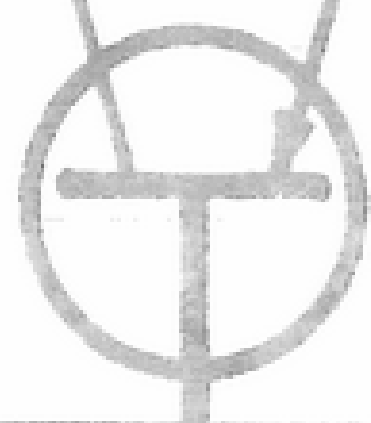


Central Oklahoma Radio Amateurs

COLLECTOR AND EMITTER

SINGLE COPY

25¢



AN INFORMATIVE MAGAZINE
PUBLISHED MONTHLY BY AND
FOR OKLAHOMA RADIO
AMATEURS

AND ANYONE INTERESTED IN
LEARNING ABOUT IT

Volume 3

DECEMBER 1977

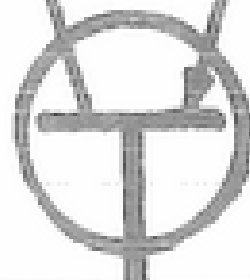
Number 35



BILL ROGERS, WA5RAQ. View of Bill's compact station, with Bill trying to look pretty. (That ain't easy). A Heath HW-17A (2 meter FM) is on the top shelf, left. Two of the add-on's are visible. Next is a Heath HW-12A. On the right are two power switching panels where the whole thing may be turned off. Middle row is a monitor 'scope and speaker panel. An SB-102 is on the table. A fan directly behind the speaker panel blows hot air (from SB-102) out the back. A panel closes the back of the speaker box. It slopes from bottom-front to top-back to help that hot air get out. The metal panel across the top is a lamp shade and a ground plane for a 2 meter quarter wave whip. A picture frame on the wall contains emergency and often-used phone numbers. Another frame has the weather chart. Area amateur activities for the month are noted on the calender. The microphone for the HF rigs swings out on an aluminum angle bar. Various switch boxes complete the station. Bill is editor of the MORI section and has been elected MORI vice president for 1978.

Central Oklahoma Radio Amateurs

COLLECTOR AND EMITTER



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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	Bob Ashby	W5HXL	942-5375
Vice President	Frank Arnold	W5PDH	737-2582
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Secretary	Zack Zackery	WB5QTI	

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OUARC PAUL THOMPSON	WB5EEY	321-6265	HAM DEANNA McENDREE	WB5UMH	482-677
BIARC EDIE DAY	WB5YHG	691-1194			

PARTICIPATING CLUBS FOR CORA COLLECTOR & EMITTER:

AERONAUTICAL CENTER AMATEUR RADIO CLUB
Poatal Station 18, Okla City OK 73169
MEETS: 8:00 PM First Friday each month
Flight Standards Bldg, FAA Aero Center

Pres	Bill Hulse	W5NI	376-2125
Assist	Lloyd Kirk	WB5HUP	685-6566
V-P	Vacant		
Sec/Tr	Robert Runyon	W5JES	373-1818

MID-OKLAHOMA REPEATOR
MEETS: 8:00 PM Tuesday, first full week
in month. Okla City EOC, 4600 N Eastern

Pres	John Huckaby	K5QDR	672-4706
V-P	Bill Rogers	WA5RAQ	632-4375
Sec/Tr	Richard Zanni	WB6FYL	691-1809
Dues: Sid Gerber, 829 E Bouse, MWC 73110			

OKLAHOMA UNIVERSITY AMATEUR RADIO CLUB
202 W Boyd, Room 219, Norman OK 73069
MEETS: 1st & 3rd Wednesday, 8:00 PM
STUDENT UNION, Room 161

Pres	Kenny Hutchison	WB5RXZ
V-P	Kirk Kirkland	WB5MJM
Sec	Nathan Kirby	WD5GWG
Treas	Mike Salem	WA5EPK

BICENTENNIAL AMATEUR RADIO CLUB
MEETS: 3rd Tuesday each month 7:00 PM
AIR National Guard, Will Rogers Airport

Pres	Ken Burdick	K5AUB	681-0281
V-P	Dick Baker	WB5TMW	685-2867
Sec	Mark Northcutt	WD5DYI	842-1086
Treas	Joe Ramage	WB5TDW	685-4814
Activities	Bill Riddles, WA5MZW		

OKLAHOMA CENTRAL AMATEUR RADIO CLUB
323 NW 10th, Okla City OK 73103
MEETS: 8:00 PM third Friday each month
American Red Cross Bldg, 10th & Hudson

Pres	T. Van Woody	W5FMX	942-2831
V-P	Ken Ford	WB5KHU	528-8770
Sec	Joe Buswell	WA5TRS	732-0676
Treas	Ellard Foster	W5KE	789-6702

OKLAHOMA CITY AUTOPATCH ASSOCIATION
MEETS: 7:30 PM 3rd Tuesday, Bi-Monthly
Oklahoma Military Academy 36th & Grand

Pres	Jim Denman	WB5OEL	681-6048
V-P	Joe Hustak	WA5ZNQ	789-8587
Sec/Tr	Hobe Burgan	WB5MLN	751-1646

CENTRAL OKLAHOMA RADIO AMATEURS,
MEETS: 7:30 PM, fourth Friday.
Red Cross Bldg., 10th & Hudson.
Come to the alley entrance.

ALTUS HAM CLUB
MEETS 7:30 PM, 2nd Thursday,
North Main Fire Station (CD)

Pres	Loren Simms	WA5CBF
Sec/Tr	Deanna McEndree	WB5UMH





NOTABLE ISSUES FROM THE PRESIDENT

We had a very good turn-out for the November meeting to listen to Bob Pace give an excellent program on making printed circuit boards. Thanks, Bob, for a super program!

The December meeting will be held at Val Cenes cafeteria in Penn Square. The time will be 7:00 o'clock PM. We will have a short business meeting, but no formal program. There will be a drawing for some door prizes. Every item will be worth more than the price of your meal, so you have a chance to get your meal free. Come on out and enjoy the social. Don't forget to send in the preregistration slip in last months Collector and Emitter so you can be eligible to win one of the prizes. All the prizes will be awared to those who are there when the drawing is being done.

Be thinking about the January meeting, when we will elect officers. If you have anyone in mind, come out and nominate from the floor. Remember, voting here, as in any other election, is a privilege, and if you are not there to express your vote, you have no gripe as to how the club is administered. Please be there, and use your American right to vote.

I listen to 2 meters as I drive to and from Edmond several times a week, and I have noticed several times that there is more and more questionable language and profanity being spouted by the lower class hams (here, class does not refer to the grade of license). Remember, this questionable procedure, such as Cb jargon, Q signals, and phrases with obviously vulgar secondary slang meanings, etc., should be omitted from the airwaves. And I once asked the FCC what the acceptable level of profanity was, when I was an official observer, and the answer was "zero". It is the individuals responsibility to keep his transmissions clean and neat, so be an Amateur of Radio, not a gutter ham.

I was pleased to receive a report from the FCC about the 220 MHz CB proposal being shelved, as a response to some letters I wrote to my Congressmen, and now another from the ARRL to say the proposal had been dropped. It shows that writing a Congressman does help, and supporting your league also has a tremendous value to the fraternity of Amateur Radio.

Thats all from the soap-box, hope to see all of you at the December meeting.

73,
Bill, W5NI

BILL, WD5YDM



(October meeting minutes continued)

Disposal of TeleRex Rotor.

Motion made by WB5SQC that sealed bids be taken after advertising locally.
If no reasonable response, advertise in Q.S.T.

Personal communications foundation - will be discussed next time.

Program by Bill Brodie K3TCY on OSCAR Satellite.

Minutes of the meeting of the ACARC for November, 1977.

The meeting was called to order by President Bill W5NI at 2000 CDT with 51 members and guests in attendance.

Following self introductions, the following was conducted:

OLD BUSINESS: AMSAT membership was discussed, and the \$100.00 contribution was approved.

Also, membership contribution of \$100.00 for the Personal Communications Foundation (PCF) was approved. It was noted that CORA had approved a \$35.00 membership in PCF.

CORA: A motion to support CORA's action was made and approved. The ACARC has responsibility for the Prizes for Ham Holiday 1978. Bill asked for volunteers with the following results:

Bob James, WB5TKF
Jess McKenzie, WB5UWB
Chuck Gueske, N5SW
Ivan Miller, W5HFU

These men will comprise the committee for HH 1978. Thanks to all for the help.

A discussion followed relative to CORA and Ham Holiday. CORA is looking into a new place for the convention, and also looking to change the date. Nothing has been reported back, nor is firm information available at this date.

NEW BUSINESS: Annual elections are due. The nominating committee for the new officer slate is as follows:

George, W5NTL
Bill, K5KDR
Bobby, W5JES

Nominations will be provided subsequently.



(November ACARC Minutes, Continued)

The annual Christmas dinner meeting will be held December 2, 1977, at Val Genes, Penn Square. Make sure you get your reservations in early.

The Program was conducted by Mr. Bob Pace W5CJG, who presented a most interesting program on the "how-to" of printed circuits. Thanks, Bob! Bob has offered to produce a set of boards for CUR, and ID, and TT Decode for the new repeater..... again, our thanks to Bob for a most interesting evening, and for the boards.....

The meeting was adjourned for coffee and eyeballs at 2205CST.

Robby, W5JES, Sec/Treas.

ROBBY'S SOAPBOX.

The other day I had coffee and eyeballs with a member of the club who had allowed his active status to lapse. He had consistently turned aside attempts to get him current. Finally, during the conversation, I learned that he had a problem. It seems he somehow felt uncomfortable around some of the other members who were in possession of higher class licenses, and "talked a good game". This man, like many in our hobby, makes his living in a pursuit other than electronics. He was attracted to the hobby via an interest in CB early on, and converted to a ham as a result of a deepening interest in more complex forms of communication.

This encounter got me to thinking about our image a bit. It is true that this club membership has a rather large percentage of people with professional status, and with excellent credentials in the various fields of electronics. One reason is, of course, the FAA employs large numbers of people in these fields. It is only natural that their skills should appear in various ways to enhance their status in the hobby. While this is true, it is also true that this club had a very high number of people on the roster who are diversely employed as aircraft mechanics, police officers, pilots, photographers, electricians, administrative types, lawyers, etc. etc.....and, interestingly our ratio of Extra/Advanced, General/ Technician/Novice is pretty well balanced. My friend, who started all this, said that he was "just a Tech", and therefore couldn't match his knowledge with these guys with the "low numbers". Well sir....that may be true, but remember, that a comparison between someone who works in the business, and someone who is interested only from a hobby standpoint ain't quite fair. I know a little about flying. I'm licensed at just about the lowest level there is. When I get into conversation with a group of professional pilots, who fly turbo-props, and jet aircraft, I have the same sense of inadequacy, that my friend feels in the radio club. I also feel this sense when I meet with a camera club with my son and start listening to the CORA Collector & Emitter



professional photographers talk.

The point is, that a great many of us who do not make a living out of electronics enjoy the hobby immensely, and perhaps even more than those fellows who have professional status. I know one man who works as an EE here at the center, and is an accomplished DX chaser. Sure he uses his skills and training to enhance his station performance, but to him the hobby lies in DX. I have seen darned few people in this hobby look down their noses at another ham because of a difference in licensing levels. I am interested in flying, but not enough to maintain IFR proficiency. So, I just don't operate in that mode. Nor do I operate high performance aircraft, for the same reason. I still participate in flying as a hobby, and make no appologies for any sub-professional status, nor for my ticket class. Most (pro) radio amateurs, as most (pro) pilots and (pro) photographers, are pretty nice guys, and very willing to share their knowledge and take pains to get understanding across to the guy without all that background.

The hobby needs everyone. There is room for all whether your interest lies in VHF, or LF, SSB or CW, antenna design, or just puttin' em up, or computers. No one should ever feel put down in this hobby. It's a great place to be, and there is wonderful fellowship for all participants.

73, Robby W5JES.

AN OPEN LETTER TO RICHARD COWAN

Dear Dick:

You've been running your finals out of resonance, and have lost all your grids OM. Since when is it immoral for the League to engage in publishing as a method of revenue generation. Since when is it immoral for the League to engage in lobbying activities. Come on Dick, be realistic. Quit taking pokes at the League because they are in competition with your publishing house. I for one, am glad they publish. Not only are their publications of high quality, but the revenue benefits me directly by generating revenue for them to represent me and my interests at a very low annual membership cost. And, if I decide I don't like the way it's done, I can voice my opinion within the League and work for change if I feel strongly enough. Dick, I am fully qualified to voice strong support for the League. I was one of the over 30,000 hams who walked out on the ARRL a few years back over incentives, and other matters. I realize now that was a grave error. We should have stayed and worked for change inside the organization. So, my friend, if you feel like taking pot-shots at the League, feel free. After all, it's your League as well as mine. But please, do us all a favor, and take your shots in a responsible way, and not behind a cloak of attacking their advertising policies. Your publication of a letter from a manufacturer who's own ethics visa-vis the illegal CB operations is



(Open Letter to Richard Cowan, Continued)

highly questionable, does you no service at all.

So Dick, grow up a little, and quit trying to wreck the league for your own self-serving ends.

73.

(Signed)

Robert E. Runyon, W5JES

FOR SALE: R-392 receiver 500Khz to 32Mhz digital readout, with power supply, manuel spare set tubes, and SSB converter - \$180.00.

HIGAIN - 3-element tribander - \$40.00.

WANTED: The name of the party who had the ICOM 21 for sale at Texoma.

WB5NHZ 321-5852

C A S H For Collins Mech. Filter. Must be 455KHz, with 1000 (or less) Hertz band-pass. Call Jess Speer 321-7302 (Norman, Okla.)

FOR SALE: Pre-WWII Tubes. Both AC & Battery types. Some in cartons; some "loose", but all good. S.A.S.E. for list. Wide Selection. Reasonable priced. Jess Speer, 1400 Melrose Dr., Norman, Oklahoma or call 321-7302.

SELL/TRADE: Meissner DeLuxe Signa-Shifter VFO. (1940 Vintage) 5-watt output on 160 thru 10 meters. Mint Condition, \$35.00 or ? ?...Jess Speer, W5SQJ, phone 321-7302, Norman, Oklahoma.

TRADE: 28-AMP 120 VAC powerstat variac for (smaller) 20-AMP 120 VAC variac. Or, will pay cash for 20-AMP Variac. Must be reasonably priced. Jess Speer W5SQJ, call 321-7302, Norman, Oklahoma.

SELL/TRADE: Heath Model IB-1100 Freq. Counter (to 30MHz). Recent factory checked. \$70.00 or ????. Jess Speer, 321-7302 (Norman, Okla.)

FOR SALE: All sorts of useful items such as meters of many types, microphones of many types, rack panels galore, an AMECO tube-type RF pre-amplifier, band-pass filter for 2-m xmtr, tubes from the early 1920's, but no new types.

W5JJ, 789-3788.

WANTED SURPLUS EQUIPMENT: for the Cleveland county red cross emergency station ; all contributions' will be greatly appreciated and are tax deductible
The station will be operated by local amateurs who 329-1543
have formed a club for this purpose. contact, JES, WB5UWJ



Club NEWS

WSLOW
The Elmer Gooder Memorial
Station

MINUTES OF NOVEMBER MEETING

Meeting was called to order at 8:02pm by President Woodie, W5FMX, with thirteen members and guests present. Woodie related the weiner roast at last month's club meeting night. He announced campout scheduled for this weekend at Little River State Park, Lake Thunderbird.

Charlie, WA5JGU, reported on the latest round of radio classes just starting. They are held at Red Cross Building. Another round of classes will start around middle of January. Beginners class is being taught by Chuck, WB4PLG and Don, WB5NIY.

George, WB5NMK, reported on last CORA meeting. Facility for next year Ham Holiday and dates were discussed. Bob, W5HXL, described the personal communications foundation, an organization which compiles legal material regarding towers - interference problems. This material is used to help clubs and individuals facing legal problems from city ordinances restrictive to amateurs. It was moved and passed that the club encourage CORA to join as a full member (\$25.00 dues).

Bob, W5HXL, related details on various facilities being investigated by CORA on Ham Holiday. The event will probably be last weekend in July to avoid conflict with Texas VHF Society and Amarillo Ham Fest which are scheduled for first and second weekends in August, respectively. He discussed for the group general arrangements and programs that usually occur. VHF club has responsibility for programs. Joe, K5JB and Woodie, W5FMX are first two to volunteer for program committee. It was moved and passed that the club have a Christmas Party at regular meeting place. Members will bring wrapped gifts (less than \$5.00 value) for children to be given to a suitable group of needy children. Several chimed in volunteering to bring cakes. Those who come are going to bring nibbles: peanuts, chips, dips, etc., on a pot luck basis. Party will start at regular time.

Business meeting was ajourned at 9:18pm and after a short coffee break, Bob, W5HXL, showed antennas and accessories he has for portable and emergency use.

Joe, K5JB, Sec'y.

WHERE'D IT GO?

What happened to the VHF Club Section in the November issue of C & E?

I didn't write anything - that's what happened. I'll use the excuses the rest of you use. I didn't have time, I couldn't think of nuthin to write, etc.

That's what happens friends when you put all your eggs in one basket. You can prevent it from happening again by getting out a piece of paper and jotting something down when it comes to your mind.

One of you would be a welcome volunteer as an alternate editor when I am not available to produce, and that ain't too often. I would be glad to show you the procedures, which are simple, and give you a supply of materials, which are few.

Joe, K5JB

LOOKING FOR STATIC

Have you ever wished you could have RF sensitive eyes so you could look at power line connections and see the one making all that cursed Buzz?

Well, I have a line on a method that may work in an oblique fashion. If there is a poor connection causing arcing, there may also be heat, right? There is an instrument on the market that is able to view a scene and pick up temperature differences as small as $\frac{1}{2}$ degree C. It is portable, hand held and costs a measly \$5 K.

I'll report on it next month if I can get my hands on one and run some experiments. I have two chronic noisemakers in my neighborhood I would sure like to look at with the instrument. It may not work on a leaky ground or the common problem of stray pieces of debris hanging over wires, but we'll see. Joe, K5JB

CLUB CHRISTMAS PARTY

Don't forget next meeting. There will be a PARTY! It will be regular meeting night, regular time. Bring SNACK'S and a present for a youngster. Each present will be placed in the age group for it is intended - child, pre-teen, teenager and boy or girl, if it makes any difference. Joe, K5JB

BAJA 400 AMATEUR RADIO STYLE

Or, how to see Mexico in a day. It all started on 75M while I was in Colorado. Fred, W5NL, and I had been chatting and had just sent the 73's and GN's. Alfonso Vela, XE2AVG called me and asked if I was in Oklahoma City. I described the coincidence of Fred being on frequency and Al explained that he would like to make a H & W inquiry into Norman. His wife, Dorothy's sister lives there and they had not heard from her lately. Fred called and returned with message that all was OK. We all exchanged salutations and that was that - right? Wrong! The story continues the next night.

It seems that Al's sister-in-law, Louise has been seeing doctors about a possible breast cancer. Not wanting to alarm anyone, she withheld the information from Fred. On the following day, however, she called Fred and told him that three doctors had agreed that surgery was necessary and she wanted her sister to know. She was scheduled into the hospital the following day and surgery was scheduled for the next. Fred told me that night and I vaguely remembered something about a "TACO" net which handled medical relief matters and in which XE2AVG was a participant. I started looking for it and found Al. I don't think it is good practice to pass bad news by Amateur Radio so I simply told Al he should call his sister, that it was important. He said he had no telephone but would go to one the following day and call. Well, I decided under the circumstances, to tell him the whole story.

The following week, after I returned home, Fred and I contacted Al from time to time, giving him news of his sister-in-law's progress, which incidentally was as satisfactory as it could be, under the circumstances. In the mail one day I discovered a brochure from Al describing a hotel in San Quintín, 200 miles South of San Diego, CA and marked up with little notes pointing out highlights, including a picture of Al himself.

By coincidence, and I swear it was one, a business trip was arranged, completely beyond my control, to San Diego, CA. I figured if I was going to be that close to San Quintín, I might as well check it out. I mentioned this to the guys on the TACO Net and they responded with telephone numbers in San Diego. Two of the net members offered to help me make travel arrangements.

As soon as I had some time in San Diego, I called Nick Callas, K6DBJ. He really rolled out the red carpet. He had me meet him when he got off work and hauled me over to his house while he explained the arrangements. Al's son Steve, lives in San Diego. He had gone over to Tiajuana and purchased bus tickets to San Quintín for me. After Al, his YL and I went out to dinner we went over to Steve Vela's house. Steve explained the arrangements and was somewhat relieved when he learned that I had at least a little knowledge of Spanish. He was concerned that I might have difficulty at the bus depots and, on the return trip, making arrangements.

After the very pleasant visit with Steve, Al took me to my motel. I spent the next couple of hours doing some cramming from my old Border Patrol Spanish Text Book.

The next morning I got up bright and early at 6:00am. (Actually that's not so early . . . 8:00am Oklahoma time . . . but it sure seemed early). It was Friday morning and I wasn't going to work. Funny how much better I feel on mornings I don't have to go the office! I quickly dressed and caught a taxi for the bus station. I couldn't wait for breakfast. I figured they serve breakfast in Tijuana that was similar to breakfast in San Diego, so why not?

Heh-Heh! You thought I was going to tell ya about a seedy little dump in TJ where I caught a case of the Green-Apple-Quick-Stabs? Not a chance; I ate at a Denny's with the rest of the Americanos Feos!

For a couple of hours I walked around TJ shopping and trying to imagine what it might be like at night. I can testify it isn't too jumping at 8:00am. At 9:30, I caught my bus to San Quintin.

The trip south wasn't too eventful except for when the Mexican Authorities (Authority?) caught me a little south of TJ. The bus had to stop at an inspection station and let a uniformed official aboard. Mexican Border Guards remind me of a cross between a circus band leader and a New York bellboy. The uniform is similar to the former and the outstretched palm mindful of the latter. After a little grilling, during which I showed suitable respect, he stamped my visa and let me go on.

The scenery in Baja, along the west coast, is a mixture of deserts and mountains with Pacific Ocean breakers mixed in. Where there aren't mountains, the land is quite flat with sparse vegetation. The mountains are large, reaching heights of 10,000 feet. My bus was an express bus destined for LaPaz, near the Southern end of Baja, a trip of about 1,000 miles. It stopped in Encenada and took on a full load of passengers. All seats were sold out. I then understood why Steve Vela had a problem getting tickets. He told me that the agent advised him that I should catch a bus to Encenada and when I got there, I could buy a ticket for San Quintin. He said no deal, he didn't want me stranded in Encenada. It probably wouldn't have been a problem but it would have made the trip take a bit longer. As it was, I was in San Quintin by 2:30pm.

Al, XE2AVG, was there in town to pick me up. He walked right up to me as though he had already known me prior to my arrival. He explained later that Nick had described me to him the previous night. Ah, the miracle of radio! We did a little vegetable shopping, stopped off at a military post to buy some bread and headed out to the Molino Viejo (Old Mill) Hotel.



British Steam Engine. Al, XE2AVG, (on right) and friend.

The Molino Viejo is so named because it is site of what was once a grist mill built by British Colonists. The Mexican Government, in one of its fickle periods (1883) tried to encourage development of Baja, California by allowing foreigners to colonize. Then, when the whimsy faded, the land was re-expropriated leaving ruin to be enjoyed by the natives. There still stands foundations and other evidence of abandoned ambitions from the past. A giant steam engine, see photo, is left as evidence of the Molino Viejo.

Al moved to the place from the United States, hoping to start up a cannery and hotel that would provide useful employment and a boost to the local economy. He is qualified to tackle both projects having had experience with machinery and, most particularly the food business in his previous years in the United States.

Al was born near McAllen, Texas of a family from Mexican heritage. He moved around the country, working during the depression on motors and other factory related machinery. He somehow got into the cooking business. I hesitate to use the term "restaurant business" because these days of quick food and super efficient system engineered meal factories it is difficult to associate restaurants with excellent food and delicious meals. I guess Al is what one would call a Gourmet cook. He worked under famous cooks in New York and Philadelphia and took to the training well.

The meals he prepares have earned his place a reputation as the best place to eat within 200 miles of Encenada. A couple dropped in Saturday afternoon from Encenada on the advice of a relative who had eaten there. Unfortunately, Al only prepares Breakfast and Supper and the couple dropped in around mid-day. Al was unprepared to fix much of a snack but he "scratch built" some soup that was excellent.

The supper that Al prepared for his guests the evening I was there was punctuated with apologies that suitable seafood and vegetables were not available. He was disappointed that there was no Abalone available, he couldn't get any fresh green onions, etc., etc. But believe me, a finer meal I have never enjoyed.

While I was chatting with a couple of fishermen, he served up some Margaritas and hors d'oeuvres made from Octopus. He wouldn't tell us what the snacks were until after we tasted them. When we were called to the table, the meal was served somewhat dining room style. First course was a soup prepared using a typical Mexican staple. Beans! Delicious! The main course consisted of several types of fish, sliced zucchini prepared in butter, etc. For dessert, we were served the specialty of the lady of the house, Dorothy, Al's YL, had prepared good old American (Norte that is) Peach Cobbler, yum, yum.

Well, I'm not all that good at describing food so off to the radio shack.

Al's a regular in the Taco Net which meets about 9:00pm, Pacific Time, each night of the week. As soon as I had eaten, he called me over to the rig and had me take to the controls. I had a bang up time operating a rare DX station such as XE2AVG! Really, if I had only had more time, I would have tuned up on the novice bands and given a lot of novices an unusual contact.

The equipment at XE2AVG consists of a Swan 350 and inverted vees at about 30 feet. Al generates the power for his hotel with a diesel generator set. When he says he is going to "throw the big switch" he really means it. We went out to the generator hut and he let me throw the switch, disconnecting the load from the generator before he shut the engine down. Boy, was it dark! One thing that concerns me is that if the generator set were to fail Al would really be QRT for sure!

The next day Al took me on a tour of the coast south, past the Bay of San Quintín. We looked over a trailer and hotel built by the government. For various reasons, the trailer park was in pretty run down condition even though it was only a few years old. No tourists were there. Al asked if I would like to go in the look over the hotel. I don't know if it was resentment regarding the Mexican government going in competition with my friend or the fact that if you have seen one Ramada, you have seen 'em all, but I couldn't have cared less about going in. Al's motel is what I guess you would call a Mom & Pop managed establishment similar to motels you might find for example, in Davis, OK, along old U. S. 77. The furniture was "early married," circa 1940. Half of the twelve units he has contain little kitchens. They are clean and simple. Al's customers are mainly fisherpeople and hunters and, as mentioned, aficionados of good food.

On our tour down the coast, Al stopped to inquire into a matter regarding a medical mission. I don't remember which case it was because there were several Al was working on. It may have been the one regarding a little girl who needed surgery to correct a crosseyed condition. There was, in that case, a need to find the mother and obtain permission to operate. Al does legwork on those kind of matters and helps in arrangement of clinics held in villages by physicians associated with the Taco Net.

Taco, by the way is an abbreviation for something but danged if I can remember it. It meets around 10 or 12pm Oklahoma time at 3855 or so.

Al, and I went down to the beach and looked over the assortment of shells and pebbles delivered by the Pacific that morning. Miles and miles of beach and not a person to be seen. What a sight!

When we returned to the hotel the couple I mentioned earlier dropped in and during the course of conversation offered me a ride to Encenada which I gladly accepted. I bid 73 to Al and headed North. In Encenada, I had some time (and money) to spend so I went shopping for a leather vest. It is a pleasant contrast to shops in

border towns. No high pressure salesmen, no street hawkers, just pleasant sales people politely waiting to answer questions.

The prices were reasonable and there wasn't much room for haggling. In border towns, you want to make your first offer at about half of the asking price or you will really get ripped off. The vest I bought for \$25.00 starts at \$50.00 in TJ.

The only adventure left was the bus transfer at TJ. My bus arrived at 9:40pm after a painfully slow crawl across town on a detour route. The last bus for San Diego was leaving at 9:45pm. I made it but in another 5 minutes I would have either had to pay through the nose for a hotel room (they only rent by the hour, hi) or pay through the nose for a taxi to the border.

If you have a sense for adventure and perhaps a little knowledge of Spanish, I highly recommend the Old Mill hotel. Alfonso Vela can be contacted by mail by writing to him at Bahia De San Quintin, Box 90, Baja, California, Mexico.

Joe, K5JB

REGULATION CHANGE SUSPENDED

Effective November 4, the FCC issued a stay in regulation adopted in a report and order in Docket 21033 concerning licensing and operation of repeater and associated stations. The stay was issued in response to a petition for stay filed by the ARRL.

The commission had proposed a substantial revision of rules regarding frequency bands for repeaters. Repeaters were to no longer be issued licenses, their operation being covered by an owner's primary license. In order to accommodate technicians, their privileges were to be extended down to 144.5 to allow them to take advantage of new repeater allocations.

In the ARRL's petition for stay, it asked the commission for more time to listen to arguments regarding potentially harmful effects of repeaters on satellite, moon bounce and other "weak signal" communication activities.

The commission is going to attempt to resolve the issues raised as soon as possible.

Joe, K5JB

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*Not furnished.
FCC Type accepted models available.

A REPORT ON WARC - 79

NOEL EATON VE3CJ
PRESIDENT, IARU
VICE - PRESIDENT ARRL

In last month's issue we presented Mr. Eaton's address to the 1977 ARRL West Gulf Division Convention. This month we would like to present the question and answer period that followed. We have paraphrased this information. It is our sincere hope that this information will make you more knowledgeable about the IARU, the importance of its' work, and the impact of World-wide communications on our hobby.

Q. What do you see future of Amateur Radio being 50-years from now?

A. I can't even forecast it two years from now. I think it will be drastically changed. After all, you must admit it has changed very much in the last 10-years with the development of solid-state, VHF, UHF, and satellites. I hope we can further develop all these things; however, with all of this, I would hope the day will never come when couldn't put 5 or 10 watts on 40-meters and work the world. It'll be tougher. And, let's face it, I'm 67 now in 50-years I couldn't care less.

Q. What about 160-Khz?

A. I am afraid at the moment it looks very bleak. It's unfortunate that's in the broadcast frequencies in Europe, Region I. It's been opposed bitterly both in Canada and the U. S. by power companies who use carrier transmissions on the frequencies. How would like to have a New York black-out blamed on some Amateur who ran a kilowatt on 162-KHz and turned all of the control system upside down? I can see they've got something on their side. My own personal opinion is that they are worrying too much. No body said we wanted a Kw up there to start with and I think a little careful work here in Canada will produce some support for it. The power companies are really scared of it. They forget that this goes on all the time in Europe with 250-Kw broadcast stations. I'm afraid we're going to have trouble there, but I'd like to see it.

Q. What effect will the conference have on CB and was it necessary for the FCC to request permission from the ITU to award the 11-meter band to CB?

A. No it was not. It will have no effect on the CB frequencies. I don't think. The CB is not a recognized service by the ITU. It is part of the land mobile or fixed service. Many people have questioned me about the loss of 11-meters. To be quiet honest, we never had any right to it. 11-meters, if you look at the allocation table is a spot frequency assigned for ISM, in other words for diathermy: Industrial, Scientific, and Medicinal purposes. This is only one. There are others through the spectrum as you go higher. There is a footnote to those frequencies that says the administration may reassign there on a non-interfering basis. And, they do not have to ask for permission.

Q. As WARC-79 approaches, is it practical to look into 5-band equipment and is there a chance we could fine one or two bands no good?

A. Well, let me say that most of the equipment (Kenwood, Yaseu, Drake, Collins) has pretty much general coverage. So, in most cases all you have to do is add crystals. The thing you are going to have trouble with is the antennas and I think that should we get new bands we'll have to go to a log periodic antenna.

Q. Do you think the OPEC nations will have an effect in WARC-79.

A. I am sure they will. At the satellite broadcast conference last February, it was most noticable and at the maritime conference before that, the gulf states, Arab block, African block, and some of the South American countries. Some of these countries use to look to the U. S. for guidance for their voting, because they did not have technical expertise. No more. They are voting for political reasons.

Q. Has the U. S. position on 50-MHz changed and is there any chance of amateurs getting the 50-MHz in the rest of the world?

A. I don't know. Region I's last opinion was that there is no hope of getting 220-MHz because it was being used for other purposes. In some countries, there is some chance that some of the older television systems are being phased out. There may be some chance of getting 50-MHz here. They didn't think there was much of a chance to get the whole 4-MHz, but there is a possibility for some of it.

Q. I personally feel that the problems with 50-MHz are not insurmountable here or in Europe, especially if some of the older television stations are being phased out over there. I personally hope that the attitude of our own delegation would be to support the use of 50-MHz.

A. Oh, I have no doubt that you will not have much trouble finding support in Region II, simply because we have it here. The people who will really make a decision like that in Region I is a group called CEPT. This is an organization of all

the Post and Telegraph departments of all of the Western European countries, and they will try to form a completely unified European position before the conference. That is where the decision will be made. The chairman is a Frenchman and I can assure you that he will be there trying to do the job.

Q. I have seen very little mention of the VHF and UHF frequencies in the articles about WARC-79. Is there any chance that we may lose some of these or that we might gain some of these?

A. There has been very little mention of VHF/UHF frequencies by many countries other than the U. S. and Canada. There is no doubt that those bands will be attacked both for terrestrial as well as space use. And, I think we can look for continued attacks on sharing in space which is ridiculous. I actually sat during the space conference with my mouth wide open when the man from the French Aviation Ministry got up and said with tears in his eyes that the receivers on his ground radar could not tolerate a one watt transmitter in an amateur frequency. At this point the gentleman from the U. K. said that if they couldn't make decent receivers the U. K. would be delighted to sell them some. That is going to be a very tight spot. In this part of the world I think that we will be all right, but to get world wide allocations on VHF/UHF will be difficult. One thing you must realize right now and one thing that we are drumming into every delegation that we are talking to, is that no longer can you believe that any frequency is confined to the country that is using it. With all of the satellites that are flying today, you can no longer do anything you want on 220, 230, 440-MHz or any other frequency because somewhere there is a satellite that is going to broadcast it all over the world. There has got to be some standardization.

Q. Do you foresee that the developing countries will have any effect on the Morse code requirements for proficiency?

A. The Morse code requirements is not on the agenda. However, there is one person, who shall remain nameless, who is in the Canadian government who is determined that we shall have code free licenses in the amateur ranks. The Morse code requirements are contained in Article 41, and through the insistence of Canada, Article 41, has been placed on the agenda. The trouble with the various government agencies, such as the FCC, is that the people who ran then and the people who make the decisions are no longer old operators. They are lawyers, they are sociologists they are haven knows what else, and the result is that they do now know the benefits of spending some time on CW and learning to be a gentleman on the air. There is a very good argument that you don't need Morse to have voice transmissions. This is crazy. It is the filter that has kept CB out of the Amateur ranks and I hope it will continue. But, I have a feeling that we may have a problem here because Article 41 has been put on the agenda at the insistence of Canada. You are well aware of the Code free licenses in some countries and the problems in Japan in Region III. Panama is another one. Only 10 percent of the Amateurs in Panama have passed a code test.

Q. What options do we have in the event of a major loss of frequencies?

A. Well, all kinds of things of course, assuming we have any at all. Let's face it, a conference like this is quite technically competent to rule the Amateur Service out of existence. Don't take me wrong. I don't think for one minute that they are going to do that. We have too many good friends. We may lose a lot of frequencies. I don't know that either as I mentioned a while ago. If we do lose a lot of frequencies, then obviously we will have to go to much narrower band techniques. I can't think of any other way of dealing with the problem. Maybe we should all start saving stamps. It is possible, and if we do lose a lot of frequencies with all of the increased numbers involved it will become a serious problem. CW is always a possibility.

Q. Since the ITU has no enforcement power in this matter, how much will the amateurs take before they lash back?

A. I have an amateur license which was granted to me by Canada as the result of passing exams. That license is of the highest standard that I know of anywhere else in the world. I'm darn proud of that license and God forbid that I or any of my compatriots or any of you out there would ever become a bunch of CB'ers that would not obey our government. My own personal opinion is that if anything that serious happened, I think Canada, the U. S., and Western Europe would, at the conference, do what they call take an exception and state publicly that they would not be bound by that decision. I'm quite sure of it. How much they would be able to do for us, I don't know. Undoubtedly, we would have a lot of QRM from other services if it was a world-wide ban on amateur radio, who cares, we've got a lot of QRM on 40-meters anyway. * * * * *

There is Mr. Eaton's presentation. Hopefully in the next several issues we can offer some of the text from the IARU position paper.

H.O., WASMLT



DECEMBER MEETING NIGHT CHANGED

Please note that for the month of December we have changed our meeting night to December 8, 1977, at 8:00 p.m., same location. Several items of interest to our club will be pursued:

1. Test facilities will be on hand to aid our members to recheck their equipment for frequency, deviation, touch-tone pad levels, etc. Take advantage of this opportunity to adjust your gear.
2. Discuss plans to hold monthly meetings beginning January, 1978, in a format which will include a formal program one month and a flea market type program on alternate months.
3. Review results of the Executive Board Meeting on November 17, 1977, and through an open forum explore the program which was developed.

INVENTORY AUDIT

Please forward to Joe Hustak - WA5ZNQ a complete listing of OKCAP property in your possession and/or under your control. Please include identifying serial numbers or other control data together with the location of this property.

Early action will be greatly appreciated.

APPOINTMENT

Gary McCormick - WA5ETV was appointed chairman of the 450 MHz committee by the board.

WELCOME!!!

New members to OKCAP:

WB7NPN	-	Henry Israel	WD5FAM	-	William Lingle
WB5ZOG	-	Jerry Ashley	K5SXJ	-	David Ferguson
WB5Z0J	-	Paul Pearl	K5ZCC	-	Bennie Baker
WB5ZGP	-	Heinz Schilling	WD5BKU	-	William Johnson

Take time to greet our new additions and make them feel at home.

FOR SALE: Real HF KW! Henry 4K Linear Console, 80-10 meters. Drive with only 50 watts. Sacrifice at \$1,300. Call Marshall - K5MB, Area 405, 787-9292 (home) or 787-9545 (office).

WANT TO BUY - 5-50 henry swinging choke for Heathkit Warrior amplifier. Also COAX relay. Harold Ward, WD5ELY. Phone 799-2376.

WANT TO BUY - Knight T-50 transmitter. Look around your shack, attic, etc. and call Harold Plunk, K5GBL, 751-4677, evenings.

The Oklahoma Autopatch Association wishes you and yours the best

for the coming holidays.



TECHNICAL ACTIVITIES

In spite of blustery winds, a fearless band of our members joined forces to run some new cable and make with a few innovations to our facilities at the 2-meter site.

On hand to perform these tasks were Bob Williams, Frank McCollom, Merrill Scott, and Hobe Burgan. Hobe's young son, Mike, joined in the activities and performed in a yeoman fashion.

In case you hadn't observed, Bob Williams added an audio time announcement to the .22 - .82 machine. 'Twas a welcome addition and we thank you, Bob.

We have been experiencing some problems in our .22 receiver and the technical committee has been trying to improve the equipment. Please be patient. All of this leads us to this point: We have a lot of real know-how in the club and your technical committee solicits your help, advice, recommendations, or what have you to improving our communications capabilities. Any contribution will be gratefully accepted. Contact Bob Williams - K5PJU, 528-3009 (office) or 341-5529 (home).

HR REPORT NO. 176, NOVEMBER 18, 1977

PROPAGATION NOVEMBER 25 - DECEMBER 6. A true contest buff, old Sol is trending toward a slight rise in solar levels as the CQ CW contest next weekend approaches. Also to be considered, however, is the rapid decrease in daylight hours as the December winter solstice approaches. "Great for low-band DXing," Oak grunts, "but lousy for biking!"

With November 23-24 the only predicted polar path disturbance, conditions by contest time should be good and improving as the weekend wears on. The "where and when" looks like:

10 Meter goodies will be available 1400-2200Z with paths swinging from east to west; southern paths open earlier. East coast competitors will probably get a crack at Europe, while the west coast will have a similar exclusive to the Far East.

15 Meters will open about dawn and stay open until dusk; an east to west swing in the paths will again be the rule. Watch for possible short openings over the pole.

20 Meters should provide Europe all morning through early evening, with Africa and South America available through the day. Pacific paths should open late afternoon; long paths to Asia will open before the short paths, as early as 1000Z for the east coast. Afternoon long paths could open by 2130, stay in until 0100.

40, 80, and 160 Meters should all open before dusk and swing east through west, remaining open until after sunrise; some low-band openings will conflict with 20-meter long paths.

Oak Suggests Prime Scouting efforts will include 1.8-14 MHz from 2200-0100 and 1100-1400 to maximize multipliers. Good luck!

AMATEURS WITH AIRCRAFT or who operate Amateur gear in others' planes should review FAA Advisory Circular AC 20-98, which contains both FAA and FCC regulations on the installation and operation of "nonessential" radio equipment in an airplane.



WEATHER NET HONORED

On November 1, 1977, the Mustang, Oklahoma, Council passed an official resolution which commended an amateur radio group, the Oklahoma City Autopatch Association and a well known meteorologist, Gary England, KWTW, Channel 9, for their combined efforts in effectively reporting severe storms. Jointly, the reporting was cited as being of great benefit to the civil defense organization of Mustang. Incidentally, his nibs the CD coordinator is Jim Russell - K5HXK.

Present to accept the resolution for the Autopatch Association were Lloyd Wright - WB5OWI and Joe Hustak - WA5ZNQ.

A copy of the resolution appears elsewhere in this issue.

AUTOPATCH WARNING

FCC Safety and Special Services Chief, Charley Higgenbotham, was keynote speaker at the SAROC banquet in Hawaii on November 6. Among the many points he discussed was the abuses of Autopatch. "Autopatch abuses, Charley warned, continue to jeopardize interconnects for the Amateur Service. 'It's your decision!' he said, and if we don't clean up our act we'll end up with formal commission proceedings that will severely curtail, if not eliminate, amateur ability to tie into the phone system." (HR Report 11-11-77)

FOR SALE: YAESU FL-2100B linear, \$325.00. FT-101E transceiver equipped with AM filter (used less than 10 hours) \$725.00. FT-101E equipped with CW filter, \$650.00. Call Paul, evenings, at 681-3839.

FOR SALE: CD AR-22XL antenna rotator, with 4-conductor cable. Used about 6 months, excellent condition. \$65.00. Call Bob, WB50BV, 721-8983, evenings.

For Sale or Trade: YAESU FL2000, 75-10 meter amplifier. Also, Gonset Communicator III, 2M AM Transceiver. Ron Cron, WA5EAI, 681-0896.

For Sale: Standard SR-146, 2M FM Walkie Talkie, full of crystals, excellent condition, \$150.00. John Fagan, WB5FZD, 364-3447.

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\$ 29.00 (used)

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BUSINESS SECTION

Our DECEMBER MEETING will be a:

CHRISTMAS DINNER

CHANGE the date to December 10, Saturday.

(Previous announcement: December 9, Friday)

COME TO MORI DINNER - BRING THE FAMILY - YOU MAY WIN A PRIZE

DATE: December 10, 1977 SATURDAY

TIME: 7:00 P. M. CST

PLACE: Humble Hearth, 4850 N. Mac Arthur Blvd.

COST: Adult - - - - - \$3.75 each
Child, age 10 & under 2.00 each
Babies - - - - - Free

FOOD! Choice of meat. Included are gratuities, drink & dessert
Salad bar - Vegetable bar

Humble Hearth is a new restaurant. We expect at least a hundred to attend. The banquet room is ours for the evening. There is plenty of free parking.

SICK LIST

Ford, W5AIP
Chet, W5GDL
Lloyd, K5YTW

MINUTES OF THE NOVEMBER, 1977 MEETING

The meeting was called to order by V. Pres. John Huckaby, K5QDR, at 8:02 P.M. CST at the Emergency Operating Center.

Introductions followed, there were 35 members & guests present.

Minutes of the October meeting were read & approved. Treas. report was given: \$1,201.30.

Trustee reports were as follows: 07/67 few minor problems, but all basically well. Just please remember TO GIVE YOUR CALL BEFORE AND AFTER USAGE OF THE PATCH (Treas. note). 34/94 all well except for propagation being a little too good.

Bob, W5HXL, reminded us all that MORI was going to be responsible for registration and publicity for "Ham Holiday 78" & that we should start to work as soon as possible but action was tabled until the new officers were elected.

Joe, K5JB, asked for volunteers to be loggers on Thursday & Friday on the Oklahoma Weather and Traffic Net at 6:00 PM. Anybody that can assist should contact Joe, any help would be helpful.

The Christmas dinner was discussed & John, K5QDR, reported that our previous date was taken but that Dec. 10 was open. Wayne, WA5AOB, motioned, & Joe, K5JB, seconded that we take the Dec. 10th date at the Humble Hearth for our Christmas Dinner. Motion carried.

➤ = = = continued on next page = = = ➤

Minutes continued.

MORI CHRISTMAS DINNER MEETING

Place: Humble Hearth, 4850 N. Mac Arthur

Time: 7:00 PM

Date: December 10, 1977 Saturday

Price: \$3.75 per person includes dinner, drink, dessert & tip.

Jim, K5VRL, reported that the probable place for next year's Ham Holiday will probably be the Lincoln Plaza although it's not definite yet. Rumor? Also Jim reported that 200 picture QSL cards w/ overlays were available for \$9.00 if interested contact Jim, K5VRL. The December CORA meeting will be held at Dec. 14 at the Red Cross.

Also Fred, K5HFN, explained to the group gathered that CORA had joined a legal aid group on the West Coast that provides legal aid material to member groups pertaining to amateur problems (R&I, tower ordinances, etc.) Sid, W5KOZ, motioned & Charlie, WA5JGU, seconded that we give \$25.

Election of the 1978 officers followed with the following candidates:

President K5QDR, John

V. President WB5EBX, Frank and WA5RAQ, Bill

Sec./Treas. WB6FYL, Rich and WB5TKI, Doug.

After the results were in John K5QDR - President by acclamation. Bill, WA5RAQ, Vice President and Rich, WB6FYL/5 - Sec/Treas. Since we had a little mix-up & didn't produce any door prizes at our November meeting as promised, Fred K5HFN, motioned & Rich, WB6FYL/5 seconded that we add \$50.00 to the Christmas Party prizes. Motion carried. Frank, WB5EBX, Rich, WB6FYL, Larry WB5POW, were selected to the Christmas Prize Committee.

After a break for coffee & doughnuts, Bill, WB5SXG, presented a program on Direction Finding, better known as "DFing". He demonstrated his home built quad he & several others use for the purpose. The program was very good & I hope that after all the questions were answered that many more will participate in this aspect of amateur radio, since it annoys us all to have someone lock our repeaters on & make it useless for any of us to use. Thanks, Bill for a fine program.

- - - Rich, WB6FYL, Sec/Treas.

THANKS TO REPEATER CREWS. An occasional thanks is greatly appreciated by those who do a good job for us. I'm sure the repeater technical crews are rewarded by appreciation and by their own sense of pride and accomplishment. This note is to pass along some thanks they may have missed.

I have heard many comments on the air and at meetings that are sincere expressions of appreciation for the great job the technical crews are doing. Quite frequently an amateur who is traveling through will tell his contact about the good repeater quality and range. Travelers often express gratefulness for a repeater they may use.

The technicians have done a good job of keeping the repeaters on the air and working properly. They have solved some tough problems. Thanks to all of you who keep these machines working so well.

- - - Bill, WA5RAQ

SILENT KEY

Herman Davis, WA5KQB, died November 11, 1977.

Herman was born July 19, 1934, in Lexington, Oklahoma. He was active in Navy MARS and was Director for this area. Herman was commissioned on the Lexington Police Department and was a member of several local organizations.

SELECTED MAGAZINE ARTICLES ON COMPUTERS

While persuing a study of computer fundamentals, I found some magazine articles that are very informative. I have referenced them below.

The National Geographic article is non-technical. It is a thorough coverage of the widespread applications of the giant computers.

Popular Science gives us a little of the technical - about as much as is usually found in this type of magazine. This article is mostly about interface with plug-in circuit boards. Applications of home and hobby computers are given, along with some buying suggestions.

The series of three QST articles might be considered a short course on microcomputers. Technical terms are explained adequately as they appear. A glossary of terms is given in the September article. The August article covers the technical or hardware. The September issue deals with programming. Two amateur applications of microprocessors are given in the October article.

If you found my article on page 17 of November 1977 C & E to be about your level of technical ability on computers, then I highly recommend these magazine articles to you. They augment what I wrote and bring us more up to date and into microcomputers. We may as well learn something about microcomputers because they will soon be getting their own amateur licenses. Some microcomputers already know the code, so it won't be long. There may even be an award: **W A K - Worked All Microcomputers.**

References to the magazine articles:

National Geographic. **BEHOLD THE COMPUTER REVOLUTION**, Nov. 1970, page 593

Popular Science. **PLUG-IN CIRCUITS**, Nov. 1977, page 39

QST. **MEET THE MICROPROCESSOR**, PART 1, August, 1976, Page 11
" " " " PART 2, September, 1976, Page 15
" " " " PART 3, October, 1976, Page 32

- + - + Bill, WA5RAQ + - + -

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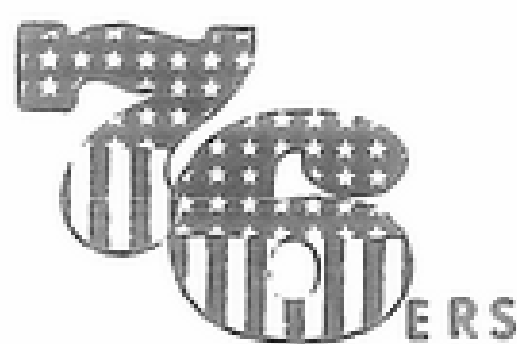
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THE BICENTENNIAL AMATEUR RADIO CLUB



FROM THE SECRETARY

As a result of being brand-new to the office of secretary and not having the right idea of how many days were left in the month, I didn't get the report of the October meeting to the editor in time for printing. My apologies.

The main order of business for the October meeting was the election of officers for the coming year. The new officers are:

PRESIDENT.	Ken Burdick	K5UAB.	681-0281
VICE-PRESIDENT	Dick Baker.	WB5TMW.	685-2867
SECRETARY.	Mark Northcutt.	WD5DYI.	842-1086
TREASURER.	Joe Ramage.	WB5TDW.	685-4814
ACTIVITIES DIRECTOR.	Bill Riddles.	WA5MZW.	842-0092

After installation of officers, Don Jones, K5UKP, presented a gavel to the president. The gavel has a nameplate which will be engraved with the club name. Don donated the gavel to the club and a deep appreciation goes to him for the thoughtful and timely gift.

Coy Day, N5OK, reported to the club on his appointment as Emergency Coordinator for Oklahoma County. He asked for help in making the program efficient and reliable, as we seem not to be too well prepared in this area. Any information on volunteering for this worthwhile aspect of amateur radio may be obtained from Coy, 691-1194.

Coy also gave the program, talking on the ins and outs of DXing. He explained the most common mistake made in DXing is "just plain not listening", (a trait I catch myself with occasionally and I'm just on two meters). Other bad habits include too ambitious "tail-ending" and calling endless "CQ DX". Some of the other bits of information passed along:

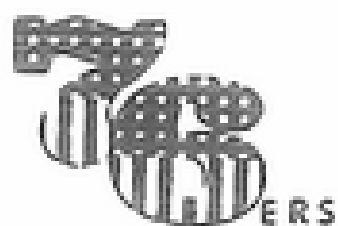
1. Don't call exactly on his frequency.
2. Listen to the operator's characteristics (time, frequency, etc.).
3. Use only the amount of power necessary for good communication--be realistic.
4. Give honest and accurate signal reports for the other operator's benefit. Hopefully, he'll be honest with you.
5. Keep an accurate log, and by all means QSL!!!
6. Don't ask a DXer to stand by to work another buddy.

Coy is a member of DXCC, with 240 countries recognized so far by the A.R.R.L. That's enough credibility to heed his tips, possibly paying off similarly to DXers present and future.

The fairly light turnout at the October meeting was overshadowed by 40 members and 4 guests at the November 15th meeting of the Seventy-Sixers. I guess nobody wanted to face up to the fact they could have been elected to a post if they showed up at the election meeting! Well, relax now guys and gals--that part is over now. Just concentrate now on attending the meetings!

After reading and accepting of the minutes and the treasurer's report, president Ken Burdick, K5UAB, appointed Edie Day, WB5YHG, as the club editor to the CORA Collector and Emitter. All items to be contributed from members should be sent to Edie early enough in the month to assure publication the following month. The president also appointed Ken Newberry, WB5PYN, and Coy Day, N5OK, to serve as representatives to CORA.

The first order of new business was in the form of a motion by Coy Day, N5OK, and seconded by Al Peck. The motion was to publish in Collector and Emitter that club dues are now past due and that those not paid by next meeting will be dropped from the rolls. Motion carried with one opposition. Dues may be paid to Joe Ramage, WB5TDW, club treasurer or through one of the club officers if Joe is unavailable. Names, addresses and phone numbers of officers appear on the inside cover of Collector and Emitter.



THE BICENTENNIAL AMATEUR RADIO CLUB



Paul Asplin, WA5HTL, moved that meetings be held at 7:30 P.M. instead of the 7:00 time established by the club. Motion was seconded by C. Y. Chandler, WB5TKG. The motion was soundly defeated with only four members agreeing with it.

N5OK, Coy, presented a report from CORA in which he revealed the progress of finding a site for Ham Holiday '78. The board will make a selection after visiting the sites. Carl Drumeller, W5JJ, is in charge of the site selection committee. The date for Ham Holiday has not been set due to possible conflicts. The board authorized Bob Ashby, W5HXL, to set the date without further action from the board. Our club is in charge of ladies' activities at Ham Holiday '78.

CORA's interest in the Personal Communications Foundation met with a unanimous approval of members present at our club. The Seventy-Sixers want to go on record stating approval of CORA's joining the Foundation and look forward to its possible benefits to Oklahoma's amateurs.

Ken Newberry, WB5PYN, gave news of the Inter-America Traffic Net, which meets on 21.415 MHz at 2030 to 2200 Z, featuring phone patch activity. Ken has information on schematics and instructions to build a phone patch. He also told of a new country with third party agreements--Ghana (9G1 prefix).

After a motion by Bill Riddles, WA5MZW, and a second by Coy Day, N5OK, the club unanimously voted to affiliate as a club with the A.R.R.L. Coy pointed out that the League has sent all materials for next class sessions (\$40.00 in postage alone) free of charge.

President Burdick announced that South Oklahoma City Junior College is looking for radio equipment, primarily through donation. Additional information may be obtained from Ken. Keep in mind that a gift of equipment is tax-deductible.

C. Y. Chandler, WB5TKG, will head a committee to study the feasibility of a club station. Other committee members include Bill Beamer, WA5YGX; Coy Day, N5OK; and Dick Baker, WB5TMW.

The Seventy-Sixers will make the next meeting (December 20) a Christmas Party/Meeting. It will be open to paid members and families only and will begin at 7:00 P.M. at Furr's Cafeteria, S. W. 74th & Shields. A meeting room is reserved for the occasion. One-hundred dollars has been allocated to the activities director to purchase door prizes for the meeting. Delinquent dues may be paid at the door as per our agreement in order that all paid members may take part in the festivities. Everyone must go through the line at his own expense. This is a family affair, so make it a point to bring the wife (or O.M.) and harmonics for everyone to meet.

The club will again sponsor licensing classes for the Winter/Spring session. Enrollment will begin January 10th and will remain open until the 24th. There is a \$5 fee, refundable upon completion of upgrading. Members currently in class who upgrade between now and January may apply the refund toward the next session. Plan to attend these successful classes. They're responsible for many new amateurs and upgrades. Plans are underway for Novice, Tech/General, and if enough interest warrants, Advanced and Extra!

Bill Riddles, WA5MZW, presented a program on buying and selling used equipment. He pointed out many important and useful tips on the "art", stressing the importance of the Golden Rule, "Do unto others...". Ask Bill sometime about the amateur's use of Dow Bathroom Cleaner! Thanks for an interesting program, Bill.

Again, remember the Christmas Party, December 20th, and the licensing classes January 10th.

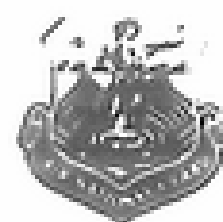
- 73 -

Mark Northcutt, WD5DYI
Secretary

LOOK AT THIS! Regency HR-2B with 34/94, 28/88, 16/76, 52/52, 04/64, 25/85, 22/82, 07/67, tone pad, 12v power supply. \$280 on a package deal only. Heathkit SB-650 digital display for \$130. Gonset G-77 AM-CW transmitter that needs work for only \$20. Kevin, WB5KGP, 341-5042.



THE BICENTENNIAL
AMATEUR RADIO CLUB



CHRISTMAS PARTY

Our first Christmas party for the club members and families is scheduled for Tuesday, December 20th at 7:00 p.m. at Furr's Cafeteria, SE 74th St. and South Shields. Bring your XYLS, YLs and harmonics. For fun we will have prizes and fellowship. To make finances simple, everyone will pay as they go through the line. In order to get the room everyone must go through the line, so be sure to bring an appetite. We will also conduct a short business meeting.

BCNU There
Ken K5UAB
President

TAX DEDUCTION FOR YOUR OLD RADIOS

Do you have any equipment that you aren't using that you wish someone would use and appreciate having? Well, join the spirit of giving and donate this equipment to South Oklahoma City Junior College. The school is teaching communications systems classes and needs equipment which will give students a hands on approach to learning. Contact Don Dorn at 682-1611 Ext. 306 for arrangements. Do it before December 31st and get a tax deduction for the fair market value. Don will give you a receipt for your donation.

CLUB EDITOR

Edith (Edie) Day WB5YHG is your new editor for Collector and Emitter. Any announcements, articles, etc. should be submitted to Edie at least a week before paste-up. We will appreciate hearing from you! Call her at 691-1194.

MEMBERSHIP

As of October our memberships became due for renewal. If you have not paid your dues (\$2.00) please do so as soon as possible in order to keep up your subscription to Collector and Emitter. Be sure to fill out the membership application also, in order to give much needed statistical information for purposes of affiliation with A.R.R.L. Do it now! Contact Joe Ramage, Tres.

FOR SALE: Well made desk with many years of office service still in good shape but needs refinishing. 5' x 42" Top-Inquiry invited- call Ken K5UAB 681-0281.

FOR SALE: Jr. size workbench w/back drop and well braced. 6' x 2' x 30" painted w/2 electrical outlets- yours for a reasonable low price. Call Ken K5UAB 681-0281.

FOR SALE: Dentron Linear Amplifier, 2000 Watts P.E.P., Model 160-10L, New and never used, Special Price \$ 500.00
Also Century 21, New and never used, C.W. only, 75 Watts (about 150 Watts P.E.P.). 10% of list or make offer. WD5FHT, 405/947-2587.

HOOD'S

DRAKE

TWO NAMES SYNONYMOUS WITH AMATEUR RADIO AROUND HERE

DECEMBER SPECIAL

TR-33C WITH TOUCH-TONE MICROPHONE \$210⁰⁰

PHONE 789-3156

EVENINGS, MONDAY THRU THURSDAY



ALTUS
HAM
CLUB

Pres: Loren Simms, WA5CBF
S/Tr: Deanna McEndree, WB5UMH

The Ham Club met 10 Nov. 77 at 1930 hrs. at The North Main Fire Station. Loren, WA5CBF, called the meeting to order. Deanna, WB5UMH asked the minutes be approved and read the treasury report. An introduction of guests followed. 17 persons were present. We missed Oliver Meeks, WA5OGC, who is at home recovering from surgery. Get well soon, Oliver.

Chuck, WB5MJS gave a report on the ham classes. On 1 Nov. 9 students passed the code test and forms 6 -10 were mailed. There is only one more class night.

Loren reported that the President's report to the club was finished. He is making copies for distribution. 17 people still have not sent in their \$ 2.00.

Dwight, WB5KRH, reported we need to begin work on our generator trailer. It is at the T.V. shop.

Dwight, WB5KRH, Chuck, WB5MJS and Dennis Ratzlaff, O.H.P. trooper took a trip up the mountain last weekend to work on the noise problem in WR5ANX. Some of the noise was in the feed-thru connector. Most of the noise was eliminated, but we still have the problem on a windy day.

Loren reminds us that the Dec. 8 club meeting is election of club officers. Please make an effort to attend! Nominating committee is Loren, WA5CBF, Deanna, WB5UMH and Bob Bratton, WD5BBW. The committee will meet to suggest names for offices.

We broke for refreshments. This months refreshments from Kenneth, WD5BBT and Deanna, WB5UMH. Next months volunteer is Pat Nichols. After the break, Loren showed the slide and tape collection of the ARRL Headquarters.

A motion to adjourn was made by Chuck, WB5MJS, 2nd by Paul, WD5BBO. Motion carried.

Much gratitude goes to Joe McDonald, W5CCV, Mangum. We are so proud of our complete Halicrafter HF rig donated to S.O.R.A. by Joe. The rig is in the radio room at the E.C.C.

Dues paid by Jerry Rochelle, WB5MMW and Steve Norris, W5KI. Next meeting 8 Dec. 77. ELECTION DAY!

73's

Deanna, WB5UMH

OKLAHOMA REPEATER SOCIETY MEETING, January 14, 1978 at Norman Municipal Library. Business meeting at 2:00 PM. Swapfest? Contact H.O., WA5MLT.
FOR SALE: Handheld 2m transceiver, Heathkit 2021, brand new. Touchtone encoder, OKC area xtals, and reverse split repeater offset xtal.
Oscar Staudt, 734-7028 (office), 1-282-6508 (home).



C O R A C O M M E N T S

OCTOBER C-O-R-A BOARD MEETING

The meeting was held in the Red Cross Building on 26 October, 1977, at 19:30 local time. Nine members and one guest attended.

The major order of business was the planning for HAM HOLIDAY-1978. CARL (W5JJ), Chairman of the Site Selection Committee, reported the results of initial contacts with various hotels and motels having facilities adequate to host HAM HOLIDAY. Insufficient information was available for the committee to finalize their recommendation and final site selection was delayed until early November. Likewise, a decision on the date for HAM HOLIDAY was delayed in order that coordination efforts with organizations in surrounding states could be completed.

Once the time and place for HAM HOLIDAY are set, the standing committees must be ready to begin operation. Names of individual chairmen for the five standing committees must be available to C-O-R-A by their next meeting.

JOE (WA5ZNF) presented a request from the Enid Amateur Radio Club that a C-O-R-A representative attend their next meeting to present the aims, objectives and functions of C-O-R-A. BOB (W5HXL) agreed to make the trip. It was reported that some interest in C-O-R-A membership exist in Enid.

A local CB Club contacted JOE with a request that they coordinate with radio amateurs in an effort to supplement amateur radio emergency communications. The board approved the concept of such coordination and ask JOE to contact the CB Club to get an initial exchange of ideas.

CARL (W5JJ) was presented an ARRL Public Relations Award for his obtaining the Governor's proclamation of Amateur Radio Week. COY DAY (N5OK) has accepted the position as Oklahoma County Emergency Coordinator.

The C-O-R-A Board Meetings for November and December were combined into one holiday meeting scheduled for 14 December, 1977. Time and place are still 19:30 local time at the Red Cross Building.

ZAC, WB5QPI

SPECIAL NOTICE! Since everyone likes to have lots of free time at Christmas, the next edition of CORA Collector and Emitter will go to bed early, be mailed early and be reduced in size. Editors and contributors need to get their camera ready copy to me by 6 PM on 15 December, and please, each club keep your contribution to one page for this issue and then the February issue which will observe the third birthday for C & E promises to be a big one and don't let the February cover fool you into thinking you are getting some new mailings from strange sources. Also a little reminder to Oklahoma Central VHF Club - You mail C & E Tuesday 20 Dec. And a Merry Christmas to you all. JOE, WA5ZNF

THE AMERICAN RADIO RELAY LEAGUE, INC.



OFFICE OF THE
SECTION COMMUNICATIONS MANAGER

LEONARD HOLLAR, WA5FSN, SCM, Okla.

QST
OFFICIAL ORGAN

REPEATERS.

A LOT HAS BEEN WRITTEN ABOUT REPEATERS AND REPEATER OPERATION. SO, HERE GOES ANOTHER ARTICLE ON REPEATERS.

WHAT IS A REPEATER? THE SIMPLEST DEFINITION I HAVE HEARD YET IS: A RELAY DEVICE THAT RECEIVES A WEAK SIGNAL ON ONE FREQUENCY AND AMPLIFIES AND RETRANSMITS IT ON ANOTHER FREQUENCY, THEREBY EXTENDING THE RANGE OF THE ORIGINAL TRANSMITTER.

NOW: SOMETHING ON LICENSING OF REPEATERS, WE HAVE SEEN A RADICAL CHANGE IN RECENT YEARS FROM SIMPLE TO DIFFICULT AND NOW BACK TO SIMPLE, AS FAR AS PREPARATION OF FORMS IS CONCERNED.

LET US AGAIN TAKE A LOOK AT VOLUME VI, PART 97 IN WHICH WE ARE ADMONISHED TO OPERATE OUR AMATEUR STATIONS IN THE PUBLIC INTEREST, NECESSITY AND CONVENIENCE AND PARTICULARLY PROVIDE A RESERVOIR OF OPERATORS TRAINED IN EMERGENCY COMMUNICATIONS. NOW THEN, I SEE NO DIFFERENCE IN A REPEATER STATION LICENSE AND AN ORDINARY AMATEUR STATION LICENSE.

JUST HOW MANY OF OUR REPEATER OPERATORS HERE IN OKLAHOMA CAN HONESTLY SAY THAT THEY ARE OPERATING IN THE PUBLIC INTEREST?? HOW MANY HOURS A WEEK OF OF REPEATER TIME ARE DEVOTED TO HANDLING TRAFFIC, PREPARATION FOR EMERGENCIES, COORDINATING SOME PUBLIC EVENT (MARCH OF DIMES ETC). I AM SORRY TO SAY, FROM MONITORING AND FROM WRITTEN REPORTS REACHING THIS DESK, THAT THERE ARE VERY VERY FEW, AND EVEN FEWER HAVE EMERGENCY POWER CAPABILITIES.

RATHER, I WOULD SAY THAT FAR TOO MANY ARE BEING USED AS PLAYTHINGS, 'I GRANT OF COURSE' THAT SOME OF THIS PLAYING HAS LED TO SOME EXCELLENT IMPROVEMENTS. BUT, I FEEL THAT TOO MUCH OF IT IS STILL 'PLAYING'. YES, I AM AFRAID WE ARE STRETCHING POINTS IN OUR OPERATING, SOME OF THE IDLE CHIT-CHAT, AND TOO MUCH OF IT, BORDERS ON COMMERCIAL TRAFFIC.

A FEW, TOO FEW, OF OUR REPATERS GROUPS ARE HOLDING REGULAR NAETS, ON WHICH TRAFFIC IS HANDLED, BULLETINS AND OTHER INFORMATION IS DESIMINATED. I FEEL THAT THIS COULD BE DONE ON ALL OF OUR REPEATERS, ALSO WHAT BETTER PUBLICITY THAT TO HELP WITH PARADES, MARCH OF DIMES ETC. LET US THINK ON THIS I WILL HAVE MORE ON THIS SUBJECT IN THE VERY NEAR FUTURE.



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Hello again everyone!

I am happy to say that the club H.F. rig is back in shape. All the thanks should go to Bill Howell, WD5HJL, and his father Fred, W2VQS. His father, an electronic technician, provided free labor, and all he asks is that we replace the tubes he put into the rig, an excellent deal to say the least!

Another important OU club happening is that we got a very nice sized article in the Oklahoma Daily, the OU paper (this article is reprinted in this issue of the C & E). I feel it gave a fair representation of Amateur Radio. This is all do to the hard work of Bill Howell, WD5HJL and his roommate Kevin Mize (not a ham but we're working on it), who both work for the paper.

Well I guess that's all for this month, I encourage everyone to attend the meetings. Have a Merry Christmas and a Happy New Year.
Kenny, WB5RXZ

FOR SALE: Lear Siegler, Inc. 10 Ampere Solid State Automatic Battery Charger, 12 Volt. In new condition. \$ 20.00 Ivan, W5HPU, 942-4160.

For Sale: New ICOM 211; Drake TR-4 w/noise blanker and new set of finals, AC-4, MS-4; ICOM 245; contact Steve, WB5ANA, 672-0453.

For Sale: R-4C; T-4XC; Noise Blanker; AC-4 power supply; MS-4 speaker; 9.5 - 10.0-MHz WWV crystal; 160-Meter Crystal, \$950.00. H. O. Townsend, WA5MLT, 329-4426.

FOR SALE: Heathkit transceiver Model HW-101 10 to 80 meter bands w/power supply and manuals \$325 Call Jim Townsend WB5VCB 632-5445.

FOR SALE: Regency UHF, VHF, Hi/Lo, 10 ch, base and mobile antennas, \$100 or trade. Call Dee at 354-8784.

FOR SALE: Realistic VHF, Hi/Lo, 8 ch scanner w/base and mobile antennas \$100 or trade Call Dee at 354-8784.

FOR SALE: Regency HRT-2, Handi-talkie, 06/76, 5 frequency Nicads & charger. \$200 (negotiable) Chip Latham, 685-0066.

FOR SALE: Realistic TRC-99C, C.E. Walkie-Talkies, 3 Channel, 3 Watts, Stock No. 21-133, two each. List Price \$ 69.95 each. Also two pair of C.E. Transmit and receive crystals at \$ 4.98 per pair. In new condition. All goes for \$ 50.00 Ivan, W5HPU, 405/942-4160.

FOR SALE: STANDARD 146A handy talkie with rubber duckie, 19 in telescoping antenna, leather carry case, desk type battery charger, and CES model 220 touch-tone pad. Crystaled for 94/94, 34/94, 22/82, 81/21, and 07/67. Extra pair for 52/52. All for \$225. Ray Roton, WA5LWZ Phone 341-6123

S.S.T.V. CRT's for SALE

Approximately 40, 5FP7 tubes in original cartons. Each \$ 1.00
Approximately 150, 3FP7 tubes in original cartons. Each 0.50
Buyer who takes all tubes gets numerous scope tubes and other 7" and 9" CT's in deal. Shipping to be paid by the purchaser due to the low prices. Walter "ABE" Crook, WB5AUF, 3448 N.W. 18th. Street, Oklahoma City, Oklahoma. 73107. 405/943-5518.

NEW ROHN TOWERS

IN STOCK AT 20% DISCOUNT. CONTACT BILL RIDDLES, WA5WZW

PHONE (405) 842-0092

If you see an antenna protruding from a car or home these days, it does not necessarily mean there is a CB radio on the other end of it.

Another possibility is even more exotic. The antenna could be connected to a ham radio and the operator could be using it to talk across town or around the world to places like Antarctica or Russia and to people like Sen. Barry Goldwater or King Hussein of Jordan.

If he or she lives in Norman, chances are they are members of Alpha Sigma Delta Amateur Radio Society, an OU sponsored club for amateur radio operators, better known as "hams."

"To be an officer of the club, you have to be either a student or a faculty member, or in the family of one," Kirk Kirkland, vice-president of the club said recently. However, there are no requirements for membership.

In fact, club president Kenny Hutchison, son of chairman of the OU Zoology Department Victor Hutchison, is a high school freshman.

"Most people get into ham radio as a way to have personal communication and entertain themselves," Hutchison said.

Getting into ham radio is not an affair to be taken lightly, according to the club officers. While CB operators can go into business by mailing an application in, ham licenses are not as easily attainable. Depending on the type of license, applicants must learn to send and receive morse code at speeds of from five to 20 words per minute, and learn varying amounts of electronic theory, along with the FCC rules and regulations that govern them.

But ham radio was around before there were any FCC regulations.

"Amateurs started radio back around 1850. Commercial radio didn't come on the scene until later," club secretary Nathan Kirby said.

Alpha Sigma Delta was formed in the 1920s so that ham operators would be able to exchange ideas and gain information.

"In the beginning, part of the purpose of amateur radio was to improve the electronics aspect. Most of that has been taken over by radio engineers," Hutchison said.

In 1931, the club obtained a license for what is now one of the oldest club stations in the nation, W5TC.

Over the years, the club has alternated between activity and dormancy. Progress has been made during the 1970's, but participation slid a little last year.

"What we need to do is get the station back into shape and try to generate more interest and membership," Kirby said.

The club station, which is located on the fourth floor of the Carson Engineering Center, is in a state of disorder. A brand new antenna sits on a shelf, unused because the 30-foot tower it was supposed to be erected upon is missing.

"It could've either been stolen, or it could be in storage in the physical plant. We haven't had time to check," Hutchison said.

One of the services that the club provides for its members is a "repeater"—a sort of booster for ham transmissions. There are several repeaters in the Oklahoma City area, but Alpha Sigma Delta sponsors the only one in Norman.

"The repeater in Norman is there for everyone's use. It is supported by donations from area hams," Kirkland said.

A part of the repeater is a device called an autopatch. With the proper equipment (a box about the size of a hand microphone) it enables a ham operator to make a phone call from a car or any other place a ham radio can be taken.

"You can use the autopatch to call for help on the road. One day a ham witnessed an accident and called the police on the autopatch. They were on the scene in less than five minutes," Kirkland said.

CORA Collector & Emitter



'Hams' have exotic pastime

The repeater, autopatch and club station equipment were procured through money from OU Student Association appropriations, donations and state surplus equipment.

The person who is responsible for what is said over this maze of electronics is the club trustee, Gordon Jones, who has an appropriate call sign, W5OU. Jones received his call sign when it was still possible to request individual preferences in letters, provided they were not being used by someone else at the time.

Since ham radio is one of the few truly international organizations, (operators are licensed in almost every country of the world) chances for foreign contacts are great.

There is also a possibility of running into a celebrity on the air waves. Many famous people, such as Goldwater, King Hussein, and radio-TV personality Arthur Godfrey, are active hams.

When a contact is made, the parties exchange what is known as a QSL card, which is a post card that gives the date, time of contact, frequency and sometimes a few comments.

The OU club station has received cards from Antarctica, Australia and other places around the world.

Another benefit from amateur radio is public service.

"One service that hams provide is the passing of traffic or messages, such as Christmas greetings," Hutchison said.

Hutchison said that last year the governor of Florida sent out Christmas greetings to all 50 states via ham radio. By chance it was Hutchison who received the message. He forwarded it to Boren.

Ham operators also run networks to handle traffic or emergencies. One such "net" is the Cleveland County Severe Storms Network, in which storms such as tornadoes are tracked by radio operators in their assigned areas.

"During September of 1977, I participated in the Gulf Coast Hurricane net. Someone checked out and I was at home (at Norman) listening, so I helped," Hutchison said.

"Mostly what I did was pass on information about the hurricane and emergency services. I even helped a network film crew to find their destination," he added.

Instead of a burden, Kirkland feels that such service is a way of saying "thanks" for the privilege of using the airwaves.

"Public service is our way of repayment for the use of a natural resource, the frequency spectrum. It's also a way we justify our existence," Kirkland said.

When listening to ham radio, one can hear a marked difference from CB. There is less static, better reception in most cases, and very little rudeness. One reason for this is the fact that amateur radio operators, unlike CB operators, rely on themselves, and not the FCC, for discipline.

"When we hear a ham say something wrong on the air, we let him know about it," Kirkland said.

Fortunately, few thieves can tell the difference between CBs and ham radios when installed in cars. Fortunately, because in the words of one club member, "A lot of people have been caught with stolen ham equipment because they thought it was a CB and behaved accordingly, using the CB lingo. It didn't take long to find them then."

Alpha Sigma Delta will also be represented at the OU Engineering Open House this weekend. Their booth will feature exhibits on OSCAR satellite (used by hams to relay messages) tracking, antenna patterns and traffic.

THE OKLAHOMA DAILY

By KEVIN MIZE
Major Staff Reporter

U.S. POSTAL SERVICE

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☐ HAVE CHANGED DURING PRECEDING 12 MONTHS

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Joe K. Harding

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Joe K. Harding, Publisher

CORA Collector & Emitter

September 1977

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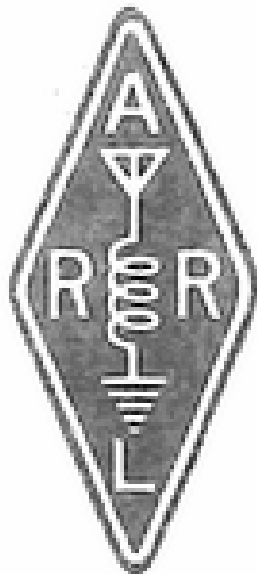
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DECEMBER HAM HAPPENINGS						
SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
				1	ACARC XMAS 2 DINNER	3
4	5	6	7 Q ARC	8 ALTUS HAM ELECTION	9	10 MORI XMAS DINNER
11	12	13	14	15 EDIT C&E	16 V/H/F	17
18	19	20 76ers XMAS PARTY VHF MAX C&E	21	22	23	24 SANTA ?
25 CHRISTMAS	26	27	28	29	30	31

See page 2 and/or individual club sections for details

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