm on June 25 to 1pm June 26. It you want more details about Field Day contact Larry Traub NSIXV.

The June dinner meeting will be held on the nite of June-25 at 6:30pm at the Seminole Pavilion at Arcadia Lake. More details later on the dinner. Be sure to listen to the repeater and the nets for the final details.

Joel Beasley KB5FCF is in need of a service manual for the Swan 500-C. If you know where he can obtain one call him at 341-1614 or contact him via the repeater 73's Dee, WD5FHR

NEW RECEIVER ANTENNA THE INTERMITTENT NOISE THAT HAS PERSISTED FOR SEVERAL YEARS ON THE REPEATER MAY(?) BE GONE. A NEW IN-TOWN RECEIVER ANTENNA WAS INSTALLED ON THE 168 FOOT TOWER AT KCSC TRANSMITTER, THIS ALLOWED US TO TAKE THE DUPLEXER OUT OF THE LINE; THEN, AS A BY-PRODUCT, A SMALL NET GAIN IN TRANSMITTER POWER WAS REALIZED. TOM KASWAV SAYS HE IS ABLE TO GET INTO THE NEW ANTENNA BETTER THAN THE OLD ONE FROM HIS QTH NORTH OF WATERLOO RD. DON'T KNOW WHY, BUT NO ONE IS COMPLAINING. TIME WILL TELL IF THIS DOES, INDEED, SOLVE THE OLD PROBLEM; BUT FOR NOW EVERY THING SEEMS TO BE WORKING GREAT! THANKS TO THE FOLLOWING MEMBERS WHO HELPED EITHER ON SITE OR IN PREPARATION FOR THIS PROJECT: LEE KASWIS. BRAD KB5CDE, BOB N5KUE, DON NSKLI, PHIL NSHIP, AND A VERY BIG THANKS TO WINDELL WB5ISO FOR THE TOWER WORK, GREAT WORK GUYS!!

HAM RADIO DEMONSTRATION EARS WAS CONTACTED BY DEBBIE HOCH, A SPECIAL ED TEACHER FROM HARDING MIDDLE SCHOOL IN OKC, TO SEE IF WE WOULD PUT ON A DEMONSTRATION FOR HER CLASSES. THIS WAS A VERY REWARDING EXPERIENCE FOR ALL THOSE WE SET UP AN HF INVOLVED. STATION WITH 5 BAND VERTICAL, 2 METER PACKET AND 2 METER FM COMPLETE WITH ABOUT A ZILLION AUTO PATCHES TO SURPRISED FAMILY AND FRIENDS OF THE STUDENTS. THIS PROJECT WOULD NEVER HAVE COME ABOUT WITHOUT THE HELP OF LARRY N5IXV, JIM N5KLH, DAN KBSENF, PHIL NSHIP, JOEL KBSFCF AND DAVID KBSDQZ. THANKS GUYS THIS IS WHAT HAM RADIO IS ALL ABC members of the Edmond Amateur SALVATION ARMY SPECIAL EVENT STATION FRANK NSFM CAME TO ONE OF OUR BUSINESS MEETINGS A FEW MONTHS AGO TO ASK OUR HELP ON THE SPECIAL EVENT STATION. HE ASKED US TO TAKE THE FIRST SHIFT AND and simulators who provided any THE EXPLORERS TO TAKE THE LAST information input to keep the SHIFT OF THE 24 HOURS, BECAUSE action moving. Once their job HE FELT OUR GROUP WOULD NOT MINE as THE EXTRA LOAD OF SET UP AND to Edmond Hospital where TAKE DOWN. AS ALWAYS THE GROUP became "residents" who CAME THROUGH WITH FLYING COLORS. having respirtory problems due A WORK PARTY OF KASWAV, NSKUE, KASZPN, NSFM AND NSHIP MET AT THE GUARD ARMORY ON trouble? You bet your life it N.E. 23, PICKED UP THE TENT AND was. TOOK IT TO THE MALL. MOST WERE BACK AT 5PM OR SO ALONG WITH KB5DQZ, KB5ENS, KB5FCF, KB5CDE, WDSCTS AND OTHERS WHOM I CAN'T CALL TO MIND NOW (PLEASE FORGIVE should it ever happen because ME) TO SET UP THE TENT. THEN, KASYPE, KASYPX, KASWIS, KBSBGM, KBS-FLS STARTED DRIFTING IN AND

SETTING UP TO OPERATE, WITH EVERY THING SET UP READY TO OPERATE WELL BEFORE THE 8:00 PM LOCAL STARTING TIME. WE ALL HAD A BITE FROM THE GOLDEN ARCHES AND STARTED PROMPTLY AT 8:00. OTHER OPERATORS FROM EARS INCLUDED NSIXV, KASWGS, KBSBOB AND AGAIN I AM SURE I AM LEAVING SOMEONE OUT! THE POST DID A BANG UP JOB GETTING THE TENT DOWN AND EVERY THING PACKED UP TO HEAD HOME SATURDAY EVENING. I UNDERSTAND THERE WERE 370+ CONTACTS AND OVER 60 HAMS WHO HELPED OUT. THANKS FOR THE INVITATION FRANK! 73 N5HIP

TRUE OF FALSE-E.A.R.S. KNOWS:

On May 3,1988, a truck carrying hazardous material called Dimethyl Sulfate was struck by car loaded with highschool students at the intersection of Edmond Road and Kelly Fumes from the trucks Edmond. leaking cargo caused the early evacuation of 2 elementary schools. I mid-high school and thousands of Edmond residents. Edmond Hospital received number of patients. not only injured from the crash involved. but from residents who. had been affected by toxic fumes. Only two fatalities were reported by the hospital, one from the car and one, a concerned passerby who died from a heart attack apparently brought on the DY excitement. Actually this was the result of Civil Defense Disaster Exercise developed for Edmond's Emergency Services Personnel. Involved in the event Radio Society, E.A.R.S. members served as victims, including convincing heart very attack victim who was played by Donna Sieble. Other members served as scene coordinators.

to the fumes. Was it all worth the time and According to Edmond's Civil Defense Director David Van Nostrand, Edmonds emergency response personnel are better prepared for the real thing operational and planning corrections that resulted from

simulator ended, many went

they

were

met on May 14 at the Norman Red Cross. Twenty-two attended meeting. Seems like the everyone else went to Tulsa for the ham fest. Steve, NISW, little was forced(by the woman) to take minutes since the secretary skipped out! And the minutes(which I am reading as I write this) sez, "Andi, WUSW(the 11'1 woman), opened the meeting at 9:43."

"Dave, K5PL, ... took two donuts but only paid once," continue NISW minutes. Now I understand why he likes CW. Please bring the secretary backf

Dave Clark, Red Cross Director, attended the meeting to announce the Cleveland County Crap Shoot to be held on Friday, June 3, 5 pm to midnite. This is a charity event(sometimes called cow pasture bingo) to raise funds for the Red Cross. It will be at the Norman Moose Lodge and a chance for a quarter beef costs \$10.

may be the only phone company in town and we act like it" was what I thought after talking several, SW Bell execs about the commercial rates being charged for amateur autopatch telephone lines in spite of the fact that those lines can't legally be used for commercial purposes. Bob, KASETA, has been in touch with the Corporation Commission but we haven't made much progress However persistence is vet. the order now.

Leland, W5MCN, thanked all those who helped him reinstall his TET beam. He said he worked 36 countries in the first hour including Then he turned the radio on and worked 50 more. I think Leland must be an unclaimed older brother of QR.

Gary, WB5ULK,

resigned as president of CORA Defense and as one of the SCARS CORA complicated reps. It was reported by a high white horse souse that he A great big thank ou from the time to devote to the job. could not have Nowever this humble reporter successful without you'

has it on indisputable grounds that this is absolutely true.

Congratulations to Jerry, N5MAY, and Fred, N5HZX, who both upgraded to General class.

Prez Andi

reported that the ARO's who helped with the Norman hospital disaster drill did a great job. The organizers were very pleased with the SCARS efforts.

Andi also reported that she has been declared winner of the wrestling tag team championship rematch held on Saturday, May 14 'cause the other side didn't show up. The WTTW committee decided to retire the tag team idea and work on mud wrestling for next month.

you can't

make heads or tails out of this column, blame it on the late hour, Steve's notes, your 0 W N poor eyesight, mу astrologer(whom I consult before each writing to see if time is favorable), or fact that I won the the And if that doesn't satisfy you, ask to write one yourself.

You can ask this and much more at the next SCARS meeting on Saturday, June 11, at 9:30 am in the Norman Red Cross.

-----KD5IT-----

NOTICE NOTICE 1

YOU ARE GOING TO PRE-REGISTER TO ATTEND HAM HOLIDAY PLEASE NOTE. THERE IS ONLY SPACE FOR ONE PERSON - SO MERELY PUT THEIR NAMES ON A PIECE OF PAPER AND SEND IT IN TODAY.

MORE EARS

the exercise.

In a letter to Mayor Carl Reherman, the Acting Civil Defense Director for the State Oklahoma. Woody Goins c ommended the Edmond Civil e cellent On. a ru and effective exercise.

resigned because of lack of City to everyone who helped. It been

CORA MINUTES

Regular meeting of CORA on April 26 1988. Meeting opened at 7:10 pm outside of the Red Cross Building.

Directors present: Wheatstraw; George Maschino and Ralph Wilder; EARS; John Thomason; SCARS; Marshal Maddox; OUARC; Mark Kleine; EARC; Phil Wolfenbarger; C&E; Joe Harding; Tri=city; John Warriner; 76'ers; Jerry Sproul; Ex-Officio; Jim Buswell; President; Gary Skaggs; Secretary; Yvonne Warriner.

Garv Skaggs introduced himself, then everyone else introduced themselves.

Minutes of the last meeting were approved.

Mark Kleine gave a treasurers report of C&E balance of \$673.51 and Ham Holiday balance of \$1,588.16. Dues are due. Report approved.

Volunteer examiner report by Phil Wolfenbarger, applicants with 15 tests. Passing 75 per cent.

C&E report by Joe Harding, no problems, several cities or societies have withdrawn from C&E. C&E will publish this month with special mailing for Ham Holiday.

Ham Holiday report: Chair for talk-in is still open. Programs; 2 national severe storms, Health fair, and Old Ladies-Knit. 1000 tickets have been ordered. Dealers and prizes were discussed. John Thomason reported that all prizes were from Icom with grand prize having 45per cent off and other brands 35 per cent off.

Gary Skaggs resigned president and after a lengthy discussion a motion was made by Joe Harding, seconded by George Machino that John Thomason be elected president, Motion carried.

A motion was made by Mark Kleine that CORA offer thanks to Gary Skaggs for a job well done, seconded Phil by Wolfenbarger, Motion passed.

A motion was made and passed that the meeting adjourn at 7:46.

Yvonne warriner, Secretary.

KAY KOUNTY

AMATEUR RADIO KLUB

The last meeting of this school year was held at the Vo-Tech building. It was time for election of officers and here's the list:

Pres- Mike Morgan N5LPZ V.P.- Steve Huston KB5DOR Sec/Tres- Harry Beattle WD5DPR

Mike and Steve are also the Field Day committee, so they'll be calling you soon looking for help at this year's field day. It will be held out at the Kaw Dam overlook which should be a really good site. The date? Why, the last weekend in June as usual, the 25th and 26th.

We also watched another ARRL tape, this one was about the W5LFL space shuttle mission back in '83. Seems like a long time ago, huh? We had several new members and visitors from zeroland. The new members are Bill and Diane Jordan KB0BZP and KB0CBB, also joining was Ron Folks, N5KYJ who lives in Kaw City, say hi to them when you hear them on the repeater. Our visitor was George, KA0OCN, he's working for Conoco during the summer. You'll hear him on the machine too. Our next meeting will be in September, so have a good summer.

PHONE PATCH NOTES-

Those of you using the phone patch remember not to use 911 unless it is a life threatening emergency. If you see or are involved in a wreck without injury, use the other police number. The problem is, the 911 computer pops up the address of the phone patch out in the Osage and the dispatcher gets confused. If you do use the patch to call 911, be sure to stress that you are using a radio phone patch and give the exact location of the accident. You might even want to use 'over' so the dispatcher

gets the idea that you are on a radio and she cannot talk to you while you are talking. So, keep that list of emergency phone numbers handy, 911 isn't for everything.

PUBLIC SERVICE EVENTS-

We always seem to have several coming up and the summer is no different. The next event will be the Triathlon on June 11th. We need at least twelve, that right, TWELVE! to help with this. This event is very spread out and involved. Please come even if you can only stay an hour or so, we'll need ya! It will start around 8 am, so we need everyone there by 7:30 and it should be over by noon. Please contact me if you can help. The next event will be the Grand Prix races on July 2 and 3. We've been asked to help with crowd control this year. You can work for half a day and get into the races both days for free! Contact Mike Morris N5JJR at 765-6260 if you can help. We need a lot of help for that race too! Well, that's all the news that's fit to print from Kay Kounty this month. 73 fer now, Dave KD5FX.

FOR SALE, Satellite Antenna System, includes KLM-14C 2 meter 14 element beam, circular polarization, 11 dB gain, 13 feet KLM-40CX, 440 band 40 element beam, circular polarization, 15.2 dB gain, 14.5 feet long. Kenpro 5400A rotator, Azimuth and Elevation type. All above used less that one year. No reasonable offer refused! Call Shawn 405-762-9593 (evenings)

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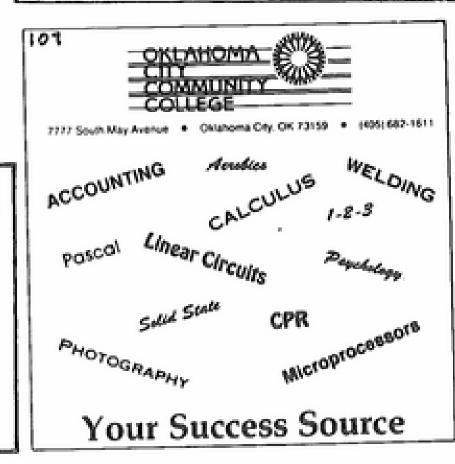
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El Presidente, Ray Barnes, AB5Z, called the meeting to order, and amid the sound of crunching potato chips and frequent trips to the non-alcoholic bar, he managed to get the necessary reports and business Thursdays. The OM and I have attended to. Some of the more serious listened to Gerald and have items discussed was the acquisition of a club Communications Van or trailer. There was general agreement that such a project was a good project dah dit dit dah, dit dit to undertake, and originators Denny Painton, WK5V and Jack Kelly, N5LBN, was encouraged to pursue the idea

purchased an antenna trailer, complete much as it hurts to admit itwith a slightly damaged crank-up that he had offered to donate to CARA. It was suggested that if repaired and the trailer put in good condition that it would make a great matching pair with the proposed van. It seems that two six hole chevy wheels could be put to good use....all donations accepted.....

Members attending this meeting were Jack Kelly, N5LBN, President Ray Barnes, AB5Z, Jack Day, NN5Z, Earnest Martin, K5NFQ, Dennis Painton, WK5V, Terry McColl, N5MLT, Verm Brewer KA5SZD, Ruth Simpson WX5Y, Betty Day KA5RTW.

After the business session the main topic of conversation was the preparations for Field Day, which is the last full week-end in June. An all out effort is planned complete with fun, food and buffalo gnats so BE THERE OR BE SQUARE! 73's. NN5Z........

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resulted 1 n a part-time position. He can be heard on Woodward FM radio station KWFX mHz from 6 pm until 93.5 Tuesdays Midnight on and noticed that he still maintains his love for CW. He heard to say, "dit dah dah, dit, dit dah dit, dit dit, dit dit dit". It is rumored that some listeners thought he had Alvin Adams, N5KQU, had previously a speech problem. Oh well, as proud We're of Gerald's accomplishments and wish him good luck in his new part-time profession. Do they really pay him to do that???

NWS ANNUAL WX PRESENTATION

Monday, April 11th, Mr. Devore gave a new and interesting presentation on severe weather. Unfortunately was not as large as usual. As surprisas it may sound, ham participation, with all the weekend's activities just completed, was fairly good. Don went into more detail than in previous lectures and gave us all a better understanding of all the elements necessary in the formation of severe weather. Our thanks to Don and to Bill Wyatt, KD5JR, for this most informative evening.

NWOSN Taylor, N5LRR, Net Andy ofthe Northwest Manager Oklahoma Service Net reports activity of the month of April as follows: 13 sessions, 136 check-ins and three pieces of traffic being handled. Not too Net activity has been bad! very good for this time of the year and Andy is to be commended for a job well done.

OUTTA GOODIES

That's about it for another month and hopefully we'll get this off to Joe in time this month. For now, 73, Lois, N5JGQ

"Well, you know how they always lean to the left." 1800Z - Plane doors are open. Equipment is being unloaded. Homer

falls down, breaking his blue plastic whirlygig. Temperature is minus 65. Wind is 44 knots. Zepp has wet pants. Tondelayo uses bunsen burner to thaw them enough to change them.

1805Z - The great man tells us, "Let's get cracking. Tondelayo, put up the tent. Momma, assemble the radio gear. Homer, put up the tower and beam. KU5B, fuel the generator. Remember, this is history, so don't screw up. Wake me when we're ready to go on the air."

> Zedd zipps up his sleeping bag. Everyone else begins feverish

work.

1900Z -- Tondelayo wakens Zedd starts checking Zedd. equipment setup.

1902Z - Zedd finds that Homer has installed the beam on the ground end of the tower.

"Why did you do that, you

dadblamed idiot?"

"Wal, Mr. Zedd, we are at the North Pole, right?" "Right. So what, you moron?"

"Wal, ever'thang is south of us, right?"

"Right. So --?"

"So iffen we wanna shoot our sigunuls down below where we are at chere -- "

Zedd groans. "We naturally put the beam on the bottom of the tower so it's a shorter distance. Right?"

"Shazam!"

1932Z - The beam has been reinstalled on the top of the tower. Homer falls in the latrine pit he has started to dig. He screams for help. Nobody rescues him.

1939Z - Zedd sits down at the mike. He touches up the loading and keys the mike.

This is A5A from the North Pole, listening up ten. A5A, A5A. QRZ3"

> It had begun in fine style. (To be concluded.)

> > -KU5B

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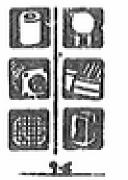
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Q. R. Zedd

WHICH WAY IS NORTH?

(Special to C&E)

NORTH POLE - Bitter south winds (they would have been north winds if the party was anywhere else) and temperatures reaching 100 below greated Q. R. Zedd, greatest DXer of them all, as he began his DXpedition here.

Zedd, A5A, had never met such conditions.

"I have never met such conditions," Zedd said.

But the weather was only half

of it.

Zedd's team included Tondelayo, his blond, nubile bride; son Zepp, age 1; Momma Zedd, of Mena, Ark., and Homer Klott, world-class nerd. One pool reporter from Collector & Emitter was allowed to go along.

Here is the moment-by-moment account of the first hours of the great

North Pole feat:

1705Z - We approached the North Pole, flying low over ice floes and polar bears, in the sleek jet aircraft of Zedd's own design. Zedd was at the controls. Momma Zedd was in the right seat. Tondelayo, Zepp, Homer and this reporter were in the back.

1712Z - "We should be almost there," Zedd said. He reduced power to the engines. The plane sank lower.

"These low clouds are tough," the great man muttered. "Momma, give me six degrees of flaps."

1717Z - We broke out of the low-lying clouds into marginal visibility.

"Gadzooks!" Homer screamed, looking out a side window. "Shazam!"

"Dirty tricks!" Zedd cried, applying power to slow our descent.

Below us, to our horror, we saw a huge encampment: a half-dozen large Soviet-built aircraft and three helicopters; two long rows of insulated military tents; a couple of half-tracks and one large quonset-type building, and uniformed men scurrying around like brown ants on the infinity of glaring white ice.

A Russian flag crackled in the

strong, cold wind.

1718Z - A voice broke in on our

radio frequency.

"Hey, Zapp, Sipp, whatever your name! This is Badenov, greatest DXer in world! Keep moving, capitalist lackey pig, you is QRMing great Russian radio sportsman signals down here on North Pole!"

"That cowpie," Momma Zedd rasped, reaching for the microphone.

"I'll tell him –"

"No, Momma," Zedd replied

coldly. "I'll handle this."

So saying, Zedd thumbed the mike. "Badenov, this is Zedd. "What are you jerks doing down there?"

"Is doing DX pedition, Zitz, what you think, boy? Is we got here first, is room for only one at the top, hah? Har har! Go back home, eat your hearts out, boy! Us humble Soviet amateur expedition is got here ahead of you."

Zedd maintained silence as we made a wide turn, surveying the installation, which covered about six

acres.

"Oh, Q!" Tondelayo cried. "What will we ever do?"

"Calm down, honey," Zedd said.

"Momma, fly the airplane. Something don't look right here. I got to make some calculations."

1722Z - Zedd began poring over charts and making multiple compass readings, punching everything into his HP calculator.

1735Z - "A-ha!" Zedd cried in triumph. "Just as I thought! Gimme them controls, Momma!" And he banked the plane sharply, headed off to portside.

1736Z - "So long, Zopp! See you later, capitalist pig swine lackey oink! Badenov has won at last! Har

har har!"

Zedd said nothing. His jaw was set like John Wayne. Tondelayo wept silently. Homer fell out of his seat into the aisle.

1744Z - Zedd told Momma to lower the flaps and we began a descent toward an icy glare below.

"But what good does it do us to operate from away from the North

Pole?" Momma cried.

"We ain't," quoth Zedd. "This is the North Pole, right here." And the gear touched down gently in a perfect landing.

"Are you sure?" all of us chorused, like in the old Hardy Boys

books.

"Yep. I am. - See? There's the sign."

And there, out the starboard window, was the official ARRL sign that read NORTH POLE ... RIGHT HERE. And an arrow pointing to the ice where the sign pole was stuck.

"But," Tondelayo asked, "how could the Rooshians make such a

mistake?"

"They missed by several miles," Zedd told her calmly, braking the plane to a stop. "They often do."

"But why? How?"

See previous page