

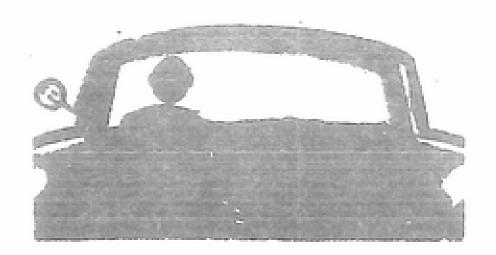
AN INFORMATIVE MAGAZINE
PUBLISHED MONTHLY BY AND
FOR OKLAHOMA RADIO
AMATEURS

AND ANYONE INTERESTED IN LEARNING ABOUT IT

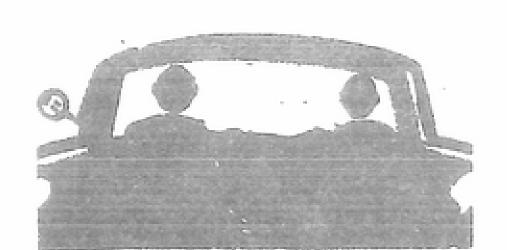
Volume 5

NOVEMBER 1979

Number 58



ONE DOESN'T HAVE MUCH FUN ON THE WAY.

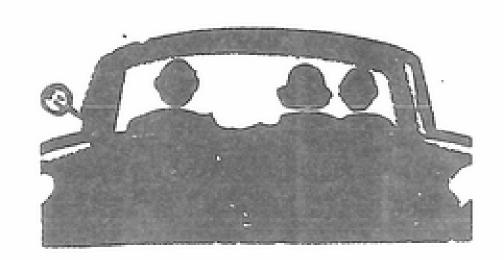


TWO WILL HELP YOU ENJOY THE TRIP

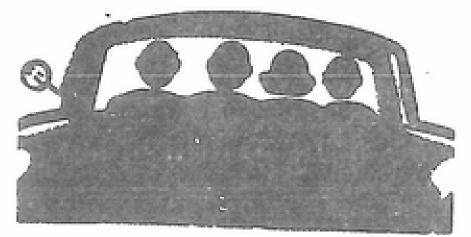
Think about car pools to increase the attendance at your club meetings.

More attendance will result in more -

PARTICIPATION:



THREE WILL "FIT" IN ONE SEAT.



FOUR WILL INCREASE THE FUN AND SAVE ALL SOME "MUN"

# KRYDERELECTRONICS

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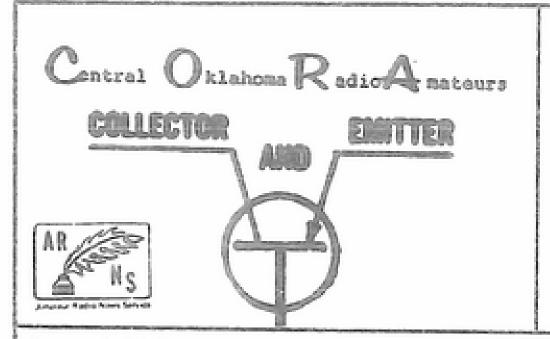
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Managing Editor Joe Harding, WA5ZNF 737-1044 Subscription: CORA members \$1.50 a year. All others \$3.00 a year.

Central Oklahoma Radio Amateurs, Inc. (CORA) is a not-for profit association of radio amateurs, founded for the promotion of interest in amateur radio communication and experimentation, for the advancement of the radio art and of the public welfare and operates to enhance the cooperation of member clubs in sponsoring activities of mutual interest to the clubs and all radio amateurs.

President Vice President Secretary Chuck Wilhite Bob Graham Kay Northcutt

K5NK 721-4926 WB5NSV 677-8685 WD5DYJ 842-1086

Treasurer Ron Recer WD5FRQ 751-5378

test test test test This is a test of the Teletype Model 43 teletype print system. test test test test THIS IS THE SAME TEST IN ALL CAPS. Now is the time for all good men to come to the aid of their party. 012234567890-!@#\$%^&\*()\_:"?><.../ Neighbor how long has isbeen since you had a good old hot thick steaming bowl of Wolf brand Chili. TEST TEST TEST TEST Hello This test is for reproducement quality of this type of printer. lest test test test test Hello World this printer is doing a nice goo!!!! whoops it also misspells Guess who cant whink of anything to type for the purpose of this test. I sure am glad that nobody knows who typed this mess.

Well this should be enough chicken scratch for one setting. b

This is a sample, rough that it may be, of the type on a printer which we are considering to be used in preparing uniform copy for the Collector and Emitter.

There will be two columns to the page with a space between them.

The result should greater legibility and more copy with less pages, at a reduced cost.

Look it over and let me know what you think of it. After all, the C&E is your publication, I'm just doing my best to make it what you want it to be. Joe, WAS ZNF

This longest line would be the width of each column.

y e or B Y E



CLUB EDITOR George Lee, WB5NMK, 946-2754 MEETS: 8:00 PM First Tuesday of month Okla City EOC, 4600 N Eastern Pres Fred Taylor KA5CXW 528-1537 V-P Bob White WB5PWZ 681-92224926 Sec Jim Buswell N5BEQ 947-11806984 Tres Jim Jones K5PER 634-52355235 Dues: Sid Gerber, 829 Bouse, WMC 73110

Another month gone "thataway". What should we say? Another month, another thirty dollars. Question --- Where's the thirty dollars? Guess it's gone to the grocer and the gas station; and they are predicting higher prices, yet. There's no end in sight. Whew!!

Enough foolishness! The meeting was called to order by President Chuck Wilhite, with apologies for starting late at 8:07 PM. Seems like things sometimes take longer than expected. There were the usual self-introductions. Following this, the treasurer's report was read and accepted. I think Jim will agree that banks sometimes seem to use a different kind of arithmetic than the rest of us. Not much different, maybe, just a little.

CORA report was made by Jim Buswell, included printer difficulties and mailing. CORA now has fifteen members, and appears to be still growing. This growth could pose some problems that won't be discussed here: someone else can do that.

The club voted to give Joe Harding a complete vote of confidence: and, that he should have supreme authority to edit or "blue pencil" any article submitted. His experience well qualifies him for the job. Also, the responsibility of publishing anything, should cary with it the complete authority to accomplish the job.

We received a good report on the 34/94 machine. The Night Owl Net was given permission to move to this machine for a few days for testing purposes; since people from distant places in the state check into the net, it seems a good way to determine the repeater coverage.

There was a discussion on the O7/67 repeater about some problems and some thought maybe it should also be replaced. More about this later I reckon. It was brought out that the new repeater call is K5ELL. Anyone using the autopatch should call "K5ELL, RPTR". This appears in line with an FCC ruling that a repeater should carry the call letters of the trustee, with the difference already noted.

Mac made some comments about "Alligator" repeaters, and other things. I enjoyed them, but please don't "big" him: He says he has enough problems. We will try not to ask you questions, Mac -- at least questions that are not too stupid. I expect there will be some, though.

We regretted to hear that one of our most prominent members, Bob Ashby, had to be hospitalized. Last word that we had, at this writing, was that he was back home on limited activity, and progressing nicely. It sounded good to hear him back on the air. Take care of yourself, Bob, we are all rooting for you.

There was a discussion on setting up a 220 repeater, nothing definite. More later, I reckon.

There is some confusion on my part about the following, don't take it for gospel. Fred motioned that any group interested in ham radio, and sponsored by CORA, be admitted to HAM HOLIDAY. Mac brought out some motions about non-paying guests be given the same chance at prizes as paying guests. Motions were made, seconded and ammended. Things happened too fast for me; so, don't jump me about inaccuries. Even Chuck admitted he got somewhat confused. Motion was made to permit the Kididle-Hopper Net to go to HAM HOLIDAY, with CORA's consent, of course. They want a time and place for their meeting.

A personal note, if you please: I don't know whether I will continue to serve as club editor, or not. Depends largely on Fred, and the club. As most of you know, my ears aren't so good. That "tin ear" I wear is certainly not a perfect substitute for natural hearing.

CORA Collector & Emitter

-4
November 1979

Mes-Oneston Reporter La.

Sometimes, in a crowd, it is very difficult to hear all that is going on all the time. The "ear" picks up sound OK, but it is difficult to separate individuals, and distant speakers. So, if I continue to write, fine: If not, it has been a pleasure, and we will see you around.

BEST Regards, George, WB5NMK

NEW OFFICERS: We have a new slate of officers which will take over at the January meeting. Even though the nominating committee failed to come up with anyone worthy of the responsibilites, those present at the last club meeting did a good job. And what an election we had. None of that railroading business. We had to have a run-off for every office, with the exception of the treasurer.

For the new President, we have Mr. Fred Taylor, KA5CXW. Fred is a very soft spoken individual, about a foot taller than most people and a very capable leader. He is very active in scout work and should make a good president for the club. I know we will all pitch in and help Fred out, for goodness knows he needs it following the outgoing president. Congratulations Fred.

Just in case Fred is not able to make the meetings, his capable back-up will be Mr. Bob White, WB5PWZ, known as the Pink and White Zebra. Bob is the one who is always complaining of having a constant headache. His headaches are just now starting. I'm sure Bob has accomplished something in his lifetime, but he has never told me about it. Anyway, Bob will make sure that Fred makes the meetings.

A new office this year, that of secretary, will be occupied by the bearded one, Mr. Jim Buswell, N5BEQ. Jim is active in every club in the Oklahoma City area and has succeeded in getting himself elected to other secretarial positions with other clubs around town. I hear he is thinking of attending secretarial school.

Poor old Jim Jones, K5PER, has had trouble all year trying to get his books balanced with the bank. Just to give him a little more time to find out where he or the bank goofed up, the club decided to give him another year in office to make it right. I wonder if perhaps the club should buy Jim a calculator.

EXECUTIVE COMMITTEE MEETING: It was announced at the last meeting that I would be calling an executive committee meeting prior to the regular meeting in November. I will see that everyone of you receives a phone call and an announcement will be put on the repeater, so make sure you show up at 7:00. We need to discuss some things. I have invited all the new officers to attend this meeting.

NEW REPEATER CALL: As most folks know by now, there is no longer a WR5APF call on the .07/.67 machine. Our faithful trustee, Mr. Merwin Adler, K5ELL, had to renew his license, at which time he also had to renew the license of the repeater. Since FCC no longer issues special repeater calls, Merwin's call is used instead of WR5APF.

It has been most interesting to listen to folks using the autopatch lately. I can hear the repeater I.D. and almost instantly womeone will want to use the patch and give the call WR5APF. This leads me to think of two things. Either they don't pay attention to the new call, or they have forgotten their Morse. I just wonder which.

Merwin has asked an announcement be made concerning the use of the repeater's patch. Too many people are not properly identifying with the repeater when they are using the patch. The proper way is: K5ELL REPEATER, THIS IS K5NK TO THE PATCH. When you are through with the patch, you should say: THIS IS K5NK CLEAR WITH K5ELL REPEATER. You should not simply say: THIS IS K5NK TO THE PATCH. It is Merwin's license that is on the line, so he asks that you use it properly.

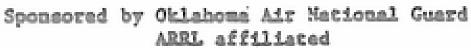
NEW .34/.94 MACHINE: The new machine on the .34/.94 repeater appears to be working fine. It has been given a good work out by the Night Owl Net for a few nights and its output appears to be very good. There are still a few bugs to be worked out, but these will be taken care of by the capable maintenance committee.

DECEMBER MEETING: Once again, we will have a Christmas Dinner for our regular December meeting. More information will appear in the December issue of the C&E about this. This has been placed in the very capable hands of Bob White and Jim Buswell to work out arrangements for meeting place and time. Plan now to attend.

Chuck Wilhite, K5NK



"Jo Promote Radio Communications"







#### NEW CLUB OFFICERS:

PRESIDENT .... Joe Couch ..... WD5BMP
VICE PRESIDENT-Kay Northcutt .. WD5DYJ
TREASURER .... Tom Cassady .... N5AOZ
SECRETARY .... Jim Buswell .... N5BEQ

The series of personal sketches of club members will continue next month with K5NK to be featured. We will even have a picture.

I am considering a series of slightly technical articles and I want to find out if there is any interest. Slightly technical because that is about all I can handle. Would anyone be interested in complete instructions for the construction of simple electronic projects that might be useful around the shack. I'm talking about very simple ideas that will seem ridiculous to most hams, but I suspect there are a few of you out there who failed to get into the practical applications of the theory you studied to pass your exam. If I'm correct and I hear from a few of you I will try one next month - perhaps an inexpensive power supply to operate your mobile two meter transceiver in the house. If I don't hear from anybody I will save my efforts and look for other ideas.

-Charlie, WA4PLG

682-7548 (days) or 632-4653 (home)

#### CQ AND BREAK FOR 2m FM

I heard recently on our local repeaters a conversation regarding "CQ" and "break" on the two-meter channels. To clear the air on this, I quote from FM and Repeaters by ARRL, Chapter 16, "Operating Practices--FCC Rules"; page 167, for those who do not have this book:

... "Some familiar 'hf' operating practices are <u>rarely</u> used. You will never hear someone call CQ on an 'fm' channel. To indicate that you are looking for a contact, simply press the microphone button and announce your call and the frequency you are listening on; for example, 'this is AClY, mobile 1, monitoring five two.' If you require special help, such as directions or highway assistance, indicate that as well....The best one-word description is 'concise'. Long calls and monologues simply have no place in this realm of channelized noise-free communications. Short-to-the-point transmissions should be the rule. This does not imply that long, friendly conversations are necessarily frowned upon, <u>except</u> on the busier frequencies; it simply means that natural give-and-take dialogue is better than having stations take long turns transmitting at one another!"

"To break into a conversation, simply wait for the brief pause between transmissions and announce your call. Do not say 'break'--this word is usually reserved for special situations. A single 'break' means that time is critical for you. A double 'break' (break-break) indicates that you have urgent traffic, such as a request for highway assistance. A triple break signifies an emergency situation, and is reserved for use when the safety or life or property is involved."

Hope this helps those who are a little fuzzy on this subject, like me being a new ham.

Al Farrell, KA5DFV

KENWOOD TR 7600 2m Synthesized FM Xcvr with matching KENWOOD MC-45 auto PTT touchtone microphone, mounted on Kriket Kamel hump-mount speaker console. Radio includes all papers, untouched warranty, and all packing. Rig used less than 6 hours, and before you ask, there's absolutely nothing wrong with it. \$325 cash takes it. Contact Mark, WD5DYI or Kay, WD5DYJ at 405-842-1086 OKC after 7 pm.

FOR SALE: Spaulding Tower, 48ft. - call Harry, WD5IDE, 789-6433 \$200



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The October '79 meeting of the Fidentennical Amateur Radio Club was called to order at 7:10 pm on the 9th with 36 members present.

The usual self-introductions were followed by acceptance of the minutes from the previous meeting as published in the Collector and Emmitter. Due to the forced absence of the Treasurer, the Treasury report was postponed until next meeting.

Bill EPERS announced a correction to the price for T-shirts he found: \$2.05 each in lots of a dozen (lettering & styletter). Bill is taking orders for them.

C. Y. WPSTKG announced that the Section Emergency Test (SET) had been reset from 6-7 to 13-14 Oct to clear scheduling conflicts.

NEW RUSINETT: Elections:

#### CONGRATULATIONS TO

President - Joe Couch WD5PMP Vice President - Kay Northcutt WD5DYJ Secretary - Jim Buswell N5PEQ Treasurer - Tom Cassady N5AOZ Activities Manager - Paul Asplin WA5HTL

Your new officers for fiscal 1980!

Each and all of these deserve your utmost support.

Paul WASHTL announced that one of our local dealers has offered \$100.00 donation to the first club to install a 220 MM, repeater in this area. Bill KRENE offered to match that with another \$100 of his own, "to get it on the air."

Fill also volunteered to replace C Y as the club's representative to the CORA Emergency Communications Committee. Finally, he also suggested (and accepted donations for) buying and sending Flowers to Clara WD5KFT and Get Well Wishes to Joe WF5TDW following their bouts with local hospitals.

The meeting broke at 8 pm for coffee and donuts to reconvene at 8:15 pm.

It was formally agreed to have a Christmas Dinner (like last year's) on December's meeting night, the 11th, under the aegis of Paul WASHTL: provide your suggestions and assistance to him soon!

The program was an examination of the relative merits of quad versus beam antennae by Coy NEOK: he began by listing areas of comparison: SIZE, DESIGN, GAIN, REFLECTIVITY, CORONA DISCHARGE, IMPEDANCE MATCHING and "Q". He concluded that "your goals determine for you which antenna you choose to use."

There being no further business or dissension the meeting adjourned to the "Aftermeeting" at 9:10 pm,

Hespectfully Submitted, Jim, N5EEL Secretary.



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#### AN APOLOGY

To all those stout-hearted puzzle freaks who couldn't find WARC, HEATH, WRAP, and possibly others in last month's "Amateur Radio Word Search": I truly apologize. In the interest of neatness and balance, I added more to my puzzle than the original. In doing so, I disrupted some of the words in my list. Also, if you spell FIELD DAY "Feild Day," you'll find it with no problem. I left TEN TEC off the list and didn't circle the example, CORA.

Next time, I'll cover my bases better. Another "Amateur Radio Word Search" is in the works! 73--Mark, WD5DYI

#### AMATEUR

#### 2 METER

#### "SAMARITANS"

WE WILL MONITOR THE 34-94 REPEATER EACH WEEK DURING THE HOUR WHERE OUR CALL SIGNS APPEAR BELOW, SO THAT ANY CALL FOR HELP ON THAT FREQUENCY WILL NOT GO UNNOTICED.

FOR ADDITIONS, DELETIONS, OR CHANGES: CONTACT C.Y. WB5TKG 232-9005

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MON	PM				WA5 HTL	N.5 BEQ							
T	AM							KA5 DCM	W \$5 N XID		W5 OZE		
UE	PM				WAS	N.3 BEQ							
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W <sub>E</sub> D	PM				WA5 HTL	N5 BEQ					KA5 CXW		
TH.	AM							KA5 DCM	WB5 NXO		W5 OZE		
$T_{H_{U_{R}}}$	PM				WA5 HTL	N5 BEQ						N5 BEV	
FR,	AM							DCM	W B 5 N X 0		W5 OZE		
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SAT	AM					·					WB5 NMK		
"T	PM	N5 BEQ										N5 BEV	N.5 G.E
S	AM	N 5 G E											
N.	PM	N.5 BEV					N5 BEQ					N5 BEV	

"SAMARITAN": ONE READY AND GENEROUS IN HELPING THOSE IN DISTRESS.

FOR SALE: Heathkit HW101 ser.#06632, HP-23 Power Supply, Heathkit Dynamic mike, Matching Speaker, Electronic Keyer HD1410 series 09918.

Clarence Dollmeyer KA5GKM, 341-7163

## Central Oklahoma Badio Amateurs

A C.O.R.A. REPORT FROM YOUR SECRETARY...

The newly elected presiding officer, Chuck Wilhite, K5NK, brought the October meeting of CORA to order at 7:32 p.m. on Tuesday, October 23rd, with a welcome to all in attendance. The traditional self-introductions followed; a total of 24 representatives and guests were present and 9 of the 15 member clubs were in representation.

Copies of the September minutes were provided each representative for his review and on a motion by Karen Recer, WD5HBX, seconded by Paul Asplin, WA5HTL, the minutes were approved as presented.

Treasurer, Ron Recer, WD5FRQ, submitted his report. Motion by Jim Buswell, N5BEQ; seconded by Karen Recer, WD5HBX, that the report be accepted. Motion carried.

In line with Old Business, Ron Recer, WD5FRQ, reported his findings with regards to CORA's obtaining tax-exempt status. A discussion followed regarding this information, and Ron will report back to CORA in the November meeting with information on the necessary steps to take to acquire the tax-exempt status.

In accordance with the Board's decision made in August, 1979, a vote was taken and passed with regards to the proposed constitution change as follows: Article 2: Purpose, second sentence, following the word "operators"; by adding the clause "to be held annually in the Oklahoma City Metropolitan area".

Don Duck, AE5N, expressed his concern over the apathy in carrying out CORA's committment to organize an Emergency Committee. Don volunteered to head said committee in an attempt to fulfill CORA's obligation. Motion by Bob Graham, WB5NSV, seconded by Merrill Scott, WB5QPI, that we accept Don's offer to chair the committee and offer him our full support. Motion carried.

Bob Ashby, W5HXL, made the motion that Ham Holiday again be held at the Lincoln Plaza Forum the last weekend of July, 1980, provided their prices are in line. Seconded by Karen Recer, WD5HBX; motion carried.

Chuck, K5NK, announced to CORA that some members of the Warr Acres Policy Department had volunteered their services to man the doors at Ham Holiday, 1980, at no cost to CORA. Motion by Ron, WD5FRQ, seconded by Karen, WD5HBX, that we accept their offer. Motion was defeated.

With regards to New Business, Chuck, K5NK, announced that the Tri-City Amateur Radio Club (Holdenville, Seminole, Wewoka area) had voted to become affiliated with CORA. Paul, WA5HTL, made the motion that we accept the Tri-City ARC into CORA; seconded by Ellard, W5KE. Motion carried.

Joe Harding, WA5ZNF, Managing Editor of the <u>CORA Collector</u> and <u>Emitter</u>, announced that he and Ron, WD5FRQ, treasurer, had recently done a study of income and expenses in publishing the <u>C & E</u> and found that rising costs in postage and printing require some changes be made. Joe and Ron presented some suggestions involving either an increase in subscription costs/member to the clubs and regular subscription costs, or a decrease in the page space allowed per club each month. Needless to say, there was considerable discussion in an attempt to offer solutions to this problem. <u>PLEASE BE ADVISED THAT THE REPRESENTATIVES FROM YOUR CLUB(S) WILL BE BRINGING SUGGESTIONS TO YOUR NEXT CLUB MEETING TO GET YOUR FEELINGS ON THIS MATTER.</u>

Meeting adjourned at approximately 9:15 p.m. - Kay Northcutt, WD5DYJ, Sec'y CORA ITEMS OF INTEREST:

Bob, WB5NSV, announced that we are currently mailing out 894 issues of the Collector & Emitter each month, and each issue is now approximately 40 pages. He also advised us that a printer has been located, and he and Joe, WA5ZNF, are in the process of testing print type and size for quality of reproduction.

If you have questions regarding CORA and its activities, feel free to contact any of the officers and/or your club representatives; or better yet, attend one of our meetings to see how your organization is working for you. We meet the 4th Tues. of each month @ 7:30 p.m. in the American Red Cross Building @ 323 N. W. 10th, OKC.



The September meeting was called to order at 7:33 pm by out-going President Mark Northcutt WD5DYI with 24 members and guests present representing nine of CORA's 14 current clubs. Not represented were Altus, EARS, Kay County, OU and Shawnee Amateur Radio Clubs.

New CORA Directors and the Clubs they represent introduced themselves: Charles Greene WA5JGU and Ellard Foster W5KF from the Oklahoma Central Amateur Radio Club; Jim Buswell N5BEQ from Mid-Oklahoma Repeator, Inc; Paul Asplin WA5HTL and Larry Griffin WB5NYX from Amateur Television Experimental Society; Kay Northcutt WD5DYJ, Joe Couch WD5PMP and Don Duck AE5N from Picentennial Amateur Radio Club; Karen Recer WD5PMX, Ron Recer WD5FRQ and Zack Zachry WF5QPI from Oklahoma City Autopatch Association; Bob Allen WD5EVP and June Allen N5ARV from Choctaw; George Lagaly W5NTL, Bill Oliver K5KDR and Bob Graham WB5NSV from Aeronautical Center; LaVerne Hoag KB5DK, Jack Bickham WB5TZZ and Charles McCown WB5UUX from South Canadian Amateur Radio Society; and Ted Vanlandingham WD5JNT and Joe Garland WA5FLT representing Wheatstraw (Joe also represented Edmond). Guests were Joe Harding WA5ZNF, Managing Editor of C & E and CX Chandler WE5TKG, Representative At-Large.

Minutes of the August meeting were approved as read with the amendment of a motion announced at that meeting to include the words "and no more" following the word "Directors" in Article 3 - Membership, Paragraph 1 - Directors of CORA, sub-para 1. The motion was defeated last month. The Treasury report was approved as published in financial statement format in October's C & E

ANNOUNCEMENTS: Bob WE5NSV stated there are 881 CORA members in our Computer memory which includes all clubs but SCARS and one other he couldn't remember.

George W5NTL advised us the "Kadiddlehoppers" comprise between 150 to 250 people who might attend an annual meeting in conjunction with Ham Holidy 1980 similar to SMIRK, 10-10 or Oklahoma Repeator Association.

The CORA Emergency Steering Committee decided and announced thru Zack WB5QPI that direct 2M FM operation without repeators is feasible across Metropolitan Oklahoma City and that, in turning operations of emergency planning over to the Emergency Working Committee, there was no further need for a steering group and they disbanded with the suggestion that the working group be made up of at least one representative member from each CORA club.

Further delving into requirements for tax-exempt status is leading to confusion thru lack of clarity, misdirections and run-around: Bob WB5NSV relayed that there are two ways to go with two sets of forms and Ron WD5FRQ advised he would contact other knowledgeable people for more and clearer answers.

Joe WA5ZNF and Bob WB5NSV recounted their tribulations attempting to acquire samples for testing from the computer printer we had been interested in using with the memory for the C & E: typical red tape; they have decided to look into a different brand.

The 76ers Club thru its representatives voiced opposition to Poard Censorship of C & E Submittals and moved a vote of confidence for the Managing Editor, Joe Harding WA5ZNF: Joe WD5RMP made the motion and Don AE5N seconded that "letters from licensed amateurs be printed in C & E space available and subject to Joe's blue pencil." After much discussion the motion passed 10 to 6 with consensus that a vote of confidence for Joe was unanimous.

There being no further announcements or old business the Board took a Coffee Break at 8:20 until 8:30 pm to reconvene with New Business:



(concluded)

NEW BUSINESS: The Edmond Amateur Radio Club, Stan Van Nort WB5UIY President, requested CORA membership by letter: currently composed of 39 members and their families, meeting the 1st Monday of each month, operating 147.63/03 and 449.2/444.2 MHz repeators on Ch 5's tower, the club was formed in Dec 1975 and incorporated in Jan 1976. The motion and second to accept Edmond into CORA membership passed without objection. Welcome to our 15th club!!

The Secretary gave the second reading of proposed constitution change, to wit: Article 2 - Purpose, second sentence, following the word "operators;" by adding the clause "to be held annually in the Oklahoma City Metropolitan area"; said change to be voted on in October 1979 meeting of the Board.

ELECTIONS: Chuck Wilhite K5NK representing MORI is new President, Bob Graham WB5NSV representing FAA is new Vice President, Kay Northcutt WD5DYJ representing 76ers is new Secretary and Ron Recer WD5FRQ representing OCAPA is retained Treasurer. Congratulations one and all!

There being no further business the meeting adjourned at 8:53 pm with hearty thanks to Charlie WA5JGU for brewing a pot of coffee for us.

Jim, N5BEQ Recording Secretary,

If I may be permitted a personal statement at this point, I would like to thank the Board as graciously as I know how for an enlightening, sometimes frustrating and always entertaining nine-month's-term as your Secretary. I must admit, I asked for it, I volunteered and then was drafted, nominated and elected (by acclamation or default, I'm not sure which) and have enjoyed every single minute — especially holding the extinction of offering the most motions defeated before the Board per unit of time? Passed or not, at the very least, they were "out in the open."

We all realize I'm quite new at this Ham Radio business tho the desire and interest have been lifelong and knowledge of the specifics and methods and the incentive were latecoming but I gratefully acknowledge the opportunity to serve especially so early in my ham career.

However, I leave you with this admonition: You only receive out of something equivalent as what you put into it. Your club representatives to and attendance at CORA is identified in this month's CORA minutes publication as in the past. Seek them out, know who they are, help them all you might—they are your club's voice in CORA—the only way your club will be heard as it affects all other member clubs (and there are 16 of them now!).

For the coming fiscal year I have been asked to represent Mid-Oklahoma Repeator Inc. in conjunction with Chuck, the new CORA prez and John Young, with Clara Storm as alternate. I am indeed honored to do so especially since, for whatever reason, there was no other MORI representation 25 Sep. Therefore, I will be looking forward to seeing you and working with you there.

Any and all rational suggestions for prizes/contributors/dealers for HH80 are greatly appreciated and I entreat you "don't put if off till the last minute."

Jim, N5BEQ



CLUB EDITOR 732-0676 .

MEETS: 8:00 PM Third Friday each month American Red Cross, 10th & Hudson OKC PRES Ken Ford WB5KHU 528-8770 CLUB EDITOR
Joe Buswell, K5JB V-P Jim Williams K5VRL 789-0769
SEC Joe Buswell K6JB 732-0676 TREAS Ellard Foster W5KE 789-6702

EDITOR'S NOTES. THE SEPTEMBER CLUB MEETING HAPPENED AFTER THE LAST C&E WAS PASTED-UP. WE WERE THEREFORE UNABLE TO RUN THEM IN THAT ISSUE. I WAS OUT OF TOWN ON THAT MEETING DATE SO JIM. K5VRL WAS KIND ENOUGH TO KEEP NOTES FOR ME.

APOLOGIES TO BILL HUFFMAN, NSCC, WHO SHOULD HAVE BEEN UPSET WHEN HE SAW, OR RATHER, COULDN'T SEE HIS ARTICLE IN LAST MONTH'S ISSUE. HE WENT TO THE TROUBLE TO TYPE IT AND HE DID SUCH A FINE JOB, I CUT IT OUT AND PASTED IT RIGHT IN. IT WAS A GOD SEND BECAUSE I WAS ONLY IN TOWN FOR THE WEEKEND TO REST UP FROM A STRENUOUS JOB IN NEW YORK. JOE, WASZNF, HAS ADVISED ME THAT THOSE PAGES WHICH WERE UNREADABLE ARE GOING TO BE REPRINTED IN THIS ISSUE. BILL, THANKS AGAIN FOR THE ARTICLE. YOU SAVED MY NECK TWO MONTHS IN A ROW BECAUSE I'M GOING TO COUNT THOSE REPRINTED PAGES THIS MONTH. JOE, K5JB

#### MINUTES OF SEPTEMBER MEETING

MEETING WAS CALLED TO ORDER BY PRESIDENT KEN, WB5KHU, AT 8:05 PM.

TREASURER'S REPORT INCLUDED A BILL FROM BOB, WSHXL, FOR A NEW COFFEE POT FOR THE RADIO ROOM.

THE CLUB'S CORA REPS FOR THE NEXT YEAR WILL BE BOB, W5HXL, CHARLIE, WASJGU. AND ELLARE, W5KE.

A CORA REPORT WAS MADE BY C, Y., WB5TKG, AND THERE WAS SOME DISCUS-ION ON SUBJECT MATTER FROM THE LAST CORA MEETING.

OUR ANNUAL CHRISTMAS PARTY AND DINNER WILL BE HELD DEC. AT THE RED CROSS CENTER. IT WILL BE A COVERED DISH DESSERT AFFAIR. BRING CAKES, SNACKS, OR WHAT EVER YOU WISH AND BE PREPARED FOR A LOT OF GOOD, FRIENDLY VISITING.

A BELL TELEPHONE FILM, FAR SOUNDS, WAS SHOWN FOR THE ENTERTAINMENT JIM, K5VRL, FOR THE SECTY OF THE GROUP.

#### WEINER ROAST

THANKS TO THE MIRACLE OF TWO METER FM, I FOUND OUT THE CLUB WAS HAVING A WEINER ROAST AT WILL ROGERS PARK IN LIEU OF REGULAR MEETING. HAD IT NOT BEEN FOR TWO METERS I WOULD HAVE BEEN SITTING DOWN AT RED CROSS CENTER, PENCIL IN HAND, READY TO TAKE MINUTES INSTEAD OF RAIDING CHARLIE GREENE'S GOODIES OUT AT THE PARK. I DIDN'T THINK TO TAKE A HEAD COUNT BUT IT LOOKED LIKE THERE WERE TWICE AS MANY PEOPLE AT THE WEINER ROAST AS NORMALLY ATTEND A BUSINESS MEETING, WHICH IS I WOULD EXPECT WITH WIVES AND OTHER GIRL FRIENDS, AND ALL.

I HAD BEEN A LITTLE BEHIND ON MY GOSSIP SO I. WAS GLAD TO SEE EVERY-BODY. I WAS PARTICULARLLY GLAD TO SEE BOB, W5HXL. HE SAID HE GETS UP AND AROUND FOR A FEW HOURS AND THEN HE GETS TIRED AND WANTS TO GO BACK TO BED. I TOLD HIM I WAS GLAD HE WAS GETTING BACK TO NORMAL.

LOOKS LIKE EVERYONE HAD A GOOD TIME. BOY THOSE SURE WERE GOOD ` WEINERS YOU HAD THERE CHARLIE! JOE, K5JB, SECTY

FOR SALE COMON YOU GUYS, LETS GET SERIOUS! I HAVE BEEN RUNNING AN AD FOR THE LAST COUPLE OF MONTHS ON MY SWAN 500 80 THRU 10 METER SSB TRANSCEIVER AND I HAVEN'T GOTTEN A SINGLE CALL ON IT. I DON'T UNDERSTAND WHY: JUST A FEW YEARS AGO IT WAS A MOST DESIRABLE RIG. I CAN SELL THIS AT A FRACTION OF THE COST OF A NEW RIG AND IT WILL PERFORM JUST AS WELL, BETTER IN SOME RESPECTS, THAN THE NEW SOLID STATE RIGS. CALL ME AND DISCUSS IT. RON, WASEAI, 681-0896.



MEETS: 7:30 PM 3rd Thursday of month.
Security Bank Basement, Ponca City
PRES Chuck Willis WB5DOT 765-5366
V-P C. L. Hallmark W5ZWM 762-8620
SEC/TR Jay Williams W5TXF 765-9440
CLUB EDITOR Chuck Willis, WB5DOT

Well, the frost is on the pumpkin and soon it will be ice on the antennas for us hams. I am scurrying around to get the antennas at this OTH ready for the winter of "80".

Our September club meeting was attended by 11 members and 3 guests. For those of you that missed the meeting, you missed a super program. Our business was rather light, consisting of an update on our emergency power for the repeater. Currently the repeater ID will change tone when it is operating on battery power. Our program was presented by members of the COOFS (Good Ole Okie Flying Society) and dealt with the radio control of models. Some of the models on display included a radio controlled helicopter and a racing plane with a finish that had to be seen to be appreciated. You know a lot of work was but in when you can count the evenly spaced painted rivets! Part of the program consisted of demonstrations of control activations by remote control along with a working display of servos and receivers. For those of you who haven't looked at radio control models in some time, or who assume that they are strictly for the bubble gum and baseball trading card set, you would be surprised at the sophistication in todays equipment. Like amateur radio, radio control models haven't stood still either. While amateurs have been blessed with the likes of digital displays, PLL, ect., radio control equipment was shrinking and going to digital encoding of commands. Most of us wouldn't think of radio control of models as being part of amateur radio, but they are, and there is part of an amateur band used for radio control. Something struck a resonant chord in my memory when it was mentioned that one of the radio control frequencies was at 53 mhz ( it still requires a tech license or higher). For all those newcomers to amateur radio, the old radio control frequencies used to lie in the amateur 11 meter band (now CB), which was hardly ever used. Maybe we better start watching our 6 meter flank!

I don't know about the rest of the ham community, but fall always seems to be the time for me to start looking skyward and trying to fill that blue space above with at least one antenna. So far all I have done is filled the backyard with wire, rope, and poles. By the time this reaches print I hope to have the whole mess attached to a local skyhook or something. There's an old saying which states that if an antenna stays up through the winter, it isn't big enough. Since last years experiment stayed up, I decided to enlarge upon the design.

I am slowly running out of things to say in this issue(some of you said that after my first sentence). I will say my 73 to all of our club members and to the other clubs in CORA until next time.

#### 73 Chuck

	KAY COUNTY	2M NET CONTROL SCHEDULE	NOV	1979
date_	no.	primary net control		backup
10/29	145	WDSACK		N 5 E O
11/5	146	W5ZWM		WA5UBO
11/12	147	WB5JYC		WB5DOT
11/19	148	N 5 E O		WD5ACK
11/26	149	WA5UBO		W5ZWM
12/3	150	WB5DOT		WB5JYC
12/10	151	WD5ACK		N5EO



MEETS: 9:30 a.m. third Saturday each month,
Red Cross Building, North Campus, Norman
PRES Jess McKenzie AF5X 329-1543
V-P Joe Green KA5AXQ 364-4301
TREAS Chas. McCown WB5UUX 321-1061
SEC Jack Bickham WB5TZZ 329-1311

#### GETTING FIRST THINGS FIRST DEPT.

As announced by AF5X, the club is pressing to collect all 1980 dues by the end of November at the latest. Main reason for the early collection is our acceptance into CORA. The C&E needs an up-to-date list of paid members for the computer, and the computer needs the list to mail the C&E. The sooner you pay your 1980 dues, the sooner Charlie McCown can have an accurate list that won't need updating all the time.

SCARS dues are \$6 annually. Please get your check to Charlie ASAP. Thanks.

#### SCARS PLANNING A NEW NORMAN REPEATER

At its September meeting, SCARS voted to begin work on refurbishing a tubed repeater taken out of service by Cleveland County. The machine is to be an open repeater whose primary emphasis will be to provide emergency redundancy to the WR5AFW machine run by the OU club. Final decisions on site and frequency were to be made very soon in cooperation with the state frequency coordinator and city civil defense officials. The antenna is to be donated by Mike Salem, N5MS, godfather for WR5AFW. Lots of details pend, but it looks definite.

With installation of a new repeater due soon, as well as collection of annual dues, the club needs all the financial help it can get, both from established SCARS members and those who might like to join. Charlie McCown, WB5UUX, is the man to contact if you want to join or help with a repeater contribution....

#### OPEN HOUSE HELD FOR EMERGENCY SERVICE CONTRIBUTORS

The club held an open house at the Cleveland County Red Cross building Sunday, October 21, for individuals and groups who have contributed to the fund drive for the new club station and related equipment. City and civil defense officials also attended. With the new 120 on line, installations at the Red Cross are almost complete. We invite all our other friends to visit any Saturday morning for coffee and a gander at the rigs.

#### CLUB ELECTIONS DUE DURING NOVEMBER MEETING

The November meeting, scheduled for November 17, starting at 9:30 a.m., will be one of the most important of the year for our group. As specified by the bylaws, annual election of officers will take place at that meeting. Because officers cannot succeed themselves, new faces will be elected at that time. A nominating committee will have a slate, but nominations will also be open from the floor. This is a meeting no member should miss.

#### EQUIPMENT AND STUFF

Jim, WD5HPU, passed his Jeneral on a brief vacation trip to Arkansas recently. Already a Tech, Jim borrowed an Icom 2-meter rig from W50U for the trip, heard about a hamfest and FCC testing on the way, dropped in, and passed the code before he had time to get nervous. Came back, bought the 2-meter rig from W50U, is now active on 28/88 as well as continuing to pound out the CW on hf.

Carl, WB5QNK, has a new crank-up of his own design and construction. New tribander on top, too. And by this publication, he probably has a new micro-processer going for his RTTY operation, too. Add the new Kenwood 180 and KDK 2-meter rig, and you have the Horriblewitz with quite an operation.

H.O., WA5MLT, reports grand results with his new Drake 2 KW linear. There were some troubles driving the older one with the TR7 due to impedance matching woes.

(Continued)

## The South Canadian Amateur Radio Society

(Equipment and Stuff, Cont.)

Bill, K5KDR, was pleasantly surprised when he sent his Pace Communicator II back for some warranty repair. Although the rig was six months in use, the company flat sent him a new one.

When John, N5ABC, had troubles with the digital readout of his TS-820S, he found the problem to be corrosion-type trouble between aluminum pins and copper sockets leading into -- and inside -- the frequency counter. John lightly scraped the aluminum pins and solved the problem. When another amateur started to do the same, Leland, W5MCN, suggested using an ordinary pencil eraser to rub the aluminum pins. Worked fine, and didn't risk digging too deeply into the soft aluminum. Incidentally, experience so far indicates that this might be a "fix" that has to be done again every 12-18 months. Maybe someone can suggest a spray for the pins?

Jess, W5SQJ, is the proud owner of a new Ten-Tec rig.

Jerry, KA5GHJ, has upgraded to Technician. A relatively new member of the Norman club, Jerry has also been working hard on design of a club logo and jacket shoulder patch. We wait to hear you on 2, Jerry....

#### NOVICE CLASS GOING GREAT GUNS

The Norman area novice class, held weekly at the Red Cross in Norman, is going well, according to KA5AXQ. The group of about 16 is through DC theory and into AC and regs now. Graded code practice has also been offered to help the newcomers gauge their own progress on the CW requirement.

#### SECOND ANNUAL CHRISTMAS PARTY PLANNED

SCARS will stage its second annual ham radio Christmas party for area amateurs and their families in December. The dinner last year at Norman's Holiday Inn was a big success, with some city OMs and YLs also attending.

Date and time, as well as place, will be announced in this space next month. The planning committee consists of K5KDR, chair, and WB5SKB, WB5UUX, and KA5AXQ.

#### NORMAN IS HOME FOR TET, USA

As readers of the advertising columns in national ham magazines probably have noticed, Norman is now the home of TET, USA, a branch of the Japan-based international firm specializing in ham towers and antennas.

TET is assembling antennas and towers in its north Norman factory and shipping from the same location. A wide range of HF and VHF antennas is offered, but one that has aroused considerable interest is the five-element 3F35DX -- a tribander that has already had stiff testing from several Norman amateurs.

TET's approach on the five-element beam is to use separate, full-size, non-trapped driven elements on 10, 15 and 20. These three driven elements are fed in parallel by means of "feeding bars" which attach identically to all three. The power goes to the element that's resonant on the operating frequency. No baluns or other devices are used, the skield of the 52-ohm coax attaching to one feed bar, the center conductor to the other. Conventional trap parasitic elements form the reflector and director.

It would appear that such a Yagi, properly designed, should have very low losses and high efficiency, and the experience of Norman amateurs using the beam tend to bear that out. As of this writing, the 3F35DX is in use by N5ALG, W5MCN, W5SQJ, WB5TZZ, and at the Red Cross station. Experiences have been very good.

(Continued)

(continued)



(TET, Cont.)

The five-element beam weighs 42 pounds assembled and ready to mount. Its boom length is 16 feet, 5 inches and its longest element is 34 feet, 7 inches, giving it a total wind surface area of 8.29 feet. It's a very well-made piece of equipment. All elements are pre-drilled, so that in most cases all one has to do is match up drilled holes and set a self-tapping screw. Early problems with the assembly instructions (They were in Japanese!) have been solved, and the manual now is clear and straightforward. Everything fits as it should, and the machine work on every part is truly beautiful in its attention to detail.

One could come up with some quibbles on minor details. Present models come with a four-foot length of coax, a PL-259 on one end and the other end already dressed for fitting to the feeding bar screws. There have been some reports of trouble with this piece of coax, according to the TET people. In my own case, the coax broke down somehow and partly shorted, requiring another trip up the tower to remove the factory coax and dress my own coaxial cable directly onto the feeding bars. Examination of the factory coax indicated that solder with a very high melting point had been used in the PL-259 -- my 100-watt iron would not begin to melt it -- so I speculate that damage might have been done to the coax gizzard in heating it enough to melt the fitting on there in the first place. Suggestion: throw the factory coax away and use your own.

Another minor glitch developed in two of the beams in use in Norman. The design of the feeding bars is such that one of them will inevitably be quite close to the pipe coming out of your rotor. If you happen to connect the shield of your coax to this feed bar, no problem. But if you happen to connect the center conductor to the bar in proximity to the grounded pipe, you may end up with an inadvertant short to ground (the Red Cross beam) or a bar so close to ground that you get weird capacitative effects (my beam). TET is adding an extra instruction in recent packages, suggesting that you routinely make the close-to-the-mast bar the grounded side of the feed.

My friend WB5QNK says he doesn't like the way the reflector and director are mated to the 2-inch OD aluminum boom. A handsome gray plastic fitting is used, but there is no provision for a tab or screw to prevent possible rotation of the element on the smooth aluminum boom. Mine hasn't slipped yet; if it does, I intend to drill the fitting and insert a stopping screw.

TET claims outstanding gain and front-to-back for the 3F35DX, and casual experimentation indicates that the antenna's figures are indeed impressive. Even nicer from some points of view is the broad-banded characteristic of the untrapped driven element section. If you follow directions, your SWR somewhere in the middle of each band will be about 1.2-1, and you'll be able to go down to CW or up to the high end of the phone band and still be well below 1.5-1.

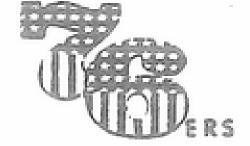
The company's seven-element beam adds an extra reflector and director, and probably works a little better on 10 meters. The longer boom is designed to add a little gain elsewhere, too.

Everyone thinks his own equipment is the best, and the Norman amateurs, now using the TET antennas are no different from anyone else. But they do have the added pleasure of telling the DX stations that the beam in use is a home-town product.

PS: There was no give-away here. I paid full retail for mine.

-- WB57727

MEETS: 7:00 PM on the 2nd Tuesday of each month at Air National Guard - Will Rogers World Airport President: Mark Northcutt WDSDYI 842-1086 V. P. : Joe Ramage WBSTDW 685-4814 Secretary: Joe Couch WDSBMP 282-4353 Treasurer: Don Duck AESN 681-0133







Editor : Chas. Kennamer WA4PLG 632-4653 Sponsored by Oklahoma Air Magional Guard

#### PERSONAL SKETCHES

MARK NORTHCUTT, WD5DYI KAY NORTHCUTT, WD5DYJ

Mark's enthusiasm for amateur radio is highly infectious. I'm glad I began this project of contributing some material to the 76ers section of C&E by calling on Mark. I received a big boost in my morale almost instantly as I interviewed him on the phone.

The introduction of amateur radio into the lives of Mark and his lovely wife, Kay is just about the greatest thing that could have happened to them. In addition to being a fantastic hobby, it is a common interest they both can share. They keep in touch via 2 meter FM since they both carry talkies. They both enjoy operating amateur radio and working together in various club activities. Their interest in amateur radio was sparked by the two meter repeater operation of one of Mark's fellow workers at KTVY Channel 4 TV, John Spivey, K5YGM. Mark liked the way 2 meters works and got the bug. Incidentally, another shared hobby is photography. They take mostly color slides of candid portraits and scenery.

Attending classes was the next step, and this training was provided by the Bicentennial Amateur Radio Club. Mark said that Coy Day, N50K, was especially helpful in furthering their interest and training. Mark was first licensed in May of 1977. Then in rapid succession came the Technician in August '77, General in January '79 and Advanced in April '79. May got her General Class license the same day as Mark received his Advanced. Kay's first license was the Technician Class in Sept. of 1977. Mark has ambitions of going on to the Extra Class and also getting a commercial license. Mark said a strong incentive for advancing from Technician was the purchase of an H.F. rig. This was before the Techs were permitted on H.F. So there it sat. He figured he better get to studying.

Kay and Mark grew up in the little Oklahoma town of Cement. Kay played the piano for various activities such as the church and the high school chorus. She also learned sewing, which proved to be very useful, because she can now make some of her clothes. Mark was musically inclined too, and played the drums in the Jr. high and high school bands. Mark studied Business Management at the Oklahoma College of liberal Arts. He was graduated with a B. S. degree in 1972. He was employed by KTVY at age 20 where he has been for 7½ years. He is Production Studio Supervisor in charge of the studio crew. He is also Senior Camera Han and takes care of lighting.

Kay attended Draughon's Business College. She is now Office Manager for the Oklahoma State General Agent of the Minnesota Mutual Life Insurance Company where she has been for 42 years.

Mark was secretary of the Bicentennial Amateur Radio Club last year and is President of that organization this year. He is also President of the Central Oklahoma Radio Amateurs (CORA) this year, and will serve in an advisory capacity next year.

Ham Holiday registration and pre-registration has kept Kay and Mark busy the last two years. This year Kay was chairperson of this committee.

Emergency and Public Service segments of amateur radio has Mark's deep interest. A Certificate of Appreciation signed by the Wichita Falls Civil Defense, AREC and Red Cross was awarded to Mark for his emergency traffic net operation in Whichita Falls following the recent tornado. He said that everywhere you looked was like the scene on the front cover of August, 1979 QST, a Wichita Falls scene of devastation.

(Continued)



"Jo Promote Radio Communications"

Sponsored by Oklahoma Air National Guard Will Rogers World Airport



Personal Sketches (continued)

Their H.F. operating is hampered by the fact that they live in an apartment. They must mount an antenna of sorts on the balcony rail. Despite this handicap, Mark is working C.W. so as to build his confidence and speed. The Extra Class license is the ultimate goal.

I think we will all agree that amateur radio is profiting very much because of this enthusiastic, energetic couple, Mark and Kay Horthcutt.

= = = Bill, WASRAQ act. PAGE 3/

#### NORMAN CLUB RAISES FUNDS, GETS RED CROSS STATION GOING

For more than a year after its inception, the South Canadian Amateur Radio Society struggled to get a club/Red Cross station on the air. During simulated emergencies, the club tower, dipoles and Ringo Ranger, bouth with donations by members, were used. But members hauled in their own equipment from home for these exercises.

Today, after a public fund drive spearheaded by Verne Hoag, KB5DK, the club has been able to install a Kenwood station. The 2-meter rig is up and operating and the Kenwood 120 is expected back on line any day after encountering some factory-type glitches. The station also includes a rotor, wattmeter/SWR bridge, 2-meter Swiss quad and 5-element HF tribander, all courtesy of TET USA, the new Norman-based branch of the respected Japanese antenna firm. Bob Fields, N5ALG, was instrumental in securing the donation of some of this antenna equipment from TET, and of course everyone thanks both Bob and the people at TET very much.

Raising money, we learned, is not hard when your club has someone willing to invest countless hours of effort. Verne has done just that. Armed with a detailed outline of station needs as well as a statement of purpose for emergency operating, Verne has personally contacted dozens (if not hundreds!) of Norman area business people and civic organizations. The response has been fantastic. Equipment on line so far is paid for and the club hopes to add a coax switching device and other necessary goodies without incurring debt. A special committee is looking into the possibility of buying a repeater which could provide emergency redundancy for the WR5AFW machine everyone likes and uses so much locally.

A great many members have invested time and effort into assembling of the new station. Verne and Bob have been mentioned because their efforts have been so outstanding. The fact that the others are not mentioned is in no way a denigration of their work. So many have given help that listing all of them would require too much space for one report. They know who they are, and so do their fellow members of SCARS.

The station is going to remain super-compact to avoid interfering with daily routine at the Red Cross. Even with pieces missing and a bug waiting to jump out of the 120, however, one of the first stations worked during a trial run was the DX-pedition on Manihiki. So we think we'll have a first-class operation going in another month or two.

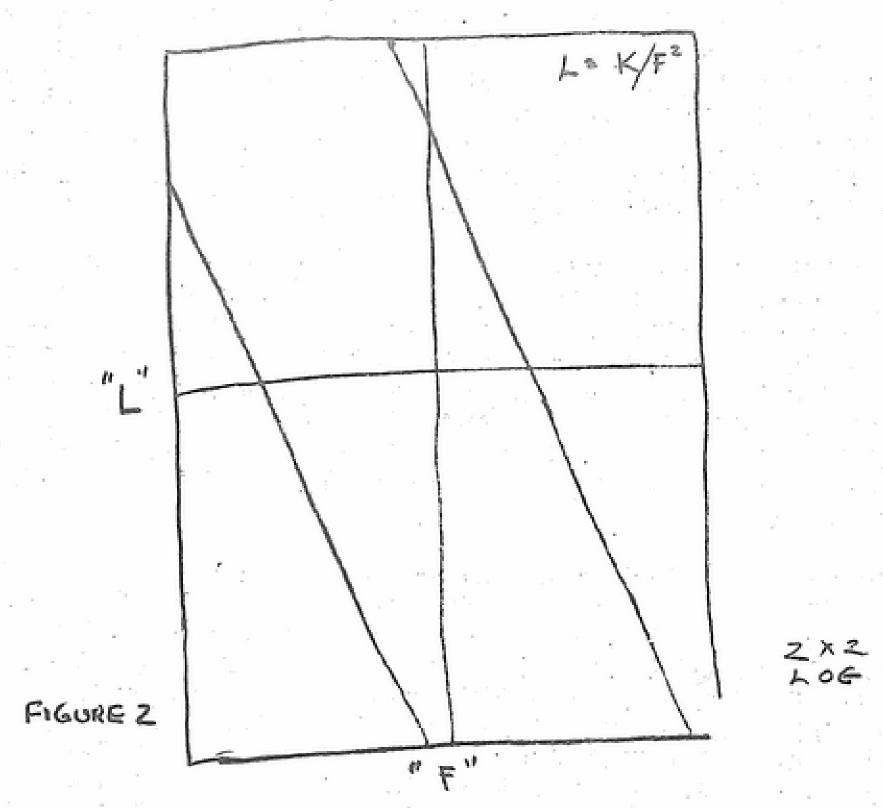
SCARS will have an open house for donors and the general public to view the new equipment in operation this Fall. We hope the station will provide new muscle for emergency operating capability in central Oklahoma -- and we hope just as fervently that a serious emergency never comes along.

Assuming you are still with me, the time has now come to discuss calibration which is of much importance if you want very accurate results. If you just happen to have some precision inductors laying around in the junk box, fine you are ready to go, if not I guess a compromise is in order. Should you need to use yould-junque-baux for calibration purposes dont despair as long as you are using marked components you cant be too far away from the truth, and besides you can re-calibrate. anytime. Could say much more here but wont just to save space.

With the reference inductance in the circuit and the oscillator working, a frequency will display on the counter. Square the frequency (in Mhz) on a hand calculator and multiply the result by the value of the inductance (in UH). You should come up with a number around 43 perhaps, depending on several factors. This is our calibration number and will not change so be sure to record its exact value. better still, affix it to the oscillator case. Expressed another way the calibration, or K, is:

$$K = \mathbb{P}^2 L$$

Once calibration has been made we are now ready to make actual measurements. Just place the unknown inductance in the circuit and as before measure the frequency in Mhz. Square the frequency and divide it into the calibration number. Presto! You now have the value of the unknown inductance expressed in uh's. In other words  $L=K/F^2$ .



As a final thought, should you want to use a chart rather than making calculations each time, this is quite practical (see fig. 2). To make a chart, let me suggest you obtain so 2 cycle by 2 cycle  $\log$  graph paper as this will simplify things greatly. If you use this graph paper you will need to draw only two straight lines as determined by four values in the calculation of L = K/F.

Bill - N5CC

#### AIRCRAFT TRANSCEIVER KIT

LAST MONTH I DESCRIBED A VISIT WITH THE FOLKS FROM RADIO SYSTEMS TECHNOLOGY, INC WHO HAD A BOOTH AT OSHKOSH WI DURING THE FLY-IN. FRAN MITCHELL AND JIM WEIR, WB6BHI, WERE FRIENDLY AND CONVINCING SO I ORDERED ONE OF THEIR KITS. ACTUALLY, I HAD MY MIND MADE UP BEFORE I WENT TO THE CONVENTION THAT I HAD SEVERAL USES FOR A PORTABLE AIRCRAFT BAND TRANSCEIVER. I WOULD HAVE PROBABLY SETTLED FOR A CRASH DAMAGED COMMUNICATION SET THAT A REPAIR JOB COULD SALVAGE. NOT FINDING THAT AND FINDING HAND-HELDS COSTING FOUR TO

FIVE HUNDRED BUCKS, CONVINCED ME THE RADIO SYSTEMS TECHNOLOGY KIT WOULD FIT MY NEEDS. THE COMPANY ADVERTISES IN AVIATION AND AMATEUR RADIO PUBLICATIONS AND I HAD A SKETCHY IDEA OF WHAT THEIR TRANSCEIVER CONSISTED OF. AT THE SHOW I WAS ABLE TO SEE ONE AND TAKE THE SPECS BACK TO THE DORM ROOM TO STUDY.

THE TRANSMITTER IS A ONE WATT OUTPUT, AM JOB, CRYSTAL CONTROLLED ON SIX CHANNELS. THE RECEIVER SECTION IS ALSO CRYSTAL CONTROLLED WITH 2 MICROVOLTS SENSITIVITY FOR 10 DB SIGNAL TO NOISE RATIO. IF THIS SENSITIVELY DOESN'T DAZZLE YOU I'LL EXPLAIN THAT IT IS TYPICAL FOR AIRCRAFT EQUIPMENT FOR TWO REASONS. THE BAND IS WIDE, COVERING 118 TO 136 MHZ, REQUIRING LOW Q TUNED CIRCUITS, AND MORE IMPORTANT, IT IS RIGHT NEXT TO THE FM BROADCAST SAND WITH ITS HUGE SIGNAL STRENGTHS. THE RECEIVER MUST BE ABLE TO PERFORM ITS FUNCTION WITH-WIPE-OUT FROM THE BCIERS.

SINCE VERY FER OF YOU GULD DATE ADOUT ARROTATE DATE EQUIPMENT I WILL LIMIT THIS TO THE KIT BUILDING ASPECTS OF THE RST 542, AS IT IS CALLED.

THE RADIO TOOK 18 HOURS TO ASSEMBLE. THE INSTRUCTIONS FER VERY GOOD, RESEMBLING THE HEATHKIT STYLE, TAKING STEP-BY-STEP AFTER A PRIMER ON SOLDERING AND OTHER CONSTRUCTION TECHNIQUES WERE COVERED. I HAD MEVER SERIOUSLY DONE ANY CABLE TYING BEFORE. MY PROJECTS USUALLY BEING FINISHED IN THE "RATS JEST" STAGE, OR IF TAKEN TO THE NEXT STAGE, FINISHED OFF WITH A FEW PLASTIC TYE WRAPS. I HAD TO GRAB THE ARRL HANDBOOK AND DECIDE WHAT STYLE TO USE. WITH HELP FROM PHOTOGRAPHS IN THE CONSTRUCTION MANUAL I WAS ABLE TO PASS THE TEST OF TYING PENCILS TOGETHER TIGHT ENOUGH THAT ONE WAS DIFFICULT TO REMOVE. THE WIRE CABLING TOOK ME A LITTLE LONGER THAN A PRO BECAUSE IT WAS MY FIRST AND THE EQUIPMENT HAD TO BE SENT BACK TO THE PROSFOR TUNE-UP AND I DIDN'T WANT ANYONE TO SEE ANY SHABBY WORK.

THE REASON FOR RETURN OF THE EQUIPMENT IS FOR IT TO BE TESTED AND RECEIVE ITS TYPE ACCEPTANCE LABEL. CRYSTALS WERE NOT INCLUDED IN THE KIT SO I WASN'T EVEN ABLE TO CHEAT. THE ONLY THING MISSING FROM THE KIT UNINTENTIONALLY WAS A TRANSISTOR AND SOME 4-40 SCREWS FOR HOLDING THE CASE TOGETHER. I WAS SHORT ONE .001 AND LONG ONE 5 PF CAPACITORS. I KNOW I DON'T DO THE NASA STYLE SOLDERING METHOD BUT NEITHER DO I GLOP IT ON BUT I RAN OUT OF SOLDER. I GUESS THEY HATE FOR SOMEONE TO OVER GROSS ON LEAD. I GUESS I'LL GO BACK AND READ THE SOLDERING INSTRUCTIONS.

WHERE IT WAS IMPORTANT, THERE WERE EXTRA PARTS. THREE OF THE CIRCUIT BOARDS PLUG INTO MOLEX EDGE CONNECTORS. THESE THINGS ARE FABRICATED BY CRIMPING INDIVIDUAL CONNECTORS ONTO WIRES AND SNAPPING THEM INTO A PLASTIC BLOCK. THERE WERE EXTRAS TO REPLACE THOSE ONE MASHED WITH HIS 'PLARS'. I WAS FORTUNATELY EQUIPPED WITH MOLEX CRIMPING TOOL WHICH SPEEDED UP THE JOB THOUGH IT DIDN'T QUITE FIT. I GUESS THEY HAVE A DIFFERENT TOOL FOR EVERY CONNECTOR THEY MAKE. BY THE WAY, I NOTICED TRICE HAS A LOW PRICE? CRIMPING TOOL FOR THESE THINGS... \$10.00 IS BETTER THAN \$40.00 I WAS TOLD THE PRODUCTION TOOL COSTS.

I INSURED THE INTEGRITY OF THE CONNECTIONS BY SOLDERING THEM AFTER CRIMPING

ONE DELIGHTFUL THING ABOUT THE PARTS IN THE KIT WAS THE RESISTORS.
THEY WERE ATTACHED TO SOME TAPE IN THE ORDER OF ASSEMBLY. BOY THAT WAS A TIME SAVER! COILS WERE PREFORMED AND IDENTIFIED BY COLOR DOTS MAKING THEIR INSTALLATION A SNAP.

PERHAPS NEXT MONTH I WILL BE ABLE TO REPORT ON THE PERFORMANCE OF THE COMPLETED UNIT. FOR INFORMATION WRITE RADIO SYSTEMS TECHNOLOGY, 10985 GRASS VALLEY AVE, GRASS VALLEY CA, 95945. THE RST-542 COSTS \$199.50 WITH ONE PAIR OF CRYSTALS. EXTRA CRYSTALS COST \$19.50 EACH. THE COMPANY CAN PROVIDE ALL OTHER ACCESSORIES. JOE, K5JB

FOR SALE RINGO RANGER ANTENNA FOR 2M. GE PROGLINES. VHF MOBILE UNIT ON 34/94, 50 WATT COMPLETE WITH CABLES AND CONTROL HEAD. LOW BAND ON 40 MHZ. GOOD FOR 6M. RON WASEAI, 681-0896.

CORA Collector & Emitter -7-



#### Alpha Sigma Delta Radio Fraternity since June 10, 1924

Dedicated to serving The University, the community and introducing amateur radio to tomorrow's leaders.

#### CLUB GETS NEW TEE SHIRT AND JACKET LOGO

The ASDRF now has a new iron-on logo for tee shirts and jackets. The logo was designed by Gene Johnson WD5GTC. Gene has a General class license and is on the staff of the University of Oklahoma Press. Both he and his son Kevin WD5GTB reside in Norman and assist the club in their own special way. The logo designed by Gene uses the new official logo like the one at the top of this page. Over the top of the interlocking OU are the words "AMATEUR RADIO" gracefully curved. At the bottom in block letters is "W5TC". You see lots of shirts that say "OU Football"; why not some shirts that say "OU AMATEUR RADIO". Gene's effort in designing us a new logo is a good example of how each of us "doing what we do best" strengthens the club. No club can be a one person operation, and each club depends on such concentrated efforts as this to make the overall effort a success. Thanks Gene!

#### OCTOBER MEETING TO HAVE TELETYPE DEMONSTRATION & DOOR PRIZE

Bruce Rogers K9WFA an Aurora, Illinois resident and student at the US Postal Training Center on campus is planning a lecture and demonstration on RTTY if he can round up all the equipment. The demo is scheduled for the next club meeting on October 11. This is the second Thursday. The OU club by a vote decided to have only one meeting each month. This meeting will be the second Thursday of every month. All persons attending the meeting will be eligible for the door prize. I do not know what the door prize is but John Stehr N5ABC, Trustee for W5TC, informs me some undisclosed Noman amateur radio operator is cleaning out his ham shack and has a highly exotic piece of? that he will donate as a door prize. The donor of the prize asked to remain anonymous (we understand this is to prevent a return of the item to the donor). Meeting time is 8 PM, Thursday October 11, at the Carson Engineering Center on Boyd. Assemble at the club station on the 4th floor.

#### CLUB GETS NEW FACULTY SPONSOR

The Alpha Sigma Delta Radio Fraternity now has a new Faculty Sponsor. The new sponsor for our club is Laverne Hoag KB5DK. "Verne" is a professor in the Industrial Engineering Department of the College of Engineering. I plan to write more about our new sponsor in a future issue. Verne relieves Professor W. T. "Bill" Cronenwett W5TPJ. Bill was sponsor of the club for many years. All of us certainly appreciate his efforts in behalf of the club. A Faculty Sponsor is a mighty important person to a college amateur radio club. Bill says he will still help us any way he can. To Bill Cronenwett we say thanks for your help for all the things you have done for the club.

UPGRADES

John Lewis WB5YJP Carl Horowitz WB5QNK Gene Johnson WD5GTC Kevin Johnson WD5GTB Technician to General General to Advanced Novice to General Novice to Advanced

#### W5TC TO GET TOWER INSTALLED SOON

The trustee for W5TC, John Stehr N5ABC, reports he expects the Physical Plant will let us put our 40' tower up sometime in October. The steel tower is the 40' tower donated recently by John Lewis WB5YJP. The tower is to be installed on the Carson Engineering Center and hold the Hy-Gain tri band beam which is still sitting on the roof assembled and ready to install. It is hoped the tower and beam will mean a tremendous improvement in the DX capability of W5TC. One of the problems faced by college amateur radio clubs is cutting through the university bureaucracy to get permission to install an item such as a tower. Both John N5ABC, W5TC trustee and Michael Salem N5MS, the VHF repeater trustee, have apparently developed a considerable degree of patience in such situations. Anyway, I know all of us are looking forward to having that beam in operation.

Nathan Kirby KB5BF

CORA Collector & Emitter

CONGRATULATIONS!

I DON'T THINK CY HAS HAD THE BENEFIT OF ALL THE WISDOM REGARDING INTERMODULATION DISTORTION, HIGH, OR ODD, ORDER DISTORTION PRODUCTS, THIRD ORDER INTERCEPT POINTS, DYNAMIC RANGE, AND ALL LIKE THAT HEAVY STUFF I READ ABOUT IN HAM RADIO MAGAZINE AND PRETEND I KNOW ABOUT IN MY COLUMN. NEVER-THE-LESS, I ADMIRE AND ENCOURAGE HIM BECAUSE HE DOCUMENTS HIS DISCOVERIES AND GETS THEM IN THE C&E.

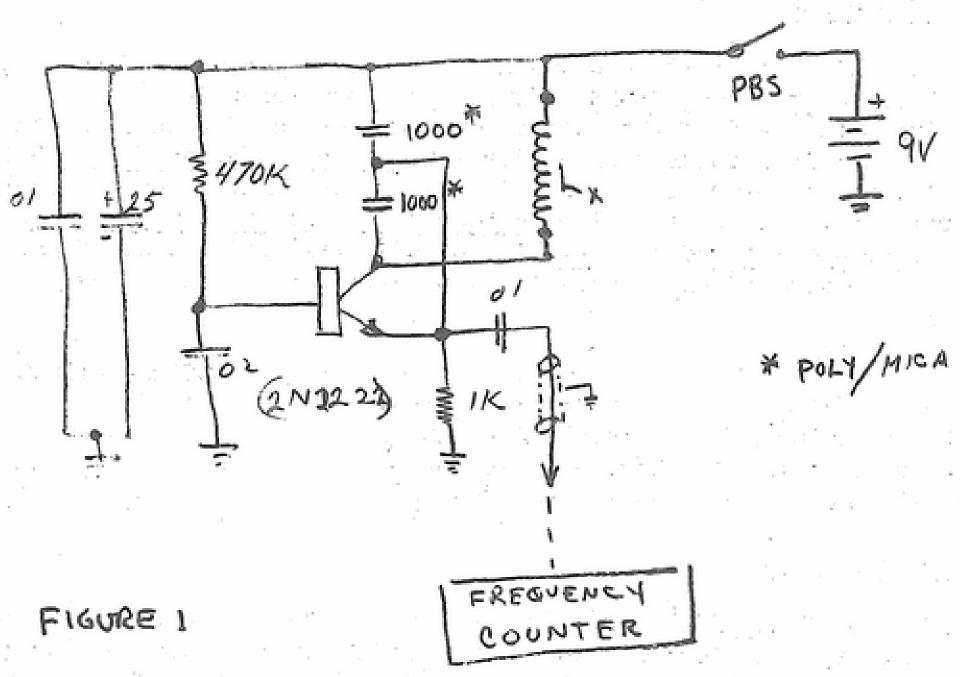
THIS MONTH I AM BLESSED WITH SOME GOOD STUFF. IT REALLY MAKES MY JOB EASIER AND MAKES THE C&E MORE INTERESTING. JOE, K5JB

#### MEASURING INDUCTANCE

Measuring inductance has always been a problem for most of us and I freely admit using a lot of Kentucky windage in this area. While its pretty easy to accurately measure either condensers or resistors, measuring inductors has generally meant a lot of trouble which really didnt yeild too high an accuracy anyway. Well if this has been your experience maybe you would like to try my (hopefully better) method which is very quick and accurate too.

Several months ago while working on some receiver tuned circuits, the old "cut-and-try" method just wasnt working out too well. Must admit I got badly sidetracked and found myself in the project of just measuring inductance. Oh well, what the heck? To make a long story very short I found a method that satisfied me so I thought I would pass it along.

I hope you don't expect something complicated as all I can offer is the single transistor oscillator shown in Figure 1. Notice its battery operated and mine is housed in an unadorned wooden box with nothing more than a pair of terminals and a push button switch showing. The oscillator will work over a very wide range of frequencies, however the exact frequency will depend entirely on the exact value of inductance (since there are no other variables). Relating the oscillator frequency to inductance is easy, and if we measure the frequency accurately, we can also measure the inductance accurately. Simple? You bet.



A useful oscillator range is obtained from roughly .luh to 3000uh without resorting to extra components being switched into the circuit. Although the range could be extended, frankly I dont recommend it because I dont need a wider range and switching components could result in less accuracy. Note that the output of the oscillator is fed through a length of coax to the counter. This length is not critical, but once the coax is made a part of the calibration, it should not be changed. Should you be a purist, possibly you would like to include an emitter follower. If so the coax length is unimportant. I am well satisfied with a fixed length of around 30".



CLUB EDITOR George Lee, WB5NMK, 946-2754 MEETS: 8:00 PM First Tuesday of month Okla City EOC, 4600 N Eastern PRES Chuck Wilhite K5NK 721-4926 V-P Bill Atkins N5AH 737-6984 SEC/TR Jim Jones K5PER 634-5235 Dues: Sid Gerber, 829 Bouse, WMC 73110

I put my notes in a safe place that was almost too safe, I had to really look for them. My wife had a bunch of the church missionary circle ladies over for a meeting. Of course, everything extraneous to the looks of the house was put away. Way-a-Way. She was tired and I relieved when it was over because it took her two days to recover from the worry of everything being just right.

Enough of that. Our regular monthly meeting was held on Tuesday, Sep. 4, 1979, with President Chuck Wilhite presiding. Meeting was called to order at 8:00 PM with the usual self-introductions following. The treasurers report was read and accepted as matter of course.

There was a CORA report of Ham Holiday. They made \$600 from the prize tickets, the proceeds to be used in purchasing a new printer for C&E/Other business was discussed and it was announced that CORA now has 14 clubs as members. It's growing real good!-

Proposed changes in the constitution were made to separate the offices of secretary and treasurer, and seconded. There was quite a lengthy discussion, pro and con. It seems, among other things, that the constitution cannot be amended in time to elect the new officers in accordance with the rules. Motion was made and seconded to temporarily elect these officers in an acting capacity until the rules could be changed. They would then assume their offices on a permanent basis.

President Chuck explained that MORI would continue to have charge of prizes at Ham Holiday through 1980 and that he would still be serving on the committee. Bet he was wishing he was traplets thus past year because he had to be three places at pane. I'll bet also that he will have some throat medicine hnady next year. If he has to do all that announcing, he will. Maybe he will have an assistant available to relieve him while he rests his voice. Chuck, you did a might fine job.

Motion was made and seconded for the following for CORA: Chuck, K5NK John Young, Jim Buswell and Clara Storm as the alternate.

Motion was made and seconded to purchase a new feed line for the 440 machine. It was carried.

There will be election of officers next month (October).

There was a discussion of the use of the word "Break" just to join a QSO. Properly speaking, a person is supposed to announce his call for that purpose, so the speaking parties can invite him into the conversation. According to protocol, a person is supposed to use the word "Break" only in an emergency. It would be polite to abide by the accepted procedures. Maybe so many of us own CB sets, that we are picking up bad habits???

Many of us, (me too) are so anxious to set our jaws in motion that we

press the mike button before the other guy has hardly finished speaking. A slight pause would give some other party a chance without having to fight his way into the conversation. Besides being considerate there is always the possibility of a real emergency. I heard that one of our ladies had some problems when she had an accident and was trying to get in touch with her husband. I don't know the details and would not present them anyway, but don't you think it's pretty rough that you can't get through when you really need to?

Chuck brought this subject up at the meeting and I think there is some real food for thought in the foregoing. Also, there is the matter of rudeness in our practices, and occasionally profanity. Are we developing into a bunch of C.B.ers? Most rudeness is probably unintentional, but it still hurts the other party and how does he know it's accidental? Most people are pretty nice, but there are exceptions and none of us are perfect.

October 1979



MEETS: 8:00 pm First Friday each month
Flight Standards bldg, FAA Aero Center
PRES Bob Pace WA5CJG 376-3569
V-P Bill Oliver K5KDR 329-6333
SEC Bob Graham WB5NSV 677-8685

Club Editor, Bob Graham, WB5NSV

#### MINUTES OF THE SEPTEMBER MEETING OF THE ACARC

The September meeting was called to order at 8:00 PM by President Bob Pace, WA5CJG. There was a very good crowd of members and guests present. The usual round of self introductions was followed by a variety of reports, and announcements. A summary of these announcements follows:

It was announced during the self-introductions, that the Oklahoma County emergency Net now meets Mondays at 9:00PM on 146.52 MHz.

Charlie Greene has a new grandson. Congratulations Grampa!

George Lagaly, W5NTL, gave a report on the W5PAA station equipment. He reported that the TR-4CW has been inoperative, but that it has been repaired and is now operational. George, also set a tentative date for September 15, for a W5PAA antenna party.

Bob Graham, WB5NSV, gave a report on the latest CORA business, and reported on the success of Ham Holiday 1979. He also reported that CORA elections will be held at the September CORA meeting, and that new CORA representatives should be at that meeting.

President Pace at that time announced the appointment of George Lagaly, W5NTL, Bill Oliver, K5KDR, and Bob Graham, WB5NSV, as the new CORA representives for the Aeronautical Center Amateur Radio Club.

Bob announced that the program for our October meeting will be on a subject of rapidly growing interest, SHF Converters. He also announced that OG&E will be presenting the November program. More on that later.

Bob then asked for anyone interested in helping make the arrangements for our annual Christmas Dinner to please contact him individually. Help is needed and we invite your participation.

The program for the evening was presented by Joe Buswell, K5JB, who gave an excellent program on how to remote control your station. Joes program was complete with actual demonstrations, and was very much enjoyed by all who attended. Thanks Joe, for a fine program.

The meeting adjourned at 9:10 PM for coffee and donuts.

Bob Graham, WB5NSV, Secretary/Treasurer

#### RANDOM WORDS FROM THE PRESIDENT;

OUR SEPT. MEETING WAS A GOOD ONE, WE HAD JOE K5JB OUT TO PUT ON OUR PROGRAM. JOE SHOWED US HOW WE MIGHT REMOTE CONTROL OUR H.F. GEAR, THE PROGRAM WAS VERY GOOD, AND I WOULD LIKE TO THANK JOE FOR COMMING OUT TO PUT IT ON.

BOB WB5NSV IS HEADING UP THE CLASSES AT THE RED CROSS AGAIN THIS YEAR' OUR CLASSES STARTED SEPT. THE 12<sup>TH</sup>. BOB SAID HE HAD A GOOD TURN OUT FOR THE FIRST NIGHT AND THERE WOULD PROBLY BE MORE SHOW UP AT THENEXT CLASS SESSION.

OUR PROGRAM AT THE OCT. MEETING WILL BE ON THE DESIGN OF VHF/UHF/SHF CONVERTORS, COME ON OUT AND JOIN US...... 73.BOB PACE, WA5CJG.

## Edmond Amateur Radio Society, Inc.

MEETS: 2:00 PM 3rd Sunday Room 205 Science Bldg, Central State Univ: WD5 IDR 341-2510 Howard Wise PRES V-P Ken Stepp W D5 H X K WA5 ZLW SEC/TR Bill Wright

CLUB EDITOR Howard Wise, WD5IDB, 341-2510

\* \* \* \* \* \* 147.72 - 147.12 \* \* \* \* \*

Boy, did I goof. Last months editing for the C. & E. snuck-up on me and I failed to get our comments submitted. Sorry - bout - that. At least I found out a lot of people were expecting to read about EARS in the September issue and wondered why we wern't there. I take full responsibility and appologize. WD5HXK

\* \* \* \* \* \* 147.72 - 147.12 \* \* \* \* \*

Our September meeting consisted of a very short business session and an extermely interesting and educational program on computers. The primary business topic, dealing with our Constitution and By-Laws, had to be posponed until our October meeting - which left us with more time for our program. Martin McCormick, WB5AGZ brought his Apple II and helped all of us not only see an Apple II perform its amazing feats, but helped us understand how computers work. Martin also brought his "home-brew" speech processor, which enabled him to hear the information we were seeing on the monitor. By the way, Martin was born blind, but you'd never know it by the way he operates his Apple and builds electronic equipment. Martin presented many interesting demonstrations and we greatly appreciate his time and efforts. Thanks Martin. \* \* \* \* \* \* 147.72 - 147.12 \* \* \* \* \*

Another item I should have gotten in the last months C. & E. is to thank Dee, WD5FHR for his efforts in bring together the necessary ingredience for an excellent EARS picnic. If there was anything lacking, it was only the will power to stop eating so much.

\* \* \* \* \* \* 147.72 - 147.12 \* \* \* \* \*

EARS welcomes three new members: Bill Humphreys, W5JYT Jim Buswell, N5BEQ

Bob McCoy Jr.

We're very pleased to have them join us and plan to put them to work very soon. Bob McCoy in not yet a ham, but is preparing to take his Novice test within the next month. Good luck Bob!

\* \* \* \* \* \* 147.72 - 147.12 \* \* \* \* \* Treasurers Report: Beginning Balance 8-20-79.....\$101.84 Income (Dues)..... 40.00 Sub-Total..... 141.84 Expenses (for generator)..... 4.10 Ending Balance 10-21-79.....\$137.74 \* \* \* \* \* \* 147.72 - 147.12 \* \* \* \* \*

Congratulations to Clarence Dollmeyer KA5GKM on his recent upgrade to General; and to Roger Harmon KA5EGU on his upgrade to Advance. Personally, I think Roger was just trying to show-off - - - he said the Advance test was too easy.

\* \* \* \* \* \* 147.72 - 147.12 \* \* \* \* \*

Our October meeting was highlighted by a program by WD5FHR, Dee. He showed us the construction and use of a R. F. Sniffer (out of QST). I wasn't able to attend, but I understand the little gadget could be very usefull.

The major item of business was the approval of an updated Constitution and By-Laws. I consider this to be a tremendous accomplishment, and I wish to offer a hardy thank you to all officers and members who have worked so hard to give us such a workable guideline for our club. Any member wishing to obtain a copy, may do so at our November meeting, or from any club officer after November 18th.

\* \* \* \* \* \* 147.72 - 147.12 \* \* \* \* \*

START YOUR OWN TV REPAIR BUSINESS for only \$750.00. Test sets, tools, supplies, tubes,-all you need to set up in your garage or shop. Call Ellen Cusky, 732-1139, evenings.

## Shawnee Amateur Radio Club



#### WSSXA

MEETS: 8:00 PM, 2nd & 4th Tuesday Shawnee City Hall, EOC Pres Earl Couch WB5 ZBA V-P Jay Tingler WD5BUQ Sec/Tr Bill Warren WB5 TZQ CLUB EDITOR Jay Tingler, WD5BUQ

WOOPS%! A little ol' storm sneeked into town Sunday evening and did some damage. Trees down, trucks turned over, a few houses damaged - and some businesses. We were lucky though; there were no serious injuries or other loss.

WHERE'S RON?? KASCAY, Shawnee Director of Civil Defense thinks he is the Man from LaMancha - or something like that. He was seen late Sunday evening attacking a large tree that suddenly sprang up in the middle of the road. He thought it was a windmill!!!

WHITE ELEPHANT COMMITTEE: SARC has accepted responsibility for the operation of the Civil Defense communications van. This behemoth is a 1952 REO 2½ ton 6X6 with a TT-11 van mounted aft. It has been painted white - hence the name, above. A technical (?) committee chaired by Les, WD5FUG and including Jim, KA5FAT; JAY, WD5BUQ; and Dean, N5BEZ has been appointed to keep the rascal going. We already have donations of a 2 meter beam and a telescoping mast to go with it. Now for some radios......

UPGRADE CLASSES: Gen/tech theory classes have started. The instructor is Les, WD5FUG. They meet in the Shawnee EOC each Monday and hope to finish in time for the January exams.

EXTRA, EXTRA, READ ALL ABOUT IT!!!!! John, WD5EKT of Wanette and OU has upgraded to Amateur Extra. The goals this young man sets for himself stagger me. But he has a very high success rate!! Congratulations, Johnny.

NEW FACE - FAMILIAR VOICE: Jerry, N5AUP was at our last meeting. He has recently moved to the Shawnee area and we're glad to have him.

73, gay/WD5BUQ



#### THE UNIVERSITY OF OKLAHOMA

CLUB EDITOR Nathan Kirby, KB5BF

Alpha Sigma Delta Radio Fraternity

MEETS: 2nd Tuesday, 8 PM, (Sep-May)
Room 449, Carson Engineering Center
PRES James Gardner KA5DHF 321-8779
V-P Alan Wormser WB5QLF 325-2194
SEC/TRES Peter Richeson KA5COI 325-3015
DUES Nathan Kirby KB5BF 364-7979

#### October Meeting a Success

The October meeting of the Alpha Sigma Delta Radio Fraternity had a very interesting meeting. Well over a dozen OU students and Norman hamsenjoyed a fascinating demonstration of RTTY. The distinguished lecturer for the occasion was our own Carl Horowitz WB5QNK. Carl had charts available to show how it works and even had a teletype hooked up and clattering away. A door prize was given away with the winning number being the one held by Carl Horowitz. I was hoping to win the prize myself because the door prize was a new Motorola mobil 2 meter antenna.

#### November Meeting to Feature Traffic Handling Techniques

The November meeting will feature a yet to be announced speaker on traffic handling and net procedures. Again a door prize will be given away. The meeting will be held on the fourth floor of the Carson Engineering Center on the 2nd Tuesday at 8 PM. Don't forget this is a new meeting time. The date is November 13, 1979.

John Wustenburg WD5EKT General to Extra

OKLAHOMA CITY AUTOPATCH ASSOCIATION, INC.

CLUB EDITOR
Chuck Wilhite, K5NK, 721-4926

MEETS: 7:30 PM 3rd Tuesday each month Okla. Military Academy, 36th & Grand. PRES: Doc Goodhead WA5CZN 721-8592 V-P: Chuck Wilhite K5NK 721-4926 SEC/TR: Karen Recer WD5HBX 751-5378

MEETING HIGHLIGHTS: We had an interesting meeting with a good turn-out at our last meeting. Doc, WA5CZN had just returned from a church meeting in San Antonio and he was full of vim and vinegar and took full command of the situation.

After the normal business meeting, Reuben Castleberry, WD5FKF, presented a most interesting program on the use of phone patches and the auto-patch. Reuben is an authority on these matters and answered many questions in the minds of members on the proper usage of these items. He had promised to have a good looking woman with him but gave some obnoxious excuse for not having her there. Thanks Reuben.

CONSTITUTION COMMITTEE: The committee appointed by our beloved president to revise our constitution has met and presented to the executive committee a rough proposal for changes to be made to said constitution. All members should make an effort to thoroughly read these proposed changes and be ready to present your suggestions at the next executive meeting. They have done a fine job. After this is finalized & approved by the club, a copy of the new constitution will be run in the C & E.

CHRISTMAS PARTY: In lieu of our normal December meeting, we will have a Christmas dinner this year. Buddy Kidd, KA5AQY and Jim Buswell, N5BEQ have selected a place to hold this party and this met with the approval of the club members. The party is to be held on the regular meeting night, December 18, at Furr's Cafeteria, located at 63rd and May Avenue, in the French Market Mall. They will be furnishing us the room and all we have to do is go through the line, pay for your own food (Dutch) and we will be having an enjoyable evening. Merrill, WB5PTQ, Perry, K5URJ, and Sully, WB5YLZ have graciously accepted our respected president's request to serve as a program committee for the Christmas party. If you have any suggestions for the program be sure and contact one of these gentlemen.

It was decided that everyone would bring a "White Elephant" gift to the party. Just in case you are not sure what a white elephant gift is, look around and find something that you have been wanting to get rid of for a long time, but didn't have the nerve to throw it away. Wrap this thing up in pretty Christmas paper and bring it to the party. Some one will just love you for bringing it. Just in case you don't have a spare bushel basket of old radio tubes around the house and have to go out & make a purchase, be sure and not go hog wild. Only spend a buck and for sure not more than two. Also, the wife is to bring some sort of dumb gift too, for we will have both men and lady white elephants. To give us some idea as to how many will be coming, you will find a form at the bottom of this page. Cut it out, or make a reasonable facsimile of it and mail it to our club secretary.

Just in case you don't luck out on the white elephant gifts, the club is donating a hundred bucks from the treasury for the purchase of gifts for the Christmas party. I am sure this money will be wisely and happily spent for a gift just for you.

EXECUTIVE COMMITTEE MEETING: Our El Supremo desires to have an executive committee meeting prior to the regular club meeting in November. I'm sure everyone will get a phone call, but in case you don't, be sure and plan to be there at 7:00, sharp.

HELP::: Your club editor drastically needs your help in writing articles for the C&E. I have gotten offers from Marshall, K5MB, Reuben, WD5FKF, and a half offer from Ron, WD5FRQ, for some input from club members. I know there are many of you out there who have something that would be of interest to everyone, but have never taken the time to sit down and write it up. Now is your chance. I plan to ask our great and glorious leader, Dr. Robert Goodhead, WA5CZN, for an article. So, why not get busy and help us out.





Being strictly a cw operator on the high frequency bands, it always does my heart good to hear someone say they are trying to build their code speed up to a respectable level. I don't claim to be the best cw operator in the world, but I am fortunate in that I can copy at a fairly good rate. I do have Uncle Sam to thank for some of this, having sat at a mill and copied code during my military days for some eight hours a day for three years. This is what you would call daily practice. You can't keep from building up your speed when you copy code for that long.

Although I copied hours and hours of code during my army days, I never once heard any plain text code. It was all cyphered code, mostly in five letter groups. In order to copy this type of code, one of the first things they teach you is to copy behind. If you are copying code at a rate of 30 words per minute, with five characters to the group, this comes out to 150 characters a minute, or 2.5 characters a second. There is no way in this world that a person can hear this many characters, retain them in your memory and put them down as they come across. You must learn to copy behind. It sounds hard and I certainly don't know how the human mind can do it, but at a speed higher than 20 to 25 w.p.m., one must be copying at least 5 letters behind at all times.

In order to copy behind, one must be able to recognize the character when he first hears it and not have to repeat it by sound. This is very easy to do, but it takes lots of practice. In the little message above, it is very hard to obtain a very fast rate of copy. You have to look at the letter, say it to yourself and then remember what the letter was before the one you just figured out and then put it together for a word. This is what gives people a lot of trouble in copying code. You must hear the character, sub-consciously repeat the sound to yourself and by this time, 2 or 3 more characters have come across and you miss them. Or, either, you hear a character and can't think what it is, sit there trying to remember it, and then at least a word goes by.

Everyone has their own way of telling someone how to be able to copy code. I don't know what the best way is, but for whatever it might be worth, I thought I would offer my suggestions.

One of the best ways I have found to learn how to copy code behind is a method they had us use in the army. After we had mastered a speed of approximately 18 w.p.m. we would write our name, or some five letter word between each group of 5 letters. With "Chuck" having five letters, this is the word I would put between each group. By doing this, in no time the higher speeds sound slower.

So, my suggestion for learning how to copy behind is to try this. Tune in some one who is going slower than your maximum speed, try to copy him and write your name in between every word he sends. This gets a little rough if he sends lots of short words, but at least you can get it in between the longer words. Then, after doing this for some time, try to copy someone at your normal speed, and deliberately stay 2 or 3 letters behind at all times. It's easier than it sounds.

To really enjoy working cw, I feel one must learn to copy code in his head. For some reason, this was very easy for me to learn, but it is most difficult for most people. There is no way that I have figured out how to tell someone how to do this. It just takes practice. You must be able to hear the code in words, and not simply letters, and retain the words to form a sentence.

Once again, this takes practice. My suggestion would be to tune around, find someone who is going slower than you are able to copy and listen to him without writing anything down. Practice, practice and do more practicing. Continue doing this and gradually listen to higher speeds. Don't worry about getting all he sends, get as much as you can.

## OKLAHOMA CITY AUTOPATCH ASSOCIATION, INC.



By doing this and with some practice, it is actually possible to know what a station is going to send before he actually sends it. The following is part of a typical QSO: Ok, OM, tnx fer the call. UR RST is 579 hr in Cleveland, Ohio es my name is John. My rig is a Drake TR-7 running 150 watts es my antenna is an inverted vee. WX hr is cldy es snowing.

To break down the information that he sent, all you would want to write down is your signal report, his name and QTH. The rest of the information is surplus, and you can actually tell what he is going to say before he sents it. Let's say you are copying the text. He sends his QTH as Cleveland. How many towns can you think of that start with Cle? Once you hear the letters "Cle", 99% of the time, it will be Cleveland. He starts to send his name. By the time "Jo" comes across, you know his name is normally limited to either John, Joe, Johnny, etc. You hear the word "Rig", so you know he is going to tell you what he is running. Normally you could care less if he is running a TR-7, TR-4, TR-3 or whatever, but once you hear "Dr", you know it's going to be a Drake of some kind. You hear the word antenna and then the letters "inv" come across. What could it be but an inverted vee? When "wx" comes across and you hear "cl", it's either going to be clear or cloudy and "sn" would indicate that it is snowing in Cleveland. So, out of all the information he sent, all you have to copy is: 579, Cleveland, John, Drake, inverted vee, cloudy and snow. By getting the first two or three letters of each of these words, you know what he is going to send before he actually sends them. While he is sending all the fill-in you can be day-dreaming.

I find operating cw to be most relaxing. To me, it is very enjoyable to be able to sit down and talk to someone for a period of time and never have to open your mouth. It's just like anything else though, it takes two things on one's part to be halfway good. Those two things are desire and practice. If you don't desire to build your speed up, you will never do it. To do it, you need to practice.

As I have said before, a kid can push a mike button in and talk.

I HEARD: CXW has a brand new grand-daughter......PZW has at least one gripe a day......TKG's smart aleck remarks are not always taken the way he intends them...........CZN telling some what.......BEP checking a Tulsa repeater into the Night Owl Net..........FKF has phased Ringo Rangers on his mobile for two-yea roger.....FRQ has a new twist to his beam......TKG wishes his vocabulary was better......OHK makes a real all government problems......FXP got a nasty letter from the internal revenue to interrupt his QSO by phoning him......BEQ catching up on his sewing during doctor......AUE making plans for a trip now that he is the new treasurer for that the Night Owl Net is not the old six meter net..........CZN has expanded his frequency coverage .........DDE and uh ............MB complaining about the donut situation......FRQ is now an Extra Class - he can answer all of those stupid questions CZN has.....and a whole lot more. K5NK

FOR SALE: Good as new 25" color TV with remote control, Early American cabinet. See to appreciate. \$200.00. Also home entertainment center with 25" RCA color TV. Beautiful and plays swell. Ray, WB5BTT, 732-6498.

CLUB NUMBERS: (1) Aeronautical Center. (2) Okla. Central. (3) MORI. (4) Autopatch. (5) OU. (6) Altus. (7) 76'ers. (8) Paid subscribers.

<sup>(9)</sup> Wheatstraw. (10) Choctaw. (11) Edmond SOCIETY (12) Shawnee.

<sup>(13)</sup> Kay County (14 ATVS (15) SCARS (16) Edmond CLUB (17) Tri-City.



### AMATEUR RADIO ASSOCIATION

MEETS: .7:30 PM 2nd Thursday each month
North Main Fire Station [CD]
PRES Steve Norris W5KI
V-P
SEC/TR Mike Schenkle W5VXU

SEC/TR Mike Schenkle W5VXU CLUB EDITOR Mike Schenkle, W5VXU

The regular monthly meeting of the Altus Area Amateur Radio Association was called to order by President Steve, W5KI, at 7.30PM, Thursday, September 13.

The financial report showed a balance of just over \$250.00 available.

Among the many items opened for discussion was a rehash of the possibility of the Club obtaining some sort of mobile or portable communications center and those members present were urged to keep this idea in mind.

Plans were finalized for the annual AAARA cookout to take place at the first pavilion at the Quartz Mountain State Park on October 13 from 10.00AM to 2.00PM. The Club will supply soft drinks, hamburgers and hotdogs and everyone planning to attend should bring their own salads, beans or what have you.

The Emergency Coordinator, Dwight, WB5KRH, advised everyone that there would be a Section Emergency Test sometime in October, so everyone be ready for this.

The remainder of the program was the showing of two films supplied by Ma Bell, the first one about solar batteries and the second about early lasers.

The meeting was then adjourned and everyone had a chance to bite into some of the goodies along with their coffee.

FOR SALE: Collins 75A-4 Receiver, SN 2584. Filters: 6.0, 3.1, 0.8; with Collins Speaker. Price: \$350.00. Contact Steve Norris, W5KI, 3508 Trail Drive, Altus, OK, PH: 405-482-4815.

FOR SALE: Heathkit SW-717 Receiver with manual. Could be usefull for Shortwave listener or beginning amateur. What do you offer? Contact Mike, W5VXU, 1211 S-Main, Altus, OK., PH: 405-482-1797.

It's just before noon on a Sunday as I am tuning across the 10 meter band. A station coming in 599 is calling CQ CQ CQ DE VEIBNN VEIBNN VEIBNN. I answer with a quick 3X3 and he comes back to me. It is Reg from Halifax, Nova Scotia giving me an RST of 599. He wishes me good DX and signs 73. Sounds like an ordinary QSO, right? It is with the exception of one thing: QRP.

What is QRP? Well, for those of you who are not familiar with it, QRP is operating with low power, 100 watts or less. And then there is QRPp - operating with 5 watts or less. I have been on the air for about a year and a half with a 5 watt rig and have received hundreds of good signal reports. The results of QRP operation can be very surprising.

About an hour later on Sunday I hear KP4X calling CQ. I answer with KP4X KP4X KP4X DE WD5IRL QRP WD5IRL QRP WD5IRL K. It is Roland in Ramey, Puerto Rico. He gives me a 579 signal report. Although the band conditions have not changed very much, my signal is not as good this time. The reason is because the signal path from my QTH is not as good to the south as it is to the northeast and northwest.

My rig is the Argonaut 509 by Ten-Tec. It has 5 watts input, and the Dentron meter shows an average of about 1.5 to 2 watts output. I have an old CB beam for my 10 meter antenna. So far I have been able to work 43 states including Hawaii and Alaska, and 14 DX countries. The most distant station I have worked is ZE1FR/N in Rhodesia. Thats not bad for QRPp, unless you compare it with someone like Louis, WD5GLO. From his QTH in Minco Louis has WAS QRP and 82 countries using his Argonaut 509.(Louis, by the way, is such an antenna expert that all he has to do is look at a piece of antenna wire and it becomes resonant.)

If you want to hear QRP in action, tune in to the QRP QSO Party. It starts at 2000Z on Saturday Oct. 6, and ends at 0200Z Sunday Oct. 7, 1979. Calling frequencies will be 60 Khz from the bottom of the CW bands, 85 Khz from the bottom of the SSB bands, and 10 Khz from the bottom of the novice bands. Try QRP operating sometime, you may be suprised.

Dee WD5IRL

## R i R

#### THE AMERICAN RADIO RELAY LEAGUE, INC.

OFFICE OF THE

#### SECTION COMMUNICATIONS MANAGER



LEONARD HOLLAR WASFSN

I HARDLY KNOW HOW TO START THIS OFF. IN THE LIGHT OF RECENT DEVELOPMENTS HERE IN OKLAHOMA. I CANNOT PUT A FINGER ON ANYONE, BUT FROM WHERE I SIT, I SEE A DECADENCE IN A.R.E.S. ACTIVITIES IN OKLAHOMA. WHY?? WHOSE FAULT IS IT?? WE HAVE LOST 2 E.C.'S THIS MONTH. BOTH GAVE THE SAME REASON; "NO COOPERATION FROM --- BLANK--- COUNTY AMATEURS".

I HAVE JUST RETURNED FROM THE DIVISION CONVENTION AT HOUSTON, WHERE EMERGENCY OPERATING WAS VERY THOROUGHLY DISCUSSED, PARTICULARLY, IN VIEW OF THE ACTIVITIES AT WICHITA FALLS AND LAWTON LAST SPRING, ONE OF THE PRINCIPLE ITEMS BROUGHT OUT WAS THE DEFINITE NEED FOR A PLAN OF ACTION, PLENTY OF PEOPLE TRAINED TO CARRY OUT THE PLANS AND THE KNOWLEDGE OF NET ORGANIZATION, OPERATION AND TRAFFIC HANDLING. ALL OF THE OKLAHOMA TRAFFIC NETS ARE BADLY IN NEED OF HELP. THERE IS MORE TRAFFIC BEING HANDLED NOW TO MORE TOWNS IN OKLAHOMA THAN I HAVE EVER SEEN BEFORE, WHY NOT PITCH IN AND HELP.

THE LONG RANGE PLANNING COMMITTEE OF THE LEAGUE HAS ASKED SOME VERY LEADING QUESTIONS. I WILL NOT GO INTO ALL OF THEM AT THIS TIME: BUT ONE IS; "ARE WE SATISFIED WITH THE PUBLIC IMAGE OF AMATEUR RADIO AND CAN YOU SUGGEST STEPS FOR FURTHER IMPROVEMENT? THERE IS INCREASING CONCERN ABOUT SOME OF THE LANGUAGE BEING USED ON THE AIR. EVERYTHING CAN BE HEARD FROM 'CB JARGON' TO RAW PROFANITY. EFFORTS ARE BEING MADE TO CLEAR UP THE PROFANITY, BUT NORE HELP IS NEEDED. I FEEL THAT THE INSTRUCTORS OF OUR CLASSES CAN HELP IN MUCH OF THIS. A LITTLE TIME SPENT ON OPERATING PROCEDURES WILL HELP MUCH. PLUS THE REST OF US SETTING A GOOD EXAMPLE. FULL PARTICIPATION IN A.R.E.S ACTIVITIES IN YOUR AREA AND IN THE TRAFFIC NETS WILL HELP IMPROVE OUR IMAGE. WHY NOT PUT YOUR BEST FOOT FORWARD AND GET INVOLVED.

THERE IS MUCH MORE THAT CAN BE DONE ALONG THESE LINES. ANOTHER IS THE EXPEDITING AND IMPLEMENTING OF "OPERATION SKYWARN", WHICH I HOPE CAN BE DONE BY JANUARY 1ST. THIS IS A STATEWIDE PROGRAM IN WHICH ALL CF US CAN AND SHOULD PARTICIPATE. SOME PAPER WORK HAS BEEN DONE, BUT FREQUENCIES AND OPERATING CONTROLS MUST BE SET UP AS SOON AS POSSIBLE. THE PROPER OPERATION OF SKYWARN AND THE DIRECT TIE IN TO THE WEATHER BUREARS IN OKLAHOMA CITY AND TULSA, WILL BE OF THE UTMOST BENEFIT TO THE AMATEURS OF OKLAHOMA.

I AM OPEN TO, AND WELCOME YOUR COMMENTS. LET ME HEAR FROM YOU.

Concert tollar

A letter of agreement between the National Weather Service and the ARRL has been signed officially stating what we have been doing for years in the Tulsa area. This will serve as a keystone to the organization of "SKYWARN SPOTTER" nets in other areas under the combined auspices of the National Weather Service and ARRL. (Tulsa TRO Signal)

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#### CHOCTAW ARC

unity Baptist Church, SE 29 & Choctaw.
PRES Frank Carter AB5H 391-3394
V-P Gary Chambers WB5WHF390-8250
Sec/TR R. G. Edwards KA5AL0390-8297

MEETS: 7:30 PM 2nd Monday. Woods Comm-

CLUB EDITOR R. G. Edwards

Just a word of reminder that Choctaw ARC is now holding meetings the 2nd Monday of each month at 7:30 PM at Woods Community Baptist Church, located at SE 29th and Choctaw Road.

This change is brought about by many members attending schools of one sort or the other on other nights.

Heard some bad news early this morning, of the passing of Pastor & Mrs. Douglas. This mans Christian activities has touched the lives of innumerable people much further away than Choctaw, and he has brought peace to the lives of many of us by his virtue of faith, and sound biblical teachings. His works will long be remembered and his faith an example for us all, until we meet again.

Jack, WD5HNO, has recently had some foot surgery but is starting to get around pretty good now. He has been working a little CW to get that General ticket soon. I worked him once on 40 CW and can tell you it shouldn't be too long.

Been hearing a lot on the air recently about certain individuals that don't seem to be identifying some repeaters properly, especially on the phone patch. Also been hearing some individuals that are trying to help others do it right -- most of them are real nice -- but there seems to be a few helpful grouches that don't seem to be very nice!!! Correct me if I am wrong, but my license manual says, and I quote "when identifying by radiotelegraphy, a station in repeater operation shall transmit the fraction bar DN followed by the letters "RPT" or "R" at the end of the station call sign." This is 97.84, Dl-- If this has been changed then delete this from your memory bank (Hi), but if this is still law, then before we start getting after amateurs for some questionable violations, wouldn't it be proper to correct the ID'ers on repeaters for some definite violations?

Also heard on a repeater was one phone patch of an order for some food -- You know, a "call in order"--all in a certain non-English language, except of course for access and sign off.

Choctaw ARC has survived for almost a year now, and is now starting to grow. I've been told that the first year is the "go or no-go"year I don't know about that, but I do know that with leaders and members like Frank, Gary, Al and ..... the list goes on, tou can't possibly go wrong -- Also, with the experiences of other CORA member clubs as a source of information and advice, it's quite hard to fail. Bad advice is not often given. Now, if you think this is a plug for Choctaw ARC and CORA, you're absolutely correct. From my point of view, as a club, Choctaw is it. As for CORA, it has to be the very best thing to happen for Amateur Radio in Oklahoma for many years. I really don't think we could boats of the many ham happenings here, without CORA and its component parts.

Now for the DX scene!! Been hearing of some hams that would like to communicate -- an arrow at a deer -- without skip. From my own experience (8 years Bow Hunting), the deer soom to be very safe!!!

D. L. and Mike have been working a lot on the repeater lately. Seems like every time they do, it gets better. Keep up the good work.

Seems loke Jim, WD5ITV, has a YF, Linda, that is working on the code and theory--maybe a harmonic too! He's been working on a SB-104A also, and I think he's trying to pull some hair act.

Just got a 509 Argonaut so I could talk with my yap instead (Cont.)

#### CHOCTAW ARC CONTINUED

of CW. Made 8 phone QSO's and about 30 CW QSO's -- now that's getting into phone in a big way. Got room for me Chuck?? My YF, Sue, has been learning CW also, and she says it's -een driving her somewhere--bananas, I think she said: However she's been talking H.T. lately, so I guess that proves the old axiom "if you can't beat 'em, koin them." Isn't love grand?

Bob, KA5EOS, who got his Novice, who got his Tech, who got his General--well, he's sure been working that 101 & 2036A. Wonder what's next, Advance or Extra//

Well, now that we've dealt with all the facts, shall we start in on the gossip?----Think Frank is trying to drum up a "shut me up" campaign, so I'll just say 73 for now Rick, KA5ALO

FOR SALE: Wilson Mark II, w/touchtone pad, leather case, desk charger, spare battery pack. 52/52, 22/82, 34/94, 07/67, 25/85, 28/88 xtals. All for \$299.00. -- Hammarlund SP-600 receiver w/speaker. Excellent CW coverage from 540 kHz to 54 mHz. \$150.00. Ray, N5AUB, 341-6123.

FOR SALE: Drake T4X xmtr and AC4 power supply, \$350.00. Misc. accessory & test equipment. Gary, WBØRIS, 364-4976 (Norman).



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November 1979

CORA Collector & Emitter

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MEETS: 8:00 pm First Friday each month
Flight Standards bldg, FAA Aero Center
PRES Bob Pace WA5CJG 376-3569
V-P Bill Oliver K5KDR 329-6333
SEC Bob Graham WB5NSV 677-8685

#### Club Editor, Bob Graham, WB5NSV RANDOM WORDS FROM THE PRESIDENT:

Wehad a nice turn out at our oct. meeting ,although there were a number of our regulars missing. One of our regulars did have a good reason for not bening here, you might say it was doctors orders, as most of you know Bob Ashby, W5HXL had a small problem with the old ticker, but as the old saying goes you can't keep a good Ham down, Bob is back in the ranks and we sure hope to see him back at our November meeting, if the Doctor will let him...

Now we need to go on to a new subject which is really a very important matter. The thing we need to think about is programs, programs. What programs would like to see brought to your club? Do you want to see more technicial or more general programs? While you are thinking about this, try to come up with somebody or a group of somebody's that can put on the program Now write it down before you forget it, and bring it with you to the next club meeting because I need some help setting up some programs.....

Now on to the next subject of importance, and that is the C &E. I am sure all of you know the cost of words you are reading keeps goning up and up. (not the price I charge to write cause my price is cheap, of course my writting isn't to good either or my spelling.). The cost I am talking about is the printing and mailing cost, and there doesn't seem to be any end to it either, I know everybody hates a price increase, but thats what it's goning to take if you want to keep reading the C & E. I know some of you will say let's find a Ham to print the C & E for us and keep the cost down, if you say this to yourself, put yourself in that guy's shoes and try to stay in business, it just don't work!!!!!!!! Let's support the C & E with what it takes to make it the best Amateur Magazine produced in the centeral United States. We also need your words to print soooo write muu for the C & E.

The next subject I would like discuss this month is repeaters and auto patches. Every group that owns a repeater likes to think their's is one of the best, well we are no different, andwe feel like ours works very good for it's height. The repeater is located near the corner of N. W. 23<sup>nd</sup> and Rockwell. The antenna is about 150 ft high. We run 50 watts into a db 224 ant. through a db products 6 cavity duplexer. The antenna pattern is to the southeast and has a 9 db lobe in that direction. The reciever sens. is .5 microvolts for 15 db quiting (when the noise is not with us). Our auto patch works good too as long as you use it in the right way i.e. WR5AVM this is (your call), then push the star for a minium of .5 seconds, now drop your transmitter and listen for the dial tone, if you get the dial tone, then dial your number but don't hold each number you dial to long because if your transmitted signal should break while you are holding down that number the tel. co. will see it as two of the same numbers, and the number you reach will not be the one you wante'd. To disconect the patch push the # for .5 seconds, then ident like you did to start the call. If you try to bring up the patch and it doesn't work, there are three things that could be keeping it from comming up, one is a control signal present on the control chanel, another is that you are tooooo weak into the system the last is that the auto patch is disabled . Use it but don't abuse it, or you will lose itttttt....

Here are some more famous words "ASK NOT WHAT YOUR CLUB CAN DO FOR YOU, WHAT CAN YOU DO TO MAKE YOUR CLUB A BETTER CLUB." get envolved and do something, don't just sit on your DUFF...

73, Bob Pace, WA5CJG.



#### MINUTES OF THE OCTOBER MEETING OF THE ACARC

The october meeting was called to order at 8:02 PM by President Bob Pace, WA5CJG. There were only 24 members and guests present. Bob told the members present of Bob Ashby's (W5HXL) hospital confinement, and said at that time that he should be home the following day. Bob also said that the Aeronautical Center Amateur Radio Club had sent him flowers with our best wishes. Get well soon Bob.

Following the usual round of self-introductions, President Pace made a series of announcements as mentioned below.

The Texoma Ham-O-Rama will be the weekend of the 25th of October. Hope to see everyone there.

It was announced that the Simulated Emergency Test scheduled by the A.R.R.L. has been moved to October 13 and 14 for this area. It was mentioned that this would confllict with the OU vs Texas football game. (If we had only known then what we know now.)

C.Y. Chandler asked about the possible illegal use of 146.52 MHz by one of the exhibitors at the State Fair. It appeared that some illegal activity had occured, but details were sketchy.

George Lagaly, W5NTL, gave the CORA report, as well as the station report. He reported that the club station doublett antenna had finally been repaired and is working fine.

Yours truely then gave both the computer report, and the report on our classes being held at the Red Cross. Both are doing very well.'

President Pace then asked for help with the Ham Holiday '80 ladies programs, and for suggestions for our annual Christmas Dinner plans. Anyone who can help or who has any suggestions should contact Bob Pace, WA5CJG.

Bob then asked Ivan Miller, Fred Taylor, and Jerry Wetmore to form a nominating committee for the position of Associate Assistant to the President. This nomination to be voted on in our regular election in January.

Tom Stinson, W50ZE, reported that the Collector and Emitter is now on "Talking Books." Tom was elated, and asked that anyone who might volunteer to read the C&E on tape for this purpose to please contact nim.

The program for the evening was presented by our own BobPace, who gave an extremely interesting talk on microstrip lines and UHF and above conversions. This was an excellent program, and I for one learned much from it. Thanks Bob for an excellent job.

The meeting adjorned at 9:45 PM for coffee and donuts.

Bob Graham, WB5NSV

ARX 450 Cushcraft vertical antennà (especially for ATV), was \$36.95 plus tax, retail, will take \$35.00 / Hutch, K5SUD, 677-5272 eves.

FOR SALE: Kenwood TS820S w/SP820 speaker, RC50 Mic. Mint condition. \$999.00. - Heathkit SB200 linear-80-10, mint condition. \$265.00. Chas., WB5UUX, 321-1061.

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#### AMATEUR RADIO OPERATING MANUAL

When the Radio Society of Great Britain publishes a manual, you may be assured it's a good one. Here's one authored by G4FTJ, R.J. Eckersely, which tells the whole story. Regardless of which of the many facets of Amateur Radio centers your interest, you'll find detailed descriptions of what it'll do, what it'll take to do just that, and how you go about extracting the maximum benefit of the operation. Sound stuffy? Don't be deceived! It's downright interesting.

It takes talent to combine instruction with interest, and G4FTJ has that talent!

Chapter headings are the lazy man's way out for quick and dirty reviews, but they do give a prospective reader a feel for whether he should dig a wee bit deeper into the book's content. How do these grab your interest?

The Amateur Radio Service

Setting up a Station

Operating Practices and Procedures

DX

Contests

Mobile, Portable, and Repeaters

RTTY

Slow-Scan Television

Special Event Stations

Appendices: Continental and Regional Maps, International Callsign Series Holders, Callsign List, Country List, Worldwide Legal Time

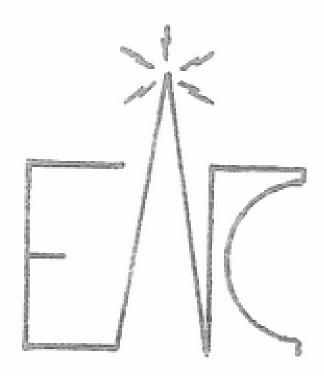
These headings are the barebones. It's what clothes those bones that counts. And that's the area in which G4FTJ really gets to it! Without reading the book, you'll never believe the detail with which each subject is treated! Every little thing that's related to the main subject gets revealed and aired thoroughly.....and I'll bet a number of these will amaze you. It's like a Field Day. You think you know everything you'll need, and you provide for these. Then you get into operation at the Field Day site and discover there're dozens of significant items you never thought of!

I could take pages and pages just telling you of these details. But I'm not going to do it.....remember, I told you giving chapter headings is a lazy man's cop-out; so don't expect any change of heart. There's just one way for you to find the answers: Contact Ham Radio's Bookstore and ask the price in the country. It costs 4.20 pounds in Great Britain, and only the Good Lord may know the current rate of exchange between the pound and the dollar. Let Ham Radio's Bookstore worry about that. You just worry about getting your hands on the best Amateur Radio Operating Manual floating about.

Yes, some aspects relate to operation in the United Kingdom, but a very high percentage of the information given is directly applicable to Amateur Radio operation in this country. And that is better than you'll find elsewhere, regardless of price or source.

W5JJ

American Radio Relay League Bulletin from WlAW, Newington, Connecticut, October 17, 1979. To All Radio Amateurs: The Federal Communications Commission has given its staff the go-ahead to prepare rules authorizing the use of the American Standard Code for Information Interchange, ASCII, by amateur radio operators. This is an important step in the regulatory process, but amateurs may not use ASCII until the rules are actually written. That may be several months away, but WlAW will report the news as soon as it happens. (WB5TKG)



The EDMOND AMATEUR RADIO CLUB returns to the Collector and Emitter this month after being voted into the CORA Association at the September meeting. EARC was a CORA member several years ago and dropped out, however, the club voted to join again at the meeting held on May 7, 1979.

EARC was organized in December 1975 and currently has 40 active members with 6 additional members licensed as wives or other family amateurs. The Club maintains two active repeaters in the OKC metro-area, both having excellant coverage. The primary repeater, 147.63/03 Mhz, has an autopatch for members use. Club meetings are held on the First Monday of every month with a business meeting on every odd numbered month and a social activity ( such as a picnic or dinner ) on every even numbered month.

Club Officers: President-Bob Shaw WA5BQX
Vice-President-Wendell Cochran WB5ISO
Sec./Treas.-Stan Van Nort WB5UIY
Trustee-Dennis Orcutt WB5ISN

Minutes of Business Meeting 9/10/79 (Summary)
Meeting commenced at 7:45pm at General Electric Co.
Sec./Treas. was unable to attend because of employment. Motion
by Ray March and Preston George to pass the minutes &
financial report.
There was a lenghty discussion next on the usage of the
63/03 machine and possible unauthorized use of the autopatch. The President was going to make final disposition
on the matter. A motion to PL was made and dropped.
In other business a resolution was made by Pres. Bob Shaw
to make a change in the club by-laws in reference to
new members. Action pending.

Ray March and Deeds Bigelow made the motion to adjourn at 9pm.
Minutes by Vice-President Wendell Cochran

Social Activity 10/1/79

A spaghetti dinner was held at Bob Shaw's house which was put together by his wife Beverly. There was an outstanding turn-out and everyone agreed Beverly can whup-up some great spaghetti and fixins. The dinner was greatly enjoyed, especially by Howard T. who after his 6 plate had to rolled home. Afterwards Bob demonstrated his Oscar Satellite set-up, TRS-80 computer, and for those that couldn't move, his Big Screen color TV. Overall it was one of better dinners and a great big THANKS to Beverly and the other ladies that helped put it together.

NEXT MEETING-NOVEMBER 5, 1979, 7:30 PM at the General Electric Co., 3228 N. Sante Fe



## THE ZANY NEWS FREQUENCY

By JOE, WASZNF

1020 FEVER AND EDITING C&E DON'T MIX\_\_\_or so I found out last month. Three days of fever and associated problems messed up my thinking and seeing last month as we put the October C&E together, so, I want to apologize to all those who worked to produce a "silk purse" and ended up with a "sow's ear" in the form of a couple of pages out of sequence and eight pages that didn"t reproduce well enough to be read. The continuation page could be figured out and I took the 8 bad pages down to the shop I used to work in and re-photographed them, made plates and run them over on PINK paper, so if you want to know what you missed here it is again. Deadlines with illness won't be an excuse any more so it just won't happen again even if it has to be re printed.

THE ABOVE BRINGS UP ANOTHER POINT -- mainly of interest to the various club editors and contributors. Use a BLACK ribbon in your typewriter. Washed out typing apparently can't be reproduced by the printer. If you can't come up with good black copy, get your copy to me a week before edit night and I will get it prepared.

Hopefully, a new printer for the ACARC computer can be obtained and in operation in a couple of months (right now we are getting close) and all copy will be prepared on it and publication quality type will be used for all pages.

C O R A STARTS A NEW YEAR, WITH NEW OFFICERS -- It will be covered elsewhere but I want to make a comment about the swell job done by last years officers and ask each club to carefully appoint three representatives to help the new officers in their efforts to guide CORA to accomplishing its mission. Four elected officers can't do the job all bu themselves - - every club, even those several miles away should have input EVERY MONTH, by having all three representatives at the meeting or by corresponding with the president to let him know what your club thinks about how to make CORA and amateur radio in general bigger and better. If it helps amateur radio let's push to make it go, if it will hurt -- squash it.

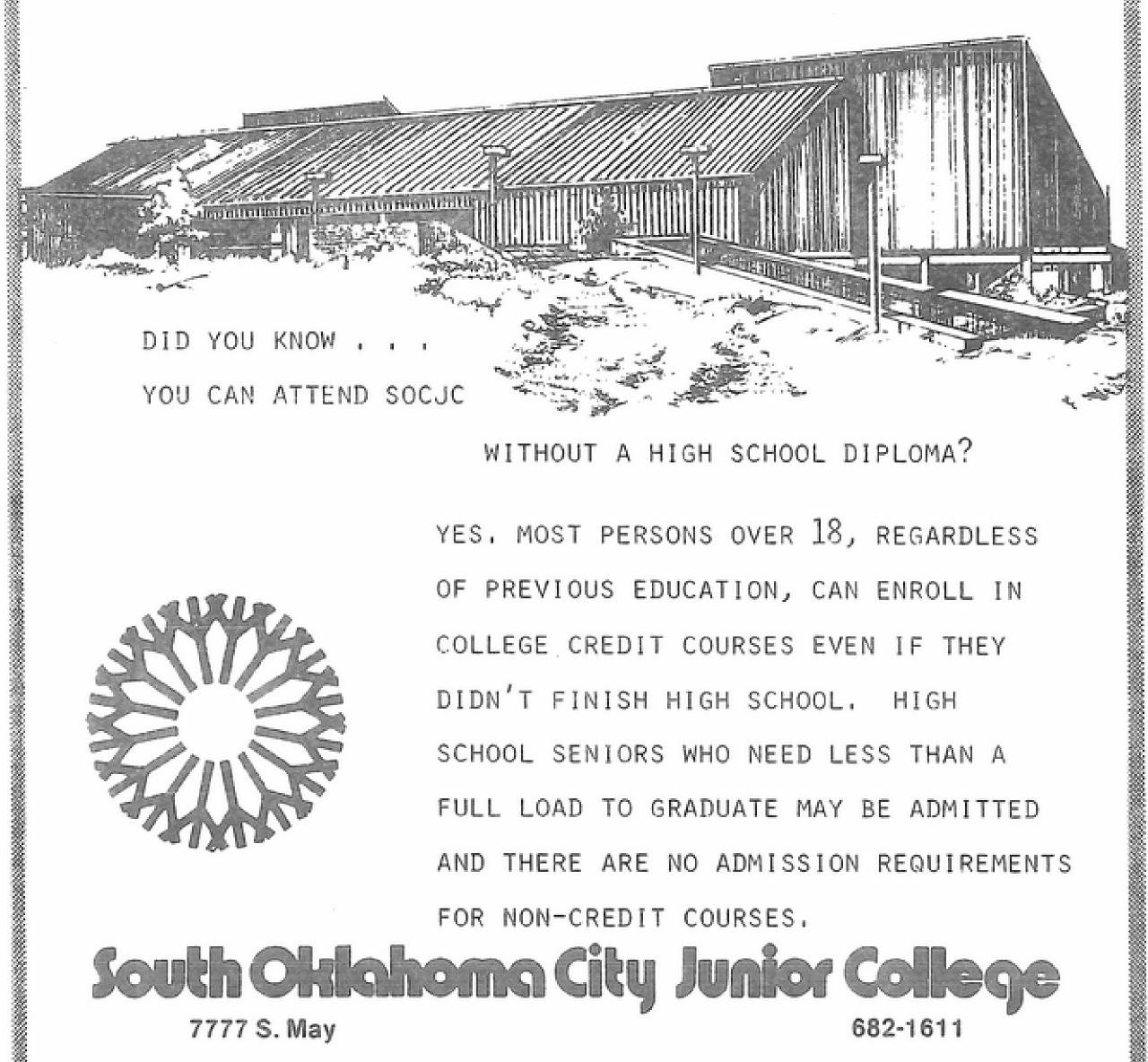
I SPEND MORE FOR GASOLINE TO ATTEND ONE MEETING of the Aeronautical Center or Bi-Centenial clubs than a years dues cost me. That seems silly when I live in Midwest City as do 58 other amateurs and a dozen cars make that trip each month with one or maybe two people in them. The same holds true of many areas of Oklahoma City, then there is Moore with 38 hams, Norman with 69, etc.

I haven"t taken the time to work out the details but a system of car pooling should be worked out to not only save energy but "bucks" that could be spent on gear or goodies. Let's hear your ideas of how it can be worked. It would increase meeting attendance and maybe call for a few more doughnuts or coffee but the more that attend meetings the more results will be obtained in promoting that activity.

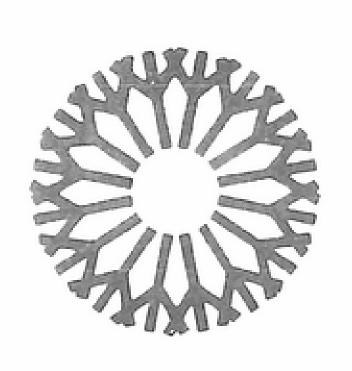
WANT TO KNOW HOW TO READ YOUR ADDRESS LABEL? The line at the top of the label shows what club(s) you belong to - according to my records - ie.; 077910 168001 means you are paid up in (07) 76'ers until the October 1979 issue of C&E and in the Edmond ARC (16) until the January 1980 issue. When you are delinquent in your dues your call sign will be replaced by a string of X's (XXXXXX) and unless you get in touch with your club dues taker the computer will drop your name out when labels are printed next month.

See individual club sections for times, places & details.

266							
N O	VEMBE	ER HAM HAPPENINGS					
Sunday Monday		Tuesday	Wednesday	Thursday	Friday ACARC meets	Saturday	
				1	2	3	
WHEAT- STRAW				ALTUS		-	
4	5 MARS	6	7	8	9	10	
Veterans'	CHOCTAW	76'ers SHAWNEE		KAY COUNTY	OKLAHOMA CENTRAL	SCARS	
Day 11	12	13 O.U.	14	15	16 (VHF)	17	
EARS		OCAPA	EDIT C&E at Red Cross	GIVE THANKS			
18	19	20	21	22	23	24	
25	26	CORA Meets SHAWNEE 27	MORI mails C&E at Red Cross	29	3()		



WITHOUT A HIGH SCHOOL DIPLOMA?



YES. MOST PERSONS OVER 18, REGARDLESS OF PREVIOUS EDUCATION, CAN ENROLL IN COLLEGE CREDIT COURSES EVEN IF THEY DIDN'T FINISH HIGH SCHOOL. HIGH SCHOOL SENIORS WHO NEED LESS THAN A FULL LOAD TO GRADUATE MAY BE ADMITTED AND THERE ARE NO ADMISSION REQUIREMENTS FOR NON-CREDIT COURSES.

## South Oklahoma City Junior College

7777 S. May

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