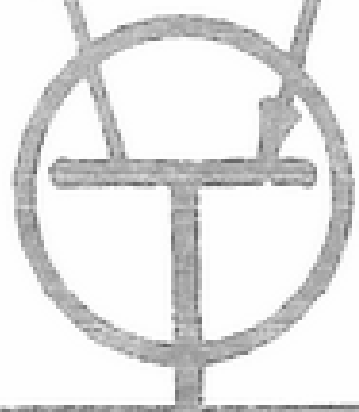


Central Oklahoma Radio Amateurs

COLLECTOR

EMITTER

AND



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50¢

AN INFORMATIVE MAGAZINE  
PUBLISHED MONTHLY BY AND  
FOR OKLAHOMA RADIO  
AMATEURS

AND ANYONE INTERESTED IN  
LEARNING ABOUT IT

Volume 5

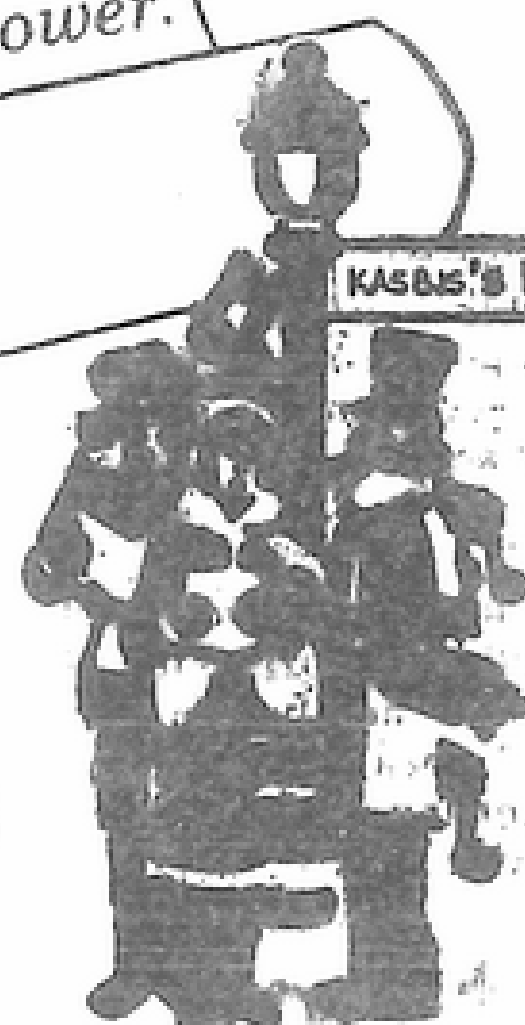
January 1980

Number 60



On the twelfth day of Christmas  
my true love gave to me:  
Twelve MORI meetings,  
Eleven tubes from Ellard,  
Ten theory classes,  
Nine new transistors,  
Eight rectifiers,  
Seven co-ax relays,  
Six 807's,  
Five open bands,  
Four microphones,  
Three CQ's,  
Two repeater guides,  
And a beam on a ninety-foot tower.

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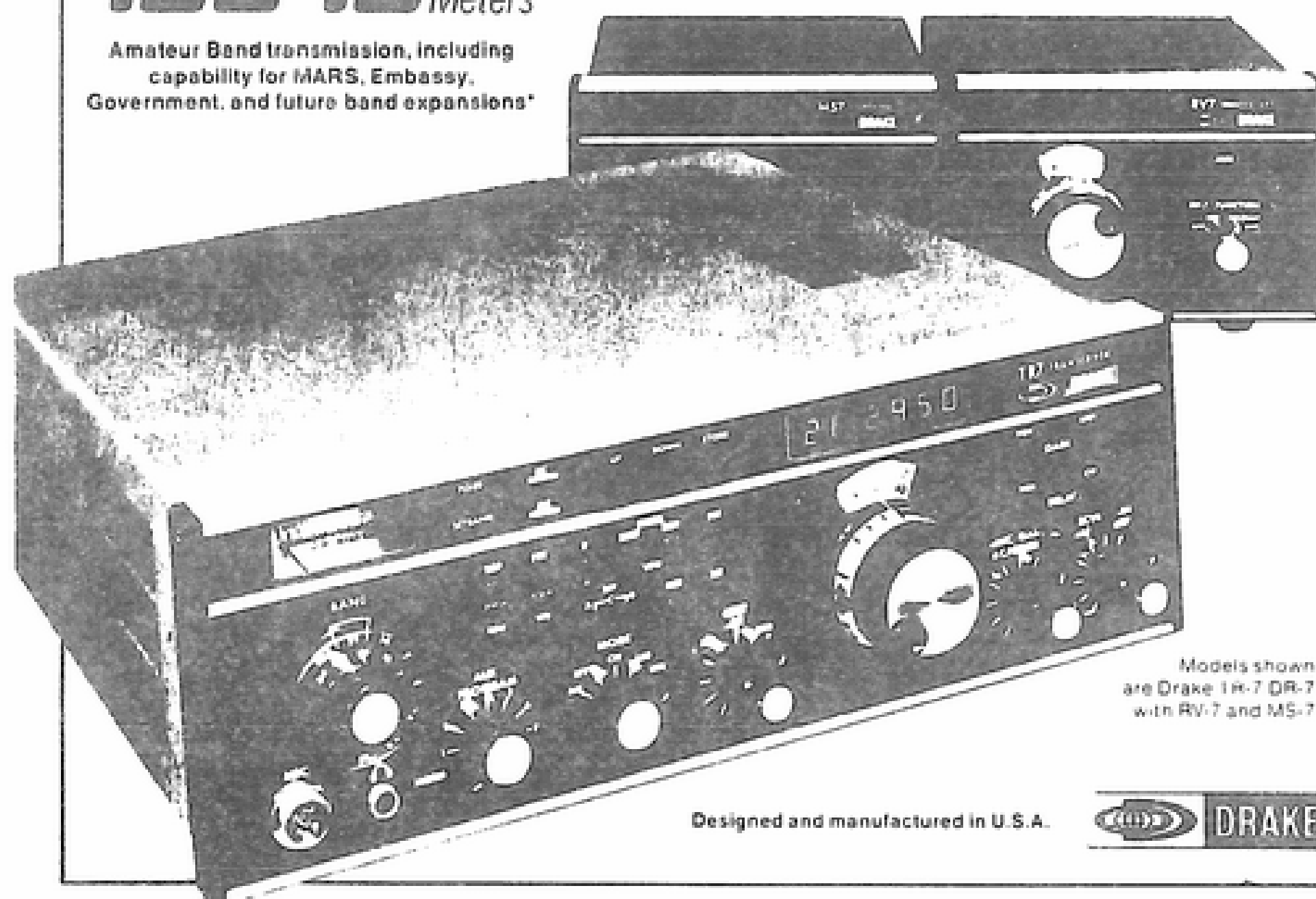
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**Central Oklahoma Radio Amateurs**

**COLLECTOR AND EMITTER**



Published monthly by CORA Inc 1020 Arthur Dr Okla City OK 73110  
**ADDRESS ALL COMMUNICATIONS TO:**  
**CORA C&E, P. O. Box 15013, Okla City OK 73155**  
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**SECOND CLASS POSTAGE PAID AT OKLAHOMA CITY OK**  
**[USPS 116-150]**

**Managing Editor Joe Harding, WA5ZNF 737-1044**  
**Subscription: CORA members \$3.00 year. All others \$6.00 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.

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No. 1745



December 7, 1979

#### ALL DIRECTORS:

The World Administrative Radio Conference, meeting since late September in Geneva, has now finished its work, with favorable results for amateur radio. In the bands below 30 MHz, all present allocations are retained and there will be three new worldwide bands. They are 10.100 to 10.150, 18.068 to 18.168, and 24.890 to 24.990 MHz. In the 10 MHz band, amateurs will be allowed to operate if they do not cause harmful interference to fixed service stations operating in the band. Amateurs may be permitted in this shared band as early as January 1, 1982. The 18 and 24 MHz bands will be exclusive, but before amateurs may operate here the existing fixed service stations must be moved to new assignments elsewhere in the spectrum. This transition will occur between July 1, 1984, and July 1, 1989. Amateur operations will likely be allowed to commence sometime during that period. In most of North and South America, including the U.S. and Canada, amateurs will enjoy exclusive use of the bands 1.800 to 1.850 and 3.500 to 3.750 MHz, which are presently shared with other services. In both cases, the remainder of the band continues to be available on the present shared basis. There were no changes to the allocations at 7.000 to 7.300 MHz. Amateurs in Region 1 will have a new narrow, exclusive allocation in the 1.8-MHz band, 1.810 to 1.850 MHz in most countries and 1.830 to 1.850 MHz in others.

Above 30 MHz the amateur and amateur-satellite services also did well. Several new amateur-satellite allocations were made between 1260 MHz and 10.5 GHz, all on the condition that harmful interference is not caused to other services. They are 1260-1270 MHz, uplink only; 2400-2450 MHz; 3400-3410 MHz, limited to Regions 2 and 3; 5650-5670 MHz, uplink only; 5830-5850 MHz, downlink only; and 10.45-10.5 GHz. For the amateur service in Region 2, a new secondary, shared allocation was made at 902-928 MHz. The band segment 1215-1240 MHz was withdrawn from the amateur service to protect a new radionavigation satellite system from interference. No other changes in present allocations above 30 MHz should affect U.S. amateurs. Several new amateur and amateur-satellite bands were designated in the largely unexplored spectrum above 40 GHz.



# The South Canadian Amateur Radio Society

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 KASAXQ 364-4301  
TREAS Chas. McCown WBSUUX 321-1061  
SEC Jack Bickham WBSTZZ 329-1311

## OPERATING FROM PJ8: AN EXPERIENCE NOT LIKELY TO BE FORGOTTEN

Brilliant sunshine, temperatures in the 80s and 90s, an unspoiled white sand beach fifty feet from the door, and a pileup on frequency virtually every time you keyed the mike and gave the call; those were among the highlights of a Thanksgiving-week DXpedition to St. Maarten, Netherlands Antilles, by Gil Wood, W5NUT, Shawnee, and yours truly.

The trip to St. Maarten was the fourth for Gil, the first for me. Hauled along were the Collins S-line and a power supply that seemed to weigh about 900 lbs. on long walks through airports, a crated 10-meter beam, a batch of pipe segments for getting up a mast, tools and coax, camera gear, and -- oh, yes -- a suitcase each containing a few clothes.

Things went well on departure November 17 and the night was spent in Miami. Managed to hear the OU-Missouri score on local TV late that night. The flight via Eastern to San Juan, Puerto Rico, was also routine. San Juan was enjoying a temperature that felt like 100, although it was probably closer to 90, with equal humidity. The airport is built like the lower deck of a football stadium, all open air. We dragged the radios and power supply along to a lower level where we waited for the last leg of the flight, via Prinair.

This deserves mentioning because Gil warned that Prinair flies B-17s. This is not true. Prinair flies DeHavilland 114s. B-17s are a lot bigger. We took off for St. Maarten with the copilot standing in the aisle, eating Fritos and explaining what to do if we splashed in on the way. The eight passengers were VERY attentive.

The flight as it turned out was unexciting, and possibly the best way to go: slowly and with big windows to provide a fabulous view of the islands strung along the route. We let a couple of people out on St. Kitts, spent a few minutes standing on the windswept seaside runway, and went on to St. Maarten.

St. Maarten is 37 square miles, roughly half Dutch and half French. The main city on the Dutch side is Phillipsburg, the "Big Apple" on the French side Marigot. Both are small. Phillipsburg, strung along a narrow neck of ground in the bay, has two streets -- Front Street and Back Street. You drive in on Front and leave on Back. The town has many duty-free shops, and the tourist can get some fine bargains if he/she knows stateside prices. You're expected to haggle.

The island is surprisingly undeveloped, a real joy for anyone who considers Miami Beach just a bit gross. There are four luxury establishments and any number of cottage-collections, many on isolated beaches. The big spenders can choose from Mullet Bay, an enormous collection of condos, apartments and rooms, complete with 18-hole golf course and huge casino; the Commodore, a Miami Beach-type luxury hotel; LaSemana, an isolated hiding place for the super-rich; and the Caravanseraï, a medium-sized luxury establishment with its own beach and a very pleasant outdoor bar.

If you prefer less luxury (and less strain on the pocketbook), you can stay at a place like ours. The White Sands is a collection of small A-frame cottages strung along a mile of practically deserted beach. Our door was fifty feet from the water. The view to the south, with cruise ships and fishing vessels sometimes appearing on the brilliant blue horizon, was beautiful. Behind us on the narrow strip of land was the airport's only runway, a 7,000-footer with water off one end and mountains sticking up at the other. When the jets landed or took off, the racket was enough to shake the cottage and key the vox.

We quickly learned that the builder of our cottage had neglected to install a hot water pipe. We then started learning how to take cold showers. Since we had by this time gone native, no shirt or shoes, it was okay. We rented a small car, kept some bread and jelly and cookies on hand, and ate an incredible amount of junk food. On big days, we drove to the airport for a goatburger.

That's not to say you can't find good food on the island. I had one of the finest meals I've ever had anywhere at a place called LaVie En Rose in Marigot. And on the afternoon of our last day on the island, we found a little cafe in the tiny village of Grand Case where the shrimp salad was extraordinarily fine. We heard glowing reports from others about a place called Chesterfield's, which we didn't make. I have an idea you could eat out every night and go to a different place without suffering any great disappointments.

(Continued)



(PJ8, Continued)

Hamming was primarily what we went to do, however, and that was certainly what we did. There was a big setback at the start -- the airline lost our beam. Gil put up a dipole and we worked some stations with that Sunday night and again Monday morning. Came time for our beam to get in late from San Juan, and -- you guessed it, no beam. The Prinair people seemed preoccupied with other things, or else they didn't speak English. We filled out forms. "Manana," they said, smiling. Oh, boy. More work with the dipole, but usually it was like digging in mud with a spoon.

This was also the hottest part of the visit, VERY hot and humid, and little breeze. We were, to say the least, perturbed. On Tuesday we went back to the airport and got more blank stares. Manana?

That afternoon about 4 p.m., came one of the cottage employees. The office had had a call from the airport. The beam was found. We drove over in record time on our "road," which would be good for training moon astronauts, got the beam, assembled it and got it up in a driving rainstorm. By then it was dark and we didn't do much more than check SWR.

On Wednesday morning I was first up, and at about 1030Z keyed the mike with a CQ from W5NUT/PJ8. The beam was pointed toward Europe. Immediately a DL called. When that exchange was finished, 10 or 15 called together. After a couple of hours, it was getting really out of hand and we QRX'd a couple minutes to let things cool down, and Gil took over. He estimated a hundred stations calling. It ran that way for about 5-6 hours, and then we began hearing fewer Europeans and Russians, and a lot more Ws, Ks, and VEs. Later, after dark, the band would long out to JA. Most nights it sounded like ALL the JAs calling.

The experience was truly incredible. For a DXer, being on the other end is a revelation. Imagine working the pileup and hearing a VS6 hollering at you. Or VQ9. Or Zambia, the South Pole, Falklands, W1AW, the Smithsonian station or the Queen Mary. We worked guys who were so pleased to get through that they forgot their own calls for an instant, or just laughed into the mike. We certainly weren't a new one for everyone we worked -- PJ8 just isn't that rare -- but an amazing number of stations thanked us for a new one.

The pileups were amazingly orderly. If I said, for example, "The station with Quebec in it. The station with Quebec," when I let the Vox drop invariably only two or three stations were still calling, and very often everyone shut up and let the Quebec station get his report. One of the most impressive things about it all was the very orderly and polite conduct of the hams in all parts of the world. I guess only the really big DXpeditions attract the maniacs.

Actually, we suffered malicious interference on only two days. Once was a barrage of carriers when we worked JAs below the American phone band, and the Ws obviously didn't like it much. Another afternoon I worked a few stations through a moron I've heard before. He's a 4 and he talks in a baby/female voice to disguise his true voice. He was with us over an hour, belching, farting, whistling Dixie and cooing obscenities, but again I was enormously proud to be a ham; not a single station on frequency gave any indication that the jerk was even there, although he was very loud. I think he finally went off to check his rig on the assumption he was not getting out.

We almost won a WAN (worked all Norman) award, and thanks to W5MCN had periodic reports on the OU-Nebraska game in progress. If there was any failure, it was in working so few VKs and ZLs. We knew they wanted us, but we just never found a window on 10.

Among the things I learned on this first trip was that it probably does little good in a big pileup to holler your full call every time. Yell two letters, and if the station does not respond quickly, holler several times; he may be picking up parts of several calls before responding, in order to speed things along. I found it possible to work four a minute this way, but usually the fellow who gave his full call once, and then sat listening, did not get heard in the initial blast.

We worked a tremendous number of QRPs and mobiles. At least 30 FT-7s -- I noticed these because I own one -- and 100 or more chicken band rigs. A lot of these got through the mess by yelling "QRP!" or "mobile, mobile!" rather than full call.

It's a good idea to listen a little while before you start calling a station working as we were. You not only learn who you're trying to work (!), you also may learn the operator's habits. Is he taking three or four at once? Does he work tail-enders? (If he does, he's a fool.) Is he working by districts? Do you know the QSL information? These things will help you make the contact, and they'll speed things along for everyone else.

(Continued)



(PJ8, Continued)

Finally, if you had gone along with us on this junket, chances are that you would go home to the home station and carefully check your mike gain and speech processor. A surprising number of stations had them way too high. Italians seemed to be the worst offenders, for reasons I don't understand. We gave some 3 and 9 reports and told folks to turn the gain down. Invariably they came back with infinitely cleaner signals. There were some, however, that we never could work because their processors made them loud, all right -- but made it impossible to decipher a single letter in their call.

If you plan a trip to an island like ours, I suggest taking extra fuses in more than the usual quantity because power outages may cause problems. You might also want to take lots of film for those beautiful views, extra log books for all those contacts, and a can of bug spray for -- well. And you'll have a blast.

The W5NUT/PJ8 box score for 10 days on St. Maarten was roughly as follows: 4,400 QSOs, 49 states, all but four WAZ zones, and 111 countries. Except for a little head-hunting on 20 late at night -- with a dipole at 15 feet! -- we simply took what came to us. Gil estimated before we left Oklahoma that we would probably do about 5K. If we had had our beam from the start, we would certainly have topped that. Given a tribander and a dipole on 75, and a couple more operators -- well, the mind boggles.

Several have asked if I would go back. Watch me.

-- Jack, WB5TZZ

#### W5OU/R ON THE AIR IN NORMAN

The new emergency service repeater sponsored by the South Canadian Amateur Radio Society is on the air. The 2-meter repeater is operating on 147.66-06 from a tower in downtown Norman.

The machine, funded by SCARS members and the general public as the result of an emergency services fund drive, is on permanent loan from Cleveland County. Repair work and retubing were funded by SCARS. Thanks to Micheal Salem, N5MS, a good deal was found on a duplexer providing 80 db of isolation, and after experimentation with an old WR5AFW antenna, the machine is presently using a different radiating device which seems to fit the old Motorola's temperament just a little better. Mike's thoroughgoing support in all phases of the effort on this new machine, however, has been truly outstanding and all SCARS members thank him.

The repeater first went on the air for on-site testing around December 5. After the inevitable glitches were smoothed, fullscale operation started. Early tests have been most encouraging as to range and quality of service.

As of this writing, the IDer had not been installed. Users are encouraged to ID for the machine during transmissions. It is possible that the IDer will be on line by the time this is read.

There is no patch on this machine. Because SCARS and the OU club, sponsor of WR5AFW, have so much cross-membership, it appears likely that users of W5OU/R will continue to support, and sometimes use, the OU 28/88 machine.

A number of area amateurs contributed time and money, as well as effort, to this project. None, however, did as much as John, N5ABC, who spent countless late-night hours getting things going. John's heroism even extended to climbing the 150-foot tower one cold dark night to work on the antenna. There would not be a W5OU/R without John's efforts, and he deserves all the thanks and praise members can possibly offer him.

#### BRIEF NOTES....

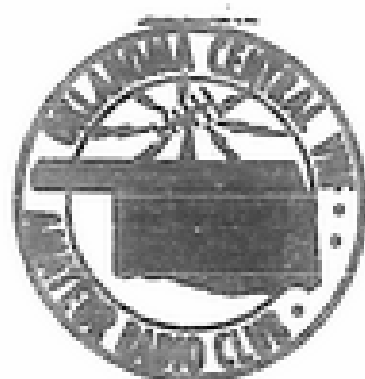
SCARS elected new officers in December, too late for inclusion in this month's report. Meanwhile, thanks to the outgoing officers.

Bob Fields, N5ALG, was mobbed earlier in December when he showed up with the first Kenwood TR 2400 most area amateurs had seen. The little rig has a full quota of bells and whistles.

H.O., WA5MLT, scored a zillion in the ARRL 10-meter contest, working a multi-op station from his QTH with WB5TZZ and WB5QNK. Total has not been figured, but it about tripled the team's winning effort two years ago from the WB5TZZ station.

Congratulations to Joe, KA5AXQ, on the new job, which has him justly excited.





CLUB EDITOR  
Joe Buswell, K5JB  
732-0676

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

### CLUB MEETING

THE REGULARLY SCHEDULED MEETING NIGHT OF THE CLUB WILL OCCUR AFTER PASTE UP OF THE C&E THIS MONTH BECAUSE OF ACCELERATED PUBLICATION CYCLE INTENDED TO BEAT THE CHRISTMAS RUSH. THE MEETING WILL BE REPLACED BY THE CHRISTMAS PARTY. ANY SIGNIFICANT GOSSIP WILL BE CARRIED IN NEXT MONTH'S C&E.

LET ME TAKE THIS OPPORTUNITY TO WISH, IN BEHALF OF THE CLUB OFFICERS, A VERY HAPPY HOLIDAY SEASON TO ALL THE C&E READERS AND THEIR FAMILIES. IT HAS BEEN A PLEASURE TO BE ASSOCIATED WITH ALL THE AREA AMATEURS FOR THE LAST YEAR AND I HOPE THAT MANY BLESSINGS ARE RECEIVED BY THEM THIS HOLIDAY SEASON AND THROUGHOUT THE COMING YEAR.

ALL I WANT FOR CHRISTMAS IS A LITTLE MORE TIME AT HOME, EITHER ON MY PRESENT JOB OR ANOTHER ONE, HI. I AM GETTING TIRED OF BREAKING PROMISES WITH THE EXCUSE "I'VE GOT TO MAKE A SUPRISE TRIP OUT OF TOWN". I WANT TO GIVE SPECIAL THANKS TO THOSE WHO HELPED ME BY TAKING OVER MY PROJECTS WHEN I WAS IN A BIND.

MERRY CHRISTMAS AND HAPPY NEW YEAR EVERYONE! ENJOY! JOE, K5JB

### RADIO CLUB OF AMERICA-FOOTNOTE

SEVERAL PEOPLE CALLED ABOUT LAST MONTH'S ITEM ON THE RADIO CLUB OF AMERICA MEETING I ATTENDED IN NEW YORK CITY. I WANT TO MAKE PARTICULAR MENTION OF A CALL FROM ONE OF THE OLD TIMERS OF THE VHF CLUB. THAT'S NOT 'OLD' TIMER, BUT 'OLD TIMER'. STEVE, W5VCJ, WHO GAVE SOME WEAK EXCUSES ABOUT NOT ATTENDING MEETINGS VERY REGULARLY, ADMITTED THAT HE IS A MEMBER OF THE RCA. I'LL TELL YOU WHAT. I KNEW STEVE WAS AN EXCEPTIONAL PERSON BUT THAT CONFIRMS IT. ONE DOESN'T PLUNK DOWN HIS MONEY AND SIGN ON THE DOTTED LINE TO GET IN THAT GROUP. HE HAS TO HAVE MADE A SIGNIFICANT CONTRIBUTION IN THE FIELD OF ELECTRONICS TO BE INVITED TO JOIN. I AM PROUD OF STEVE. I'LL BET A LOT OF YOU DIDN'T KNOW THAT STEVE DEVELOPED THE OKLA. HIGHWAY PATROL RADIO NETWORK WHICH CONSISTS OF REMOTELY CONTROLLED LOW BAND BASE STATIONS SCATTERED OVER THE STATE CONNECTED TOGETHER BY HIGH BAND LINKS. A RELATIVELY COMMON CONCEPT TODAY, IT WAS QUITE AN INNOVATION WHEN IT WAS DESIGNED. HOW 'BOUT THAT. THAT'S OUR STEVE,

I'LL TELL YOU SOMETHING ELSE. STEVE IS A PRETTY GOOD WRITER. HIS ARTICLE SOME TIME BACK ON SIX METER DX DURING THE LATE 50'S WAS ONE OF THE BEST WE HAVE HAD IN MY SECTION OF THE C&E. HOW ABOUT A LITTLE MORE OF YOUR STUFF STEVE?  
JOE, K5JB

### TECHNICAL CORNER-REPEATER SENSITIVITY

IN THE TWO WEEKS I HAVE BEEN HOME I HAVE BEEN ABLE TO FINISH VERY LITTLE TO WRITE ABOUT BUT I STARTED SOME GOOD ONES FOR SOME SUBSEQUENT ISSUES. SINCE I AM A REPEATER TRUSTEE AND CHAIRMAN OF THE OKLAHOMA REPEATER SOCIETY TECHNICAL COMMITTEE, I THOUGHT IT WOULD BE PROPER TO DISCUSS SOMETHING ABOUT REPEATERS THAT THE AVERAGE AMATEUR MIGHT NOT HAVE EXPERIENCED.

ANYONE WHO HAS OPERATED FIELD DAY WITH A CLUB HAS EXPERIENCED INTERFERENCE FROM NEARBY TRANSMITTERS. ANYONE WHO HAS OPERATED 20 METERS HAS EXPERIENCED INTERFERENCE WITH TRANSMITTERS CLOSE IN FREQUENCY TO HIS RECEIVE FREQUENCY TOO, HI! WELL, REPEATERS ARE ALWAYS OPERATED WITH A RECEIVER AND TRANSMITTER ACTIVE AT THE SAME TIME AND CONNECTED AS SHOWN IN FIGURE 1. NEXT PAGE. IF THE RECEIVER



AND TRANSMITTER ARE LOCATED IN THE SAME PLACE AND OPERATED ON THE SAME BAND, AS I BELIEVE ALL OF THE LOCAL ONES ARE NOW, THERE IS POTENTIAL FOR SERIOUS INTERFERENCE FROM THE TRANSMITTER TO THE RECEIVER.

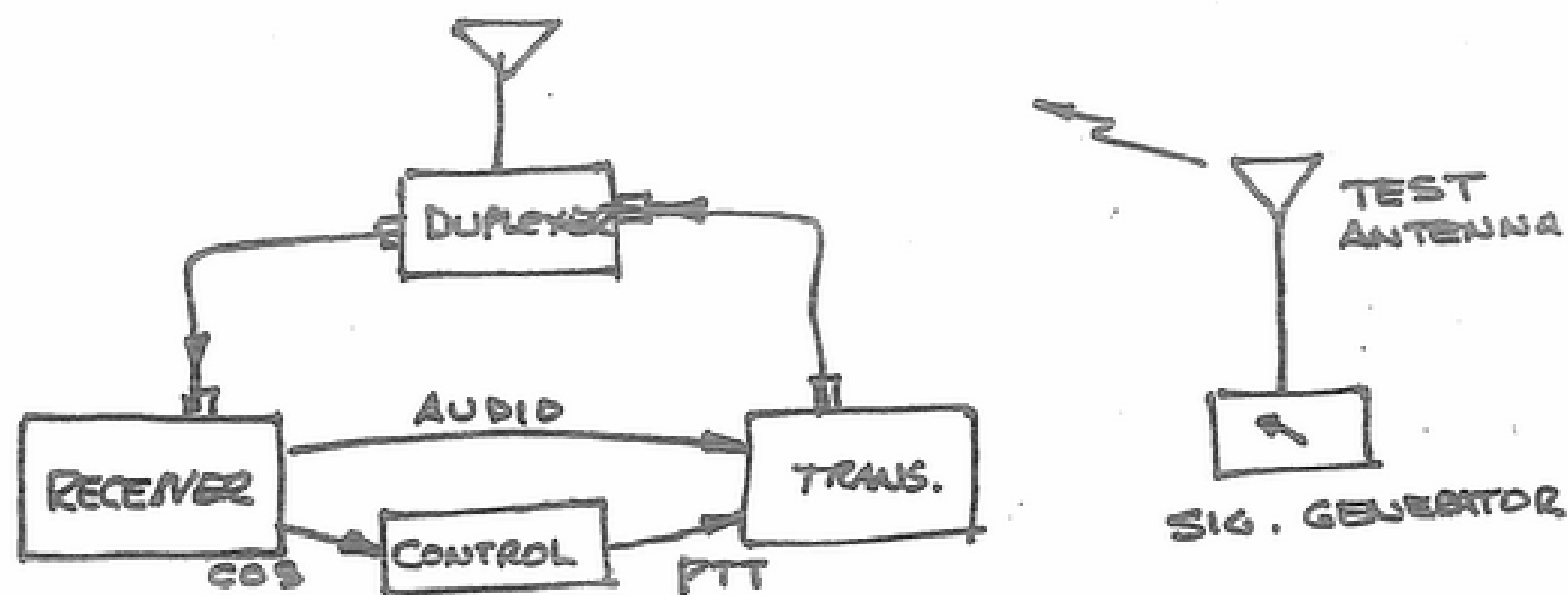


FIGURE 1. REPEATER BLOCK DIAGRAM

REPEATERS DO NOT HAVE TO HAVE A DUPLEXER AS SHOWN IN THE FIGURE, IF TWO ANTENNAS ARE USED AND THEY ARE SEPARATED SUFFICIENTLY TO GET THE NECESSARY ISOLATION. ON TWO METERS, THE CONVENTIONAL FREQUENCY SEPARATION IS 600 KHZ. ON 220 MHZ, IT IS 1.6 MHZ. ON 450 MHZ, IT IS 5 MHZ. THE LOCAL SIX METER REPEATER HAS 155 KHZ SEPARATION. AS THE FREQUENCY GOES UP, THE SEPARATION HAS TO BE GREATER TO GET THE SAME PERFORMANCE. THIS IS BECAUSE OF THE CHARACTERISTICS OF RESONANT CIRCUITS. THE 'Q' OR QUALITY FACTOR OF A TUNED CIRCUIT LIKE FOUND IN A RECEIVER OR TRANSMITTER IS LIMITED BY MECHANICAL CONSTRAINTS. THE 'Q' DETERMINES HOW SHARP THE FILTER IS, OR RATHER, HOW WELL IT REJECTS AN UNWANTED SIGNAL. TRANSMITTERS, THEREFORE HAVE A LIMITED ABILITY TO FILTER NOISE AND SIDEBANDS GENERATED BY THE AMPLIFICATION AND MODULATION PROCESS THAT FALL ON THE RECEIVER FREQUENCY. RECEIVERS LIKEWISE HAVE A LIMITED ABILITY TO FILTER ENERGY ON THE TRANSMITTER FREQUENCY AND KEEP IT FROM THE FIRST ACTIVE DEVICE. A CERTAIN AMOUNT OF OFF FREQUENCY ENERGY WON'T HURT BUT IF IT BECOMES TOO GREAT IT WILL CAUSE THE RECEIVER TO RESPOND AS THOUGH IT IS RECEIVING A SIGNAL. GAIN OF STAGES STARTS GOING DOWN AND APPARENT SENSITIVITY TO ON FREQUENCY SIGNALS IS DECREASED. THIS IS CALLED DESENSITATION, OR, DESENSE.

THE AMOUNT OF ISOLATION NEEDED BETWEEN A TRANSMITTER OUTPUT AND RECEIVER INPUT DEPENDS ON THE DESIGN OF THE EQUIPMENT. A TRANSMITTER OF GOOD QUALITY, PROPERLY TUNED, CAN BE OPERATED NEAR A RECEIVER WITH LESS ISOLATION REQUIRED THAN A LESSER QUALITY TRANSMITTER. LIKEWISE, SOME RECEIVERS LEND THEMSELVES TO REPEATER DUTY BETTER THAN OTHERS. FOR THIS REASON SOME REPEATER GROUPS HAVE HAD SERIOUS PROBLEMS WITH REPEATER PERFORMANCE WHEN THE WRONG EQUIPMENT WAS SELECTED WITHOUT COMPENSATION WITH ADDED SELECTIVITY OR INCREASED ISOLATION. WITH SOME EQUIPMENT, 50 DB OF ISOLATION IS SATISFACTORY. WITH OTHER, 120 DB IS INADEQUATE. FOR EXAMPLE, ONE REPEATER GROUP ATTEMPTED TO USE A 140 WATT KLM AMPLIFIER ON A LOCAL REPEATER. THE RESULT WAS SEVERE DESENSE BECAUSE THE AMP WAS NEVER INTENDED FOR THAT APPLICATION. INHERENT NOISE AND LACK OF FILTERING GOT 'EM.

WHAT BROUGHT THE SUBJECT OF SENSITIVITY TO MIND WAS A PROBLEM WITH ONE OF THE REPEATERS THAT WAS CORRECTED LAST WEEK WITH THE HELP OF RON, W5EAI. THE REPEATER HAD BEEN SHOWING SIGNS OF DESENSE FOR SEVERAL MONTHS AND I ASSUMED IT WAS PROBABLY CAUSED BY A TRANSMITTER TUBE GOING SOUTH. THAT IS PROBABLY ONE OF THE MOST COMMON CAUSES OF DESENSE THAT OCCURS AFTER THE EQUIPMENT IS IN SERVICE FOR A WHILE. IN THIS CASE, THE PROBLEM WAS A DEFECTIVE COAX CABLE IN THE CABINET BUT THAT IS NOT THE POINT OF THE STORY. THE METHOD OF FINDING IT IS WHAT I THOUGHT MIGHT BE INTERESTING.

WHEN DESENSE GETS SEVERE IT CAN BE DETECTED WITH A WEAK SIGNAL REMOTE FROM THE REPEATER. WITH A SIGNAL GENERATOR OR OTHER ADJUSTABLE SOURCE, THE LEVEL OF THE SIGNAL CAN BE BROUGHT UP UNTIL THE REPEATER



IS TRIPPED. IF THE RECEIVER SENSITIVITY IS BEING AFFECTED BY THE TRANSMITTER, IT MAY GO LOW ENOUGH FOR THE CARRIER OPERATED SWITCH TO RELEASE, DROPPING THE TRANSMITTER. MOST CONTROL CIRCUITS INCORPORATE HYSTERESIS, THAT IS, IT TAKES MORE SIGNAL TO ACCESS THE REPEATER THAN IT TAKES TO HOLD IT IN. THIS HELPS REDUCE CHOPPING TO SOME EXTENT. IF THE DESENSE IS GREAT ENOUGH, A WEAK SIGNAL, HELD STEADY, WILL CAUSE THE REPEATER TO CYCLE ON AND OFF. WHEN THE TRANSMITTER COMES ON, SENSITIVITY OF THE RECEIVER DROPS, AT THE END OF THE SQUELCH TAIL TIMER, TRANSMITTER CUTS OFF, RECEIVER SENSITIVITY RETURNS AND THE CYCLE CONTINUES.

RECEIVER SENSITIVITY IS EASY TO MEASURE WITH THE PROPER EQUIPMENT. A CALIBRATED SIGNAL GENERATOR IS CONNECTED TO THE RECEIVER AND LEVEL REQUIRED TO GET DESIRED RESULTS IS INDICATED ON THE GENERATOR. DESENSE IS A LITTLE MORE TRICKY, BUT NOT MUCH. THE GENERATOR CAN BE CONNECTED TO THE SYSTEM IF PROPER MEANS ARE TAKEN TO NOT DISTURB THINGS ...INCLUDING THE GENERATOR. THE METHOD WE USED WAS SIMPLER. THE GENERATOR WAS CONNECTED TO A TEST ANTENNA AND ALLOWED TO RADIATE. RECEIVER AUDIO WAS MONITORED TO DETERMINE WHEN AN ACCEPTABLE SIGNAL WAS BEING RECEIVED. BY COMPARING SIGNAL LEVELS ON THE GENERATOR DIAL WITH THE TRANSMITTER TURNED OFF AND ON, THE DESENSE CAN BE MEASURED. FOR EXAMPLE, IF IT TAKES 100 MICROVOLTS WITH THE TRANSMITTER OFF AND 200 MICROVOLTS WITH THE TRANSMITTER ON, THE DESENSE IS 6 DB. THIS IS EQUIVALENT TO A WALKIE TALKIE TRYING TO USE THE REPEATER DROPPING IN POWER FROM ONE WATT TO 250 MILLIWATT.

FINDING THE DESENSE CAUSE IS JUST A MATTER OF HUNTING AND TRYING DIFFERENT THINGS. IF THE TRANSMITTER IS DISCONNECTED FROM THE DUPLEXER AND CONNECTED TO A DUMMY LOAD AND THE DESENSE PERSISTS, THE PROBLEM IS IN TRANSMITTER SHIELDING. IF THE DESENSE GOES AWAY AND REAPPEARS WITH THE DUMMY LOAD CONNECTED TO THE DUPLEXER PORT, THE PROBLEM MAY BE IN THE DUPLEXER. THAT IS THE LAST ITEM TO MONKEY AROUND WITH THOUGH IF PROPER EQUIPMENT IS NOT AVAILABLE TO TUNE IT. RECEIVER SHIELDING CAN BE A PROBLEM IF THE ANTENNA IS CLOSE OR THE TRANSMITTER SHIELDING IS NOT SO GOOD. DOUBLE SHIELDED COAX SHOULD BE USED IN THE CABINET AND EVERY ATTEMPT MUST BE MADE TO KEEP RECEIVER SIGNALS AND TRANSMITTER SIGNALS FROM GETTING TANGLED TOGETHER.

ELMO, W5JCB, TELLS ME THAT IN COMMERCIAL SERVICE, MAXIMUM DESENSE THAT CAN BE TOLERATED IS ONE DB. AFTER CORRECTING THE PROBLEM, WE MEASURED THE DESENSE AT .24 DB, WHICH IS PRETTY GOOD BUT IT CAN BE REDUCED TO ZERO, I THINK. THAT FIGURE MOVES THE PROJECT PRETTY WELL DOWN ON MY LIST OF PRIORITIES NOW. JOE, K5JB

#### SET

AS I TYPE THIS, WALL CLOUDS, ELEPHANTS, LIONS, FLOODS, AUTO CRASHES, ALLIGATORS, AND ANTENNA EATING TERMITES ARE DEVASTATING THE AREA, SIMULATED, OF COURSE. SIMULATED EMERGENCY TEST, UNDER DIRECTION OF KB5BS, AND HENCHMEN, IS WELL UNDER WAY. I COULDN'T RESIST THE TEMPTATION TO GET IN THE ACT SO I GOT ON 34/94 AS A SIMULATED 'LID'. WHEN I STARTED 'QR ZEDDING' THE FREQUENCY, BOB, W5HXL, PICKED UP ON IT AND WE FRAZZLED THE POOR NET CONTROL OPERATOR, I BELIEVE IT WAS FRED, WD5CXW, OPERATING W5LOW. THAT'S THE WAY IT GOES FELLOWS. IT GETS HECTIC AND NOT ALL OPERATORS COOPERATE WHEN THE REAL THING HAPPENS.

I'M SORRY I DIDN'T GET DOWN TO THE RED CROSS BUT I AM UNDER PRESSURE OF TIME TO GET SOMETHING OUT FOR C&E BEFORE I LEAVE AGAIN FOR NEW YORK. I HOPE THAT THIS TRIP DOES IT FOR A WHILE. I HAVE ENOUGH HOME PROJECTS BACKLOGGED TO LAST 'TIL SPRING. I AM SURE SOMEONE WILL MAKE A MORE COMPLETE REPORT ON SET. IT SOUNDED LIKE A GOOD ONE FROM WHERE I SAT. JOE, K5JB

FOR SALE HEATH SB-101 WITH 400 HZ CW FILTER AND ALL THE MODS EQUAL TO OR BETTER THAN SB-102 WITH HOME BREW POWER SUPPLY AND SHURE 440 MIKE, \$375. OUTBOARD VFO FOR SB-101 \$100. BOTH FOR \$350 JOE, K5JB, 732-0676, HOME OR 329-8920, OFFICE.





MEETS: 2:30 PM <sup>1st</sup> Sunday. Location varies. See Text.  
PRES Marvin Stokes WA5JHB 893-2221  
V-P Ted Vanlangham WD5JNT 262-1675  
SEC/TR Ralph Wilder WA5PFK 623-5421  
CLUB EDITOR Virginia Beneda, WB5WTH, 825-3302



The first Sunday in December found the Wheatstraw ARC meeting in the Country Fare Restaurant for their annual Christmas Dinner Meeting. The day was beautiful, the food delicious, and the fellowship delightful; the only way the day could have been improved was for everyone to have been present. A count of 40 entered the "Chow Line" and after everyone was too stuffed for any "Back-talk" the President WA5JHB called the meeting to order and had everyone introduce themselves and their guests. The minutes were read and approved then the president started serving "left-overs" from November. (Or old business as most people call it).

K5GGL reported the offer for the tower had been declined as there was more section of tower than had been previously reported, so a motion was passed to delegate the purchasing committee to proceed at their own discretion. Question of the traffic net was discussed and was decided rather than hold a formal net to have an informal check-in to pass any pending traffic as the frequency is usually monitored and members are always willing to help. By the way, if anyone needs any help with the alphabet just contact K5GGL - Of course he begins with Z but does a super job!!!

New business included a gift of \$70. being made to Crippled Children's Hospital, we were reminded of CORA dues and a report on the CORA meeting was made by WB5JNT, K5VRL reported on the 34-94 repeater, and we were also reminded that our own Wheatstraw dues are now payable. To date we have approximately 35 paid memberships.

Election of Officers was held and President for the coming year will be WB5JNT, Vice-president AB5Z, Sec-Treas WA5PFK, and Reporter "Old Bean Head" WB5WTN, however the new presidents first unofficial action was to promise the reporter to double the salary. Boy! does he campaign!!!!!!

Net control for December is former president WA5JHB. Check-ins have been good but could be better. "Good Ole'Marvin" almost got stuck on 13 last week.

Must hurry and get this to the Pony Express office. Check in to the net for the next meeting place.

#### REMEMBER



"Keep CHRIST in Christmas"

And have a Happy one

73 - WB5WTN



# CHOCTAW ARC

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

CLUB EDITOR R. G. Edwards

I'm just setting here minding my own business--now that's a unique experience--trying to figure out what to say versus what needs to be said--what should be said--what will be said! Oh well, enough is enough, already. .-. .-. .-. .-

Just minding my own business means reading the latest C&E and really enjoying it. Don't think I would care to get along without it. I've been especially enjoying the Z.N.F. by Joe. It seems to be a mixture of wit, tempered with common sense and a liberal amount of serious thought. I've found many words of good advice from Joe, but particularly those slurred KA's. Having broken this call in on 2 meters (metres) quite some time ago I would like to say that people eventually get used to something new. Sometimes though, it goes like this:

KA5---, listening...kerchunk. K5--- this is WB5---kerchink. Roger WB5--- this is Kaaa Aaaa 5 ---, Kilo Alpha 5 --- name is Rick, in Choctaw. You have a real good signal here. WB5---this is Kaaa Aaaa 5---Kerchunk. Roger K5---this is WB5--- name of Jim and I read you 59 also! Sound familiar??? What to do???

FIRST CONTACTS: Having been around for a little while and having gained some Ham experience, I thought it would be refreshing to share a few of our members' first QSO's.

- 1 3D5ITV/WN5KAA/KN5WYT--"Its been so long ago, I only remember his call sign.  
(K5SAH) I was using a long-wire, an old military receiver and, oh yes, an  
home-made transmitter." EDITORS NOTE Remembering all that and not the  
contact? May be more here than meets the eye! HI!
- 2 AB5H--Frank said he could go all of 5wpm(times do change)and got a QSO in  
Dallas. The fellow was an Extra class(even made a phone call for Frank)  
and they had a regular session for 2 hours. 2 cw nuts and 1 other on the  
telephone--what a combination.
- 3 K5UV/WN5KHW--Mike got his first QSO in 1964 using a DX-40 into an inverted  
V antenna and a BC-342 receiver. 75% and crystal control. It was with  
WN0JYA in Denver and Mike couldn't find his pencil. That makes the first  
time he tried it in his head. Don't even know if Mike owns a pencil now.
- 4 K5EQQ--D.L. made his first contact with a guy in Ringold, Okla. He said  
it "scared the tar"out of him, but he sweated through it though. Since  
there is a Ringold, Tex., D.L. was sure having a hard time making a TX  
out of an OK. That's what they call a desire for DX!

Now, what does all this prove? Just simply that not everyone managed to forget all their Morse Code, that's all. But even at that, they had their share of problems.

I want to take this time to give some thanks where it is very much due. We seem to have several of those "Un-sung Heroes" so here goes. He provides a laugh for all of us occassionally, not to mention the generator for FD and the one and only 2 meter contact for FD also. He is also able to provide a very interesting program when nothing else has been lined up. All this, and much, much more--and still has time for Amateur Radio. Now who could this mysterious person be? Why, Tony(WB5PNH) of course! Thank you Tony, for a job well done, from all of us in Choctaw ARC.

CHAIN PULLING--Well, since I've already started, I might as well go down through the list and do a good job right--or a right job good--or a job right good--or--KERCHUNK! KLUNK! Drats, D.L.'s turned the repeater off again.

WB5OHK--Al--He's on the go so much you can talk to him on 3 different frequencies and the phone too. AB5H--Frank--The only Carter to have already been re-elected to another term of office. WB5WHF--Gary--He makes some very good PC boards. K5EGQ--D.L.--Can argue and fuss so much you don't know if you're comin' or goin'. WD5HNO--Jack\*\*Likes 40 meter CW and chewing the fat. KA5ALO--Rick--Well....what can I say?  
WD5ITV--Jim--Been married since July and is still of the honey-moon.  
WB5PNH--Tony--Stays busier than Al. K5UV--Mike--Keeps Frank busy on CW  
W5WZM--Mac--Likes 6 meters and community projects. KA5EOS--Bob--He is a habitual up-graded, up-graded, up-grader(finally got it right) (more)



CHOCTAW  
AMATEUR  
RADIO  
CLUB

Welcome to our repeater  
147.69/.09

AE5N--Don--A much sought after celebrity in all the clubs. W5FUD--Ralph--  
The only out of state member. WD5EVP--Bob--Likes food better than me.  
N5ARV--June--She is going to be writing these articles very soon. Hee Hee.  
N5AZP--Leon--Just had to tell someone,"get your license,and I'll give you  
this radio." WB5FIJ--Mary--She likes Amatuer Radio AND watermelom AND Leon.

I'm also reminded of the fact there is a new Ham on the 2 meter band. I've  
known him for about forever--well anyway 15 years or so. His name is Jim and  
his call is KA5GOM, so if you hear him, say hello.

By the time this is in the C & E, most of the pre-Christmas dinners will be  
behind us and Christmas will be in the front of our minds. Always remember the  
real meaning of Christmas, have a good New Year and help CORA to grow as much  
next year as it has this year. Also, remember to console or congratulate that  
Ol' K5NK for his courageous action of getting of the HF Phone band.

Rick KA5ALO

FOR SALE: Pentax K-1000 special edition. Almost new, in excellent con-  
dition. 15 months warranty still in effect. 50 mm F:2 lens, original  
boxes, manuals & receipts. Robbie Reid, WB5VXL, 321-0077. \$170.00.

WANTED: Help! I am having trouble with the carburator and/or automatic  
choke on my "68 Dodge. A couple of garages have tried but they seem to  
make it worse. Surely there is an amateur (radio, that is, not mechanic)  
who can help me get it running right - for a fee of course. The problem  
is driving me nuts. Joe, WA5ZNF, phone 737-1044.

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5-10





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

#### THE CASE OF THE FALLING LADDER

CHUCK WILHITE - K5NK

One day recently, I volunteered my services to a friend, a local ham, to install an antenna on the roof of his apartment. I won't give his call so as to protect him, but we will use the name of Mark for identification purposes only.

Mark is a very active amateur, but his operating time has been severely hampered by the lack of a suitable antenna for the high frequency bands. He had tried everything from mobile whips to wet noodles, and found by and large that he seldom could get out any farther than his downstairs neighbor's stereo set. He had spent hours scheming and devising methods on how he could improve his antenna farm and finally come up with the brilliant idea that a roof mounted vertical was his answer.

He had one major hurdle to overcome. He did live in an apartment complex and rules that he had to abide by said that nothing could be mounted on the roof. Mark is a very outstanding young man with a brilliant mind. Somehow, somehow, he sweet-talked the lady manager of the apartments to let him do something he wasn't supposed to do, that being install the antenna on the roof. He had kept his eyes open and noticed a ladder hanging on the side of one of the buildings near the swimming pool. Likely this was used to pull drowning victims out of the pool, but Mark had a better idea on how to use the ladder. By placing it on the steps leading into his apartment, one could actually reach the roof with little or no effort.

This is actually where I entered the story. It was a beautiful morning with very little wind and the sun was shining brightly. I arrived at Mark's apartment about 10:00 in the morning and he had all the preliminaries out of the way. In order to identify his wife, we will call her Kay. She had left for work, but she had left a large pitcher of iced tea made for me. Kay is a sweet young lady and knew that I was very fond of iced tea. The only thing that was lacking was the ladder, so we cautiously made our way to the swimming pool area to fetch our weapon. No one saw us for it was really too cool to be out sunbathing and most of the folks who live in the apartments had gone to work. We noticed a couple of fellows walking around the area, but they had jackets on identifying them as Home Box Office personnel.

We got the ladder and cautiously made our way back to the apartment. We breathed a sigh of relief since we made the trip without hitting any trees or the sides of the buildings. So far, so good. Up the steps we went, placed the ladder against the roof and started hauling the antenna, radials, tools, etc. up, trying to be as quiet as possible. Finally, there we were, two stories in the air with all our goodies. Mark had everything so well planned out that nothing could go wrong now. But, it did. The U-bolts wouldn't fit as he had planned. I couldn't believe that anyone as systematic as Mark is could make such a blunder. Anyway, off I went to all the local hardware stores trying to find larger U-bolts, without success. I returned to find Mark still on the roof and he had figured out a way to raise the beast. So, now all we lacked was stretching the radials out and stapling them down.

We labored feverishly for some time and finally got all the radials routed around air conditioners, drain pipe vents (whew, stout man, I should have waited for that sinus operation), and all the other paraphernalia which cluttered the roof. Feeling that he was stretching his luck as it was, Mark had decided to not put the vertical high enough in the air so that all the radials would droop down in a 45 degree angle. He decided to simply let these lie along the roof and used his staple gun to tie the ends down. Staples were driven into the tar and gravel of the roof and to make sure that no leaks would come in the roof, Mark made sure that all the staples were covered good with loose gravel. Smart, huh? I already said he was systematic.

All of this had taken a little more time than we had thought and we hadn't noticed that the wind had picked up in speed, although we had noticed that it was getting cooler. I don't think anyone knew we were on the roof since we had been so quiet. The HBO boys were busy at their work and the only others around were some folks on the other side of the street pouring a concrete driveway. And then all things broke loose. We all of a sudden heard this loud banging noise, loud enough to wake the dead. Words can not be written to explain the expressions on our faces when we realized that our ladder had fallen down and had managed to hit every step on the way





down. Boy, you talk about a pickle, we were in one.

We finished up our project and then Mark asked one of the most stupid questions I have ever heard. He asked, "Chuck, how are we going to get down from here?" I gave him my best answer and told him that I didn't know how he was going to get down, but after he got down, he was going to put the ladder back up and I was going to walk down the ladder. I sure wasn't going to jump off.

Mark is seldom seen without a two meter talkie strapped to his side, but this time he didn't have it. All this time, the HBO boys had been getting closer to us and I finally figured out that Mark wasn't going to jump off, so very quietly, I called one of them and asked him if he would do me a big favor. He laughed and came over and put our ladder back up. Boy, what a relief.

We got down off the roof in good shape, although it was my quck thinking that did it. We had to make several more trips to the roof for adjustments on the antenna and we made sure the ladder was pulled up after us. We finally finished our job and returned the ladder to its normal resting place.

To pay me for my efforts, Mark bought me a big steak and I knew the entire ordeal was well worth it. It was just another one of those things to look back on and get a good laugh about.

Just in case a similar article appears elsewhere in this issue of the C & E, this is the way it actually happened.

#### CLUB NEWS

It's pretty difficult to come up with anything of importance for this month's issue due to the fact that this is a short month. I am going to assume that the Christmas party was a real success with a good turnout and folks won the white elephant gift that they had always wanted. More will be reported on this in a later issue. The Executive Committee meeting has not been held at this time. A tentative date and place was picked out, but due to some of those who should be present being out of town, this was called off. Everyone will be contacted at a later date. One of the most startling things that happened was Mr. Reuben Castleberry, WD5FKF, almost got out of amateur radio completely. He had threatened to send his license to Dallas, but had a change of heart and instead bought back his beloved Drake TR-7. Now, he is back on if full force. We sure thought we were going to lose him to the criminal band again. This was of great concern to me, for he is one of my favorite people to write about and if he had carried his threat through, I would have had to look among the ranks for a replacement. K5NK

#### NEW YEAR'S RESOLUTIONS

I resolve to make at least one contact on the high frequency bands this year if I can get the rig away from Mark. Kay, WD5DYJ

I resolve to try and keep the same rig all year and do no more swapping if at all possible. I love, love my Drake TR-7. Reuben, WD5FKF

I resolve to try and get a 70 over S9 report this year by golly. John, WD5FXP

I resolve to stay on my side of the road this year and to stay away from those big old mean trucks. Clara, WD5KFT

I resolve to be nicer to people this year in my columns. Chuck, K5NK

I HEARD: FKF gives all drivers courtesy and the benefit of a doubt.....CXW is a slowpoke.....FKF blows kisses to men drivers who irritate him out on the streets.....FKF has all the trees named on the Turner Turnpike between Oklahoma City and Tulsa.....FRQ and his Rinky Dinky Do.....YLZ telling off colored jokes.....FXP almost had a wreck eyeing a pretty girl walking down the street.....TKG gets fouled up too easy.....FKF fixing to start a war with his new neighbor.....FKE squatting and laying an egg as he waited for a golden train to pass.....FKF has a soft spot in his heart for lawmen.....FRQ bought a jail in Anadarko.....KFT has a chauffeur to take her to all the club Christmas dinners.....JJ missed a city council meeting to make the MORI dinner.....and a whole lot more. K5NK





Attention Mr. Chuck Wilhite, this is WA5CZN with the latest news. Today's date is December 8, 1979 and we have here in the studios Mr. Charles H. Plemmons, otherwise known as WA5EYV, the famous inventor of the Plemmons 80 Meter Flushomatic. Ok, Mr. Plemmons, I wonder if you would consent to sharing with us some of the things that you have experienced with the 80 Meter Flushomatic antenna that you have devised sir? We would like to share it with our reading audience.

WA5EYV: Do you want a technical discussion about this antenna or would you like a non-technical discussion Doc?

WA5CZN: Well, let's see if we can meet somewhere down the middle of the road.

WA5EYV: Oh, alright, well, we could possibly go way back in time when I first ever heard about it on the air, way back early in the sixties, where I used to hear some folks talk about it, putting commode balls on their antenna at which time I also chucked a little bit like most of the other people on 80 meters do that hear me say it today. However, the more I thought about this over a period of years, the more concerned that I began to get about this fact, and at one time, when I was up in Alaska, I learned about an antenna called a Double Bazooka, one that the handbook speaks very vaguely about and doesn't give much coverage on it. But, I found out that a Double Bazooka antenna is probably for an inverted vee or a flattop dipole, one of the most efficient antennas on 80 meters than I have ever run across, with the exception of a beam or some other massive array. However, for a single dipole, I have found that a Double Bazooka is extremely hard to beat for a simple antenna. So, I came up thinking about this commode ball thing at some later date after I had used this antenna for several years and I decided to put the commode balls on the end of it, brass commode balls, you can't use plastic of course because you want this thing to be part of the antenna and not part of the insulating end of it. So, I installed a set of brass balls on my antenna, one on each end and immediately had to remove a foot or two of wire from the antenna because of the added capacitance to the end of the antenna to get it back on the same original resonant frequency, which in my case is 3834. I found that the commode ball antenna is a very efficient device and I think it made the antenna a little more efficient with commode balls on it than it was before I put them on there. It also tends to keep the corona off the ends of the antenna during periods of high moisture in the air while running the legal limits of power and that will also remove a little bit of problems, TVI problems and other things if you have corona problems. So, I have found that since I have added the commode balls, it has not only been a very controversial and funny subject, but it also works very well. So, in order to try to show some of the fellow amateurs around Oklahoma City how well my 80 Meter Flushomatic works, I have donated to El Supremo one each, genuine, Plemmons built, Flushomatic for him to test and see if he doesn't like it a little better. Is there anything else you would like to know about this antenna?

WA5CZN: Yes sir, Mr. Plemmons, is there any particularly distinguishing characteristics about the Flushomatic antenna other than the commode balls, in other words, does it look to the casual observer to be an inverted vee antenna?

WA5EYV: Oh, yea, it looks just like a regular inverted vee that has open-wire feeders out on the end, characteristic of the Double Bazooka design, with 300 ohm open-feeder on the end there, 17 feet on each end to be exact, on 80 meters, right close to 17 feet if I remember. It has to be tuned a little bit depending upon the particular characteristics of your own installation. Doc, I see you are looking in the new handbook for the Double Bazooka antenna. I don't know if they even included it in here or not. The new 1980 model A.R.R.L. handbook has apparently completely removed the Double Bazooka antenna from the text of the book unless they put it somewhere else.

Particularly, I use RG-58 to build the antenna out of for the simple reason it's cheap and secondly, it doesn't weigh very much and if you can keep the weight down on the antenna, it doesn't present a problem to stretch it out whereas if you use RG-8, it becomes a lot of problem to put that much strain on the ends of it to hold it up. So, feed it with RG-58, clear from the antenna to the house. I do run 2 KW p.e.p. input on my linear and approximately 1000 watts output p.e.p. to the feed-line of the antenna and I have for the past several years run this same antenna, in-





cluding in Alaska and I have had excellent luck with it and no great amount of problems except a little bit of strain problems on the center of it which I have rectified most recently with strain relief insulators.

I have been very tempted to add a double set of comode balls on the end of it and see just how much more effect it would be. I can't put too many because of wind loading, but I would like to put a double pair on and see if it works.

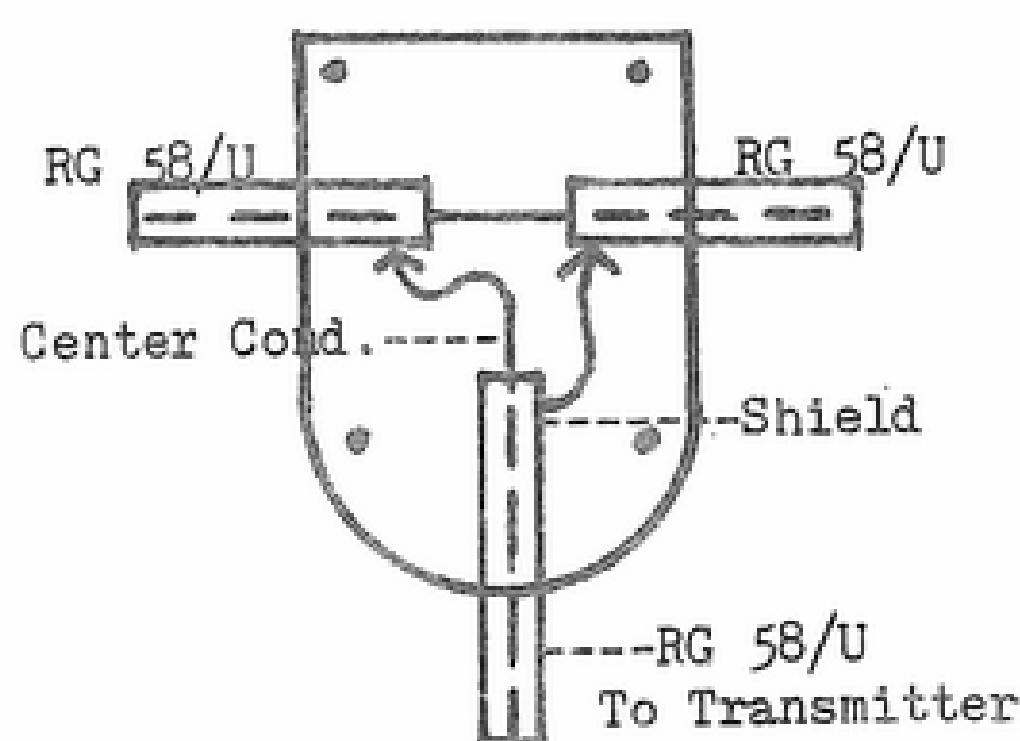
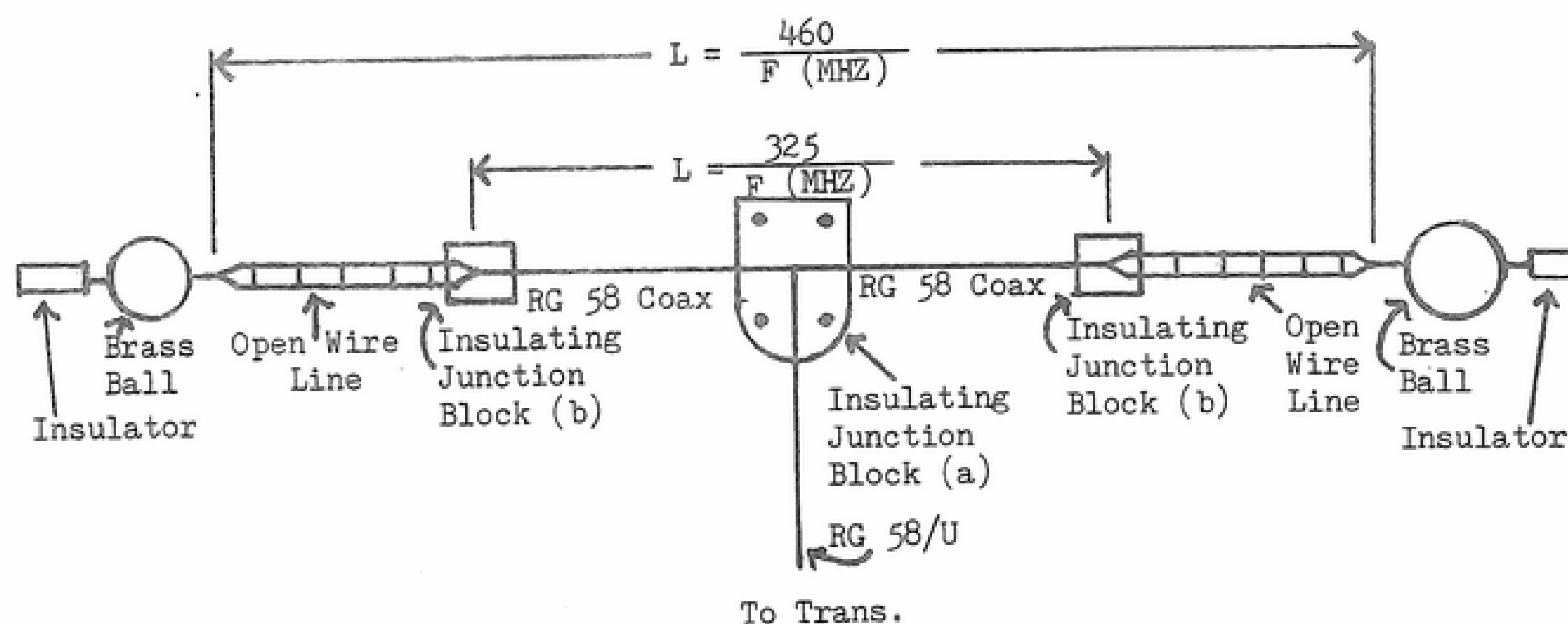
WA5CZN: I have one last question Charlie, is it true that you use a sealcock at the feedpoint?

WA5EYV: Definitely. You need one about 12 inches long to keep the water from freezing back on you. You have a little bit more wind up there than you have down on the ground level so it has a tendency to freeze from the top down.

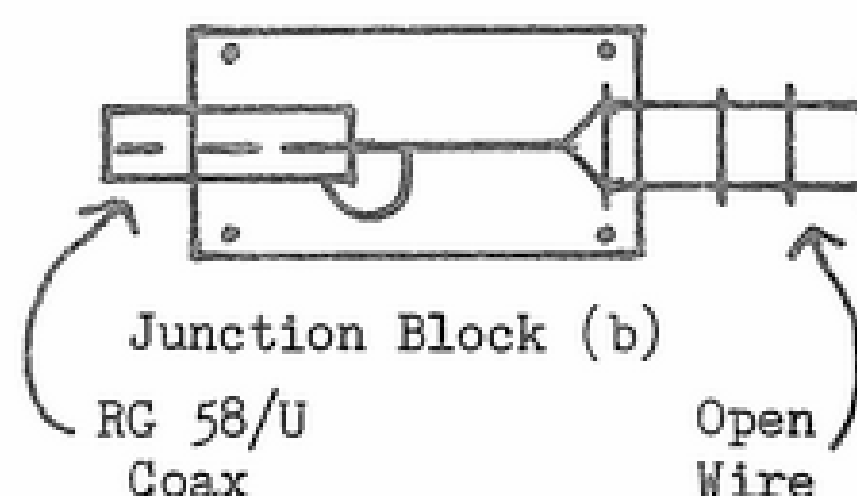
WA5CZN: Well, thank you sir, we appreciate it.

WA5CZN

# PLEMMONS FLUSHOMATIC ANTENNA



Junction Block (a)





LEAGUE INC

LEONARD HOLLAR WA5FSN

IN A DISCUSSION ON THE NIGHT OWL NET THE OTHER NIGHT, IT WAS BROUGHT OUT THAT THE INFORMATION PUBLISHED IN QST DID NOT GO INTO DETAIL ENOUGH ABOUT NET OPERATIONS HERE IN OKLAHOMA. THEREFORE, IN ANSWER TO THAT REQUEST, HERE IS THE INFORMATION THAT I HAVE AS OF DEC. 7TH. WHEN THE MONTHLY QST COLUMN WAS WRITTEN.

NET.	SESSIONS	QNI	QTC	WX
O.P.E.N.	4	255	6	
O.L.Z.	30	221	62	
O.N.O.N.	30	665	46	
O.A.N.	30	207	30	
S.T.N.	26	539	124	
O.T.W.N.	26	488	27	331

I, ALSO HAVE REPORTS FROM OTHER LOCAL NETS THAT DID NOT PROVIDE ANY OF THE ABOVE INFORMATION.

ANOTHER FIGURE THAT IS INTERESTING TO ME IS THE TRAFFIC REPORTS FROM THE VARIOUS OPERATORS. IN NOVEMBER, WE HAD 235 ORIGINATIONS; 895 MESSAGES RECEIVED; 1112 MESSAGES SENT AND 93 DELIVERED, FOR A TOTAL OF 2335. THESE FIGURES ARE ACTUALLY A GOOD SAMPLE OF THE TRAFFIC HANDLED. AS MANY STATIONS DO NOT REPORT THEIR ACTIVITIES TO THIS WRITER. THIS IS PARTICULARLY TRUE OF THE OCCASIONAL TRAFFIC HANDLER, WHO SENDS OR RECEIVES MAYBE ONE OR TWO A MONTH. WE APPRECIATE THESE OPERATORS COMING IN AND HELPING OUT. I FEEL THAT THE GROWTH OF OUR LOCAL NETS WILL FURTHER HELP OUR ACTIVITIES AND INCREASE INTEREST.

THE LOCAL NET WILL BE THE BACK BONE OF ANY A.R.E.S. OPERATION IN AN EMERGENCY OR IN WORKING WITH 'SKY WARN' DURING INCLEMENT WEATHER.

NEXT MONTH, I WOULD LIKE TO GO INTO TRAFFIC COUNTING WITH YOU. ALL OF THIS HAS BEEN LEADING UP TO ONE THING THAT ALL SCM'S ARE AFTER; MORE INFORMATION FOR THE MONTHLY COLUMN. WE ARE ALWAYS OPEN FOR MORE NEWS OF GENERAL INTEREST. I AM ALSO VERY HAPPY TO HAVE THE COLLECTOR & EMITTER TO HELP ME SPREAD ANY INFORMATION DESIRED, OR ANSWER ANY QUESTIONS OF GENERAL AMATEUR INTEREST. BUT!! YOU MUST LET ME HEAR FROM YOU.

I SEE IN QST THAT THE S.W.O.R.A. OF ALTUS IS THE ONLY 100% AFFILIATED CLUB THAT WE HAVE IN OKLAHOMA. WHY?? I CAN REMEMBER NOT TOO LONG BACK WHEN WE HAD SEVERAL.

THE OKLAHOMA REPEATER SOCIETY WILL BE MEETING ON JAN. 12TH IN WOODWARD. I URGE ALL INTERESTED VHF OPERATORS TO ATTEND AND HELP MAKE THIS THE ORGANIZATION THAT IT SHOULD BE; ONE OF THE BEST IN THE NATION.

\*\*\*\*\*

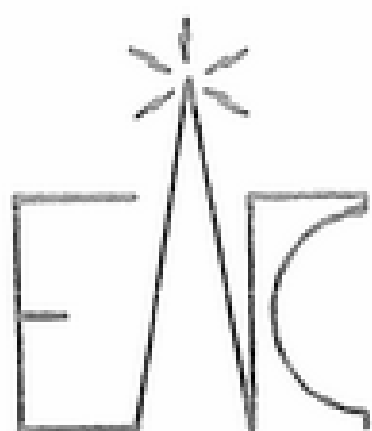
#### WEATHER WATCH - WEATHER WARNING

Wednesday morning, 12 December. As I type this I can look out and see ICE on my driveway and in the street. Tonight I shall attempt to drive to the Red Cross and put the C&E together - but - for the rest of the winter, if there is ice or snow on the streets on the Wednesday night we edit and/or mail the C&E I won't be there and it will have to be re-scheduled. I will call everyone I can but maybe you had better call me to see if all is GO. If the weather stays bad mail your copy in. Fold it softly and it will go in a #10 envwlope. If any young, adventurous type wants to fill in for me on that kind of night I will be glad to train them in advance, in fact that needs to be done anyway. Joe, WA5ZNF

\*\*\*\*\*

Due to the short time between the December issue and this one your expiration dates on the address label may not be current. No need to bug your secretary - we will have it caught up next month.





MEETS: 7:30 pm 1st Monday.  
G.E. 3228 N Santa Fe  
Pres Robert Shaw WA5BQX 341-4763  
V-P Mendell Cochran WB5ISO 943-4308  
Sec/TrStan Van Nort WB5UIY  
EDITOR: Stan Van Nort

MERRY CHRISTMAS and HAPPY NEW YEAR from the Officers of the  
EDMOND AMATEUR RADIO CLUB...

#### MINUTES OF THE REGULAR MEETING 11/5/79

The meeting was held at Maurice Wood's house instead of usual location at the General Electric Company. The meeting was called to order at 7:35 PM by Pres. Bob Shaw. Minutes and financial report was read and approved. Then the nominating committee was given the floor. Larry Dillard, the chairman, presented the following recommendations for officers... Harold Plunk-Pres.

Bob Shaw-Vice-Pres.

Stan Van Nort-Sec./Treas.

There were two other nominations from the floor and then secret balloting commenced. The results was unanimous for the above listed slate of officers. The new officers will begin their duties on Jan 1st.

Old business continued with the discussion about changing the membership application and requirements. The pres. called for a vote to determine whether or not there should be a committee to study the problem. The vote passed by a margin of one and the pres. will appoint the committee later.

New business started with the announcement that Deeds Bigelow will host the December dinner meeting at his house. The menu will be Chili & Stew and everyone agreed to exchange gifts also.

Dennis Orcutt then brought up a problem with the UHF repeater. Seems the PL decoder is clamping badly and not working up to par. The same repeater also needs a new power supply. The Executive committee (all officers) will take the items into consideration later.

Dennis also wanted the club to put up a 220 Mhz repeater to try and collect the \$200.00 offer made in the last C & E. The members voted to investigate the pros & cons of a 220 repeater being sponsored by the club. Dennis will report on it at the next meeting.

There was next a discussion on a club logo, and Harold Plunk will contact an artist to get a permanent designed. This will be used on new stationary and envelopes which the club need to get printed soon.

Motion to adjourn by Maurice and seconded by Deeds.

It was noted that the meeting was quickly adjourned before Larry Dillard could tell his new political joke.

16 members present, no visitors, and 3 wild kids. (Maurice's) After the meeting Ms. Woods served coffee, soda pop, cookies, and brownies. The refreshments were great and plenty to go around since Howard Thompson did not make it.

*Stan* WB5UIY  
SEC/TREAS

#### DECEMBER MEETING (DINNER) 12/3/79

A large crowd turned out at Deed's Ranchito for the second annual Chili & Stew dinner. Those ladies can cook up some outstanding vitals and everyone over indulged. Once again Howard didn't make it so there were left-overs. The high-light of visiting Deed's is a tour of the ham shack and the ladies never understand why all the "boys" are lookin' at the "toys". Needless to say his shack is well equiped and there is always a new radio for all to check-out. Another high-light was John Bohan, Jr. (age 3 mos.) who has now attended more meetings than his dad. Once again we would all like to thank the chef for another outstanding diner. To those that didn't make it-better luck next time..NO RAINCHECKS.



## Central Oklahoma Radio Amateurs

C.O.R.A. IS WORKING FOR YOU. . .

The 1979-1980 Central Oklahoma Radio Amateurs Board of Directors held its November-meeting at 7:30 p.m. on Tuesday the 27th, with president, Chuck, K5NK, presiding. Thirty-one guests and representatives attended--twelve of the now sixteen member-clubs were in representation, and among the guests present were three representatives from the Kadiddlehoppers.

The standard minutes and treasurer's report were presented and approved. Also, Ron, KE5M, brought additional information to the Board regarding C.O.R.A.'s obtaining tax-exempt status. He gave his recommendation in line with C.O.R.A.'s legal obligations, and a motion was made and carried to obtain tax-exempt status.

Bill, KB5BS, gave a report from the Emergency Committee. He stated that there had been two meetings during the month of November, priorities in working with other organizations in the area had been established and a regular meeting night has been determined--the third Monday each month @ 7:00 p.m. at the Red Cross Headquarters, 10th & Hudson. The Simulated Emergency Test (SET) announced at the C.O.R.A. meeting was held Sunday, December 9, @ 2:00 p.m. local time on .34/.94 and 3900 kHz.

The Ham Holiday '80 committees are still working to make this one the best yet!

Results of club poll regarding raising the C & E subscription rates were taken, and motion made and carried to raise the subscription rate per member to \$.25 per member per month with a 25% rebate to any member club for any advertising sold. This increase became effective the December issue of C & E. Thanks to all for your support in maintaining our fine publication.

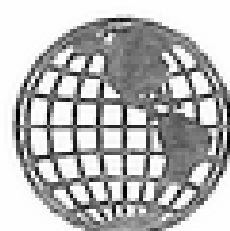
Representatives from the Kadiddlehoppers, Chet Hazelwood, W5GDL; Sam Morgan, WB5ZOY; and E. E. LeFan, WD5GLB, expressed the Kadiddlehoppers' desire to hold their annual get together in conjunction with Ham Holiday '80. After some discussion, the matter was put into the hand of a committee to work with the above reps to determine the possibilities.

Bob, WB5NSV, and Joe, WA5ZNF, gave their report on a possible printer that had been located. After considerable discussion, it was the feeling of the Board that this particular printer was not the one, and Bob will continue to look into the possibilities.

Kay. WD5DYJ

C.O.R.A. Secretary

\* # \* # \* # \* # \* # \* # \* # \* # \* # \* # \* # \* # \* # \* # \*  
# REMEMBER: THERE WILL BE NO DECEMBER MEETING OF C.O.R.A. . . . . . \*  
\* # \* # \* # \* # \* # \* # \* # \* # \* # \* # \* # \* # \* # \* # \*



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## BEARCAT OR BUST--AGAIN?

How many of you loyal C & E Readers are tired of reading the useless drivel that have appeared in recent issues regarding the Bearcat (Nifty) 250? Now raise your hands! Humm. That many. Well, too bad. You'll just have to turn the page and turn to K5JB or K5NK for fast relief. I know that everybody out there doesn't own a Bearcat 250, but maybe you'll take the hint and check under the Christmas tree with more than just a touch of apprehension that Santa is truly a mindreader. In any case. The article last week regarding the use of the Store function to fool the 250's microprocessor and allow it to search certain frequencies outside the published range drew blood or at least the comments of Dennis Werblo of Oklahoma City. Shortly after last month's article appeared in public, Dennis called me to say that he had heard of the technique that I discussed in the article. A discussion of the technique had appeared in a newsletter published in Anaheim, California by RCMA, a club for people into scanners. The out of band search technique first appeared in their March issue. Subscriptions to the publication are \$6.00 and are available by writing P. O. Box 4563, Anaheim, California 92803.

Incidentally, one sharp eyed reader noted that perhaps I had left a step out of the program listed on page 29 and 30 of the article. I rather huffily reread the article. Gulp, he was right. You do need to stop the scanner after opening the scanner squelch to store the limit in one of the 64 storage registers. The thing to do is just stop the scanner by pressing manual after opening the squelch. I just can understand why that happened? It was only two O' Clock in the morning when I wrote that.

Anyway, Dennis had a few extra goodies to add to my article. I wasn't sure how to enter the out of band frequency into the regular 50 channels. In fact, I didn't think it could be done. I did explain that you could press lockout and store the frequency in the 64 channel register for later recall, but not in the 50 channel registers. Well, it can be done and Dennis explained how. All that is necessary is to bring the scanner to the frequency you want. Once the frequency is set on the display, either by scanning to the frequency or recalling it from the 64 channel storage register, turn the scanner off and leave it off for about 5 seconds or so. Turn the scanner back on and dial up the channel you were on and the frequency should be stored in that channel.

Dennis also shed some light on whether or not the scanner actually covers the frequencies that are displayed during these out of band searches. Actually, he has the best approach rather than my primitive ramblings of testing the receiver with my calibrated signal generator. Dennis rather simply measured the frequency of the local oscillator (Well, I thought of it, but really didn't have the courage to dig into the scanner)... Dennis also monitors the front end switching that switches in the various front ends for low, high and UHF band. Knowing which front end is going will be helpful in determining whether or the sensitivity is going to low enough for any decent reception. There are two separate circuits for High/UHF and Low Band VCO. The Low band VCO is Q6 and Q7 and the High/UHF Band VCO is Q8. Both of these VCO's go through Q11 before being fed to IC1, the mixer. The VCO runs from 21.5 to 167.05 Mhz (apparently tripling for the UHF output). Dennis takes the output of the High/UHF VCO off of L14, the oscillator coil. I think that it would also be possible to attach your frequency counter to the emitter of Q11, which is a little postamp for the two VCO's. When a High Band signal is being received, Diodes D3 and D4 are switched on by the band switching circuitry to change the front end. By measuring the voltage at Point H of the schematic, you can determine whether or not the High Band front end is on. Obviously, when the High band front end is on, the Low Band UHF band is off. By determining the output of the VCO and the state of the UHF/Low Band front end, you can determine what frequency the radio is intending to receive.



Incidentally, Dennis mentioned that he had occasion to stop his Bearcat on its out of band scans (or in band scans for that matter), but got tired of opening the squelch to stop the scan. A simpler solution is to ground the base of Q17 which drives the scan control. This stops the Bearcat dead in its tracks. You should be able to put the switch somewhere on the front or rear panel at your convenience. Push button momentary or bat switch is up to you although it appears that a bat switch might be more useful in holding the frequency.

Incidentally, Bearcat has two different versions of the 250, one with a 10.8 Mhz IF and another with a 10.85 Mhz IF. Not sure why they did that. Only know that they did. I would suggest that the reason may be that greater immunity to birdies on certain frequency is lessened by the use of one IF or the other.

Bearcat does have a manual available for the 250, the 210, and one that will be available soon for the 220 (aircraft scanner plus the same bands as the 250 and 210). Communications Electronics in Michigan sell them for \$5.00 each. They are really useful for learning about the radios. They contain schematics and alignment instructions. Hear Hear for Bearcat.

Micheal Salem N5MS

#### NIFTY COR FOR POSITIVE GROUND RADIOS (A SWITCH IN TIME . . .)

I have mentioned previously that I have enjoyed great sport in converting surplus HT-200 receivers into useful single channel miniature receivers for repeater receivers, link receivers, monitor receivers. K5JB has characterized these receivers as miniature Motrac and there is no doubt that they are dandies. The specifications for the receivers are usually very good. For the UHF versions, the sensitivity is generally .8 microvolt for 20 db quieting (Almost every one I have played with will usually get about .7 microvolts for 20 db). The VHF versions feature an RF amplifier and have a nifty sensitivity of typically .5 microvolts for 20 db quieting. The UHF version features a three cavity RF Preselector ahead of the first diode (that's right, a diode mixer at UHF) mixer. The VHF receiver doesn't have the space for a preselector, but does have a couple of tuned circuits ahead of the RF Amplifier and three sections of LC filters ahead of the diode mixer. The narrow band versions of the receivers accept +5 KHz and feature 500 milliwatts of real power to the speaker. Selectivity for the VHF receiver is 80 db at + 30 KHz with spurious and image rejection of more than 70 db below the carrier. The RF image rejection is 60 db. The UHF receiver has selectivity of more than 80 db at +25 KHz and ultimate spurious and image rejection of more than 45 db below carrier. Both receivers use a simple noise compensated squelch which is very crisp and nifty sounding. All around, these precursors to the Motorola HT-220 are all around good bargains if you know what to shop for.

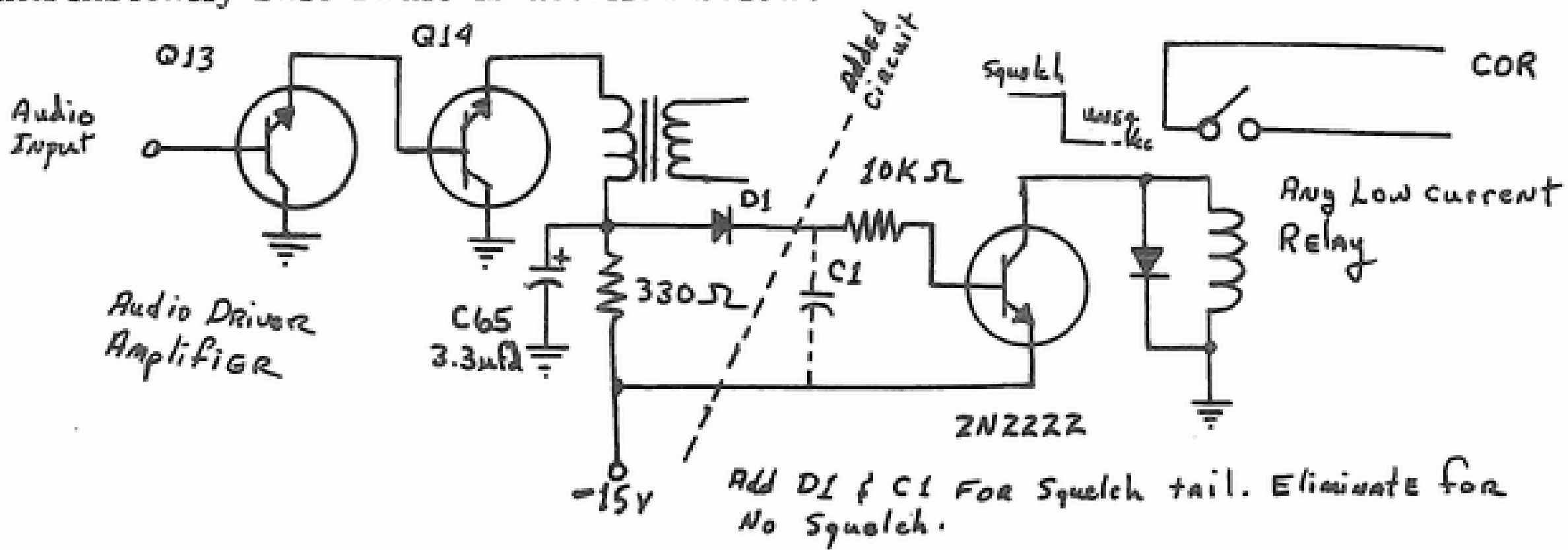
Do be careful. The HT-200 is a fairly old device (back when they actually designed with PNP transistors) and I have come across several versions that have really been through the mill. In fact, I have about 5 UHF and 4 VHF radios that I have not had the time or parts to get the receivers up and running. I have had some minor success with a couple of the receivers and restored two VHF HT's for use by the local coast guard auxilarly. When shopping, put a battery in the radio and see if it will blow squelch. Be careful to observe that these radios are positive ground (One of their few drawbacks). I have a couple that will blow squelch, but have no receiver sensitivity. These could be anything and can be a real bear to troubleshoot. It is very critical to use an on frequency signal source when tuning up the UHF version. There are a variety of birdies that the radio will tune up on. As illustration, I was working on a UHF receiver and using my uncalibrated (frequency) signal generator. By a considerable amount of fiddling, I was able to get the sensitivity down to about .5 microvolt (Great, better than spec!). However, after installing the receiver



in place on the tower as a link remote control receiver, I found that I could not hit it after traveling a couple of blocks. Humm. Now what the hell is going on? I took the receiver off the tower and brought it back and slapped it on the signal generator. Still about .5 microvolts!?!? A suggestion by K5HMD provided the solution. I fired up the Bearcat (nifty) 250 and punched in a frequency that would put the local oscillator of the Bearcat on the receiver input frequency. I then zero beat the signal generator to this frequency in the HT-200 receiver and checked the sensitivity. What! It was somewhere around 20 microvolts. I dialed the receive frequency I was tuning the radio to and zeroed the signal generator to open the squelch of the 250. The signal was again nowhere near as sensitive as the birdie. I retuned the receiver keeping it on frequency with the Bearcat 250 and found the receiver come right up to specifications. I placed it back on the tower and found that it worked great. The moral is to make sure that your receiver signal source is right on the intended frequency. Don't just sweep across the band and tune up on what you think is the correct frequency. Verify it with some alternative source that you know is accurate like the Bearcat 250.

The only major drawback to the receiver is that it is positive ground. This means that the positive voltage is placed on the ground and the minus lead is about 15 volts below ground. This can be a real problem when attempting to interface the radio to the outside world. Also failure to observe the proper polarity may force you to contribute a certain amount of cash to the Motorola corporation for the purchase of audio power output transistors. Those little germaniums just can't take those 15 volt reverse surges and give up the ghost quite readily. The simplest solution is to build a separate power supply for the receiver, something not too difficult when you consider that the receiver doesn't draw more than 4 ma. when squelched and 60 ma. when the squelch is open. In addition, I use a full wave bridge rectifier as part of the power input circuitry to prevent old fumblefingers me from busting open the germanium with a blast of reverse voltage. A simple monolithic regulator, a couple of diodes, and some capacitors make up the power supply.

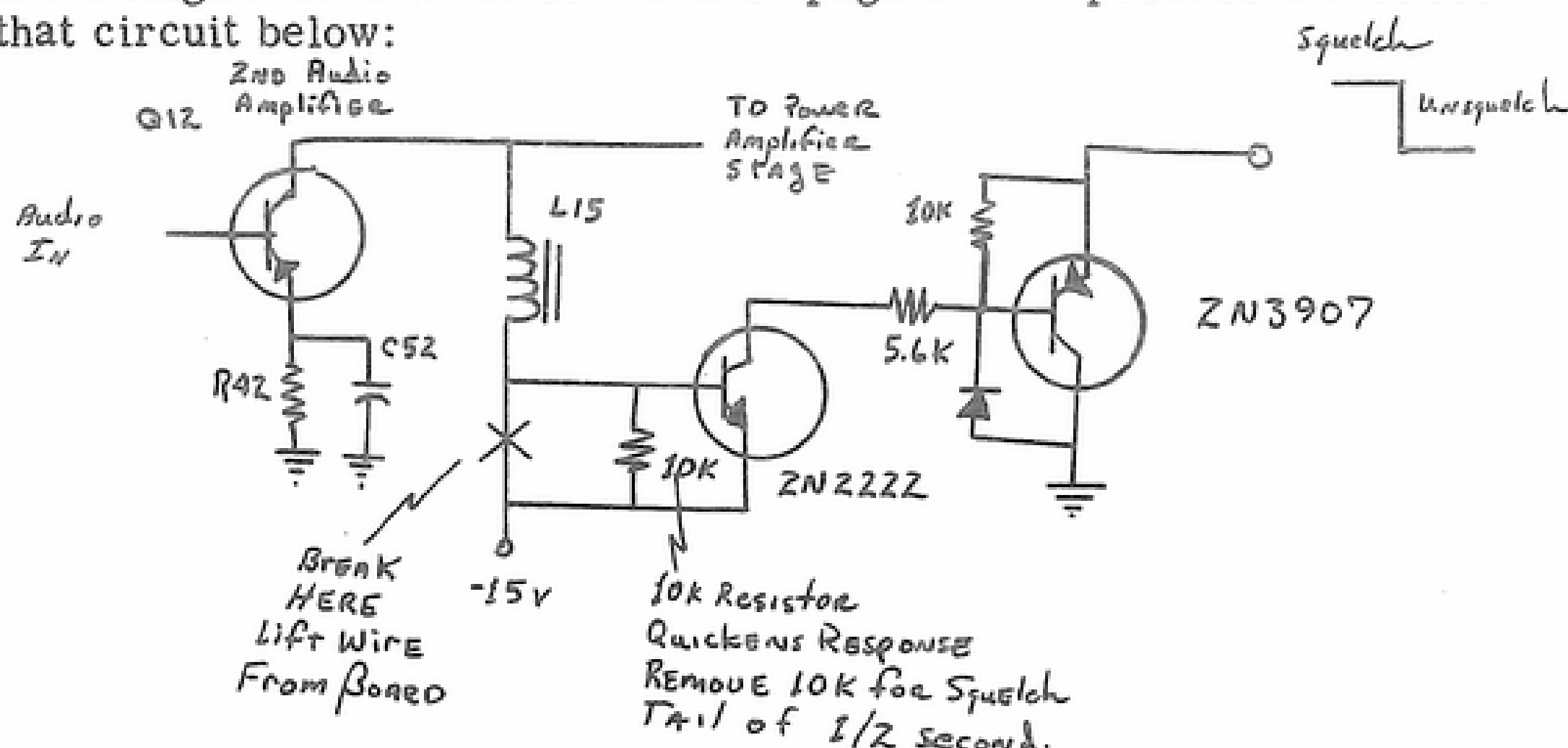
Now, suppose you want to use the radio as a repeater receiver. How do you whip up a COR circuit? Motorola uses the HT-200 transmitter and receiver in a simple low power lookout repeater. They build up a separate squelch and COR circuit that runs directly off the audio from the receiver audio output. Definitely too complicated. Fortunately, I have K5JB to rely on. Joe converted one of these receivers for the UHF 444.1 Mhz MORI repeater and worked out a simple circuit to be shown. Motorola makes two different versions of this receiver. One for their intrinsically safe HT-200 for use in explosive atmospheres (the transmitter has only 50 Mw output). The battery voltage is only 8.0 volts. The other version is the regular HT-200 with 15 volts on the receiver. I had detailed this circuit in a previous issue of C & E in an article about various types of COR's, but later examination showed that I had drawn the circuit wrong. Nobody complained, however. (It scares me that maybe nobody read the article. Well, I can't let these things bother me. Maybe). The conversion for the intrinsically safe radio is detailed below:





The operation of the COR is quite simple. Q13 and Q14 are part of the audio driver amplifier. The circuitry (not including the Diode D1) right of the dashed line is the added circuitry for the COR. As audio passes through Q14, the transistor begins to draw current. As the current increases, the voltage drop across the 330 ohm resistor increases until the 2N2222 begins to draw current and switch on. As it switches on, the collector moves toward -15 volts and pulls the relay in. Diode D1 and Capacitor C1 can be used to add a squelch tail to the COR if needed. As the 2N2222 switches on, C1 charges up. When Q14 switches off, D1 prevents the charge from C1 from dissipating across the 330 ohm resistor. C1 bleeds off through the 2N2222 holding it on until its voltage drops below .7 Volts. I found that 22 ufd adds about a quarter of a second tail.

The circuit for the HT-200 regular receiver is different from the intrinsically safe radio and requires an extra resistor to be added. This is the one that was butchered in the August 1976 issue of C & E on page 8. I reproduce a correct version of that circuit below:



I think that this circuit is really neat. First, because most of the circuits that K5JB comes up with are simple and effective. Second, because the circuit is really useful. The circuit makes up for the design differences between the Intrinsically safe HT-200 and the regular HT-200. As I indicated previously, the intrinsically safe radios use an 8 volt battery instead of the 15 volt battery of the regular HT-200. The audio stage is just different because it is a power amplifier stage and is adjusted accordingly for the lower battery voltage.

This circuit operates in much the same way as the previous circuit. As Q12 starts to draw current, the current through the base-emitter junction of the 2N2222 turns the transistor on. This in turn pulls the emitter of the 2N3907 down, but no lower than .7 volt below ground because of the resistor from the base to the collector. This transistor (2N3907) turns on and pulls whatever load you have to ground. Voila! A solid state level converter. Completely solid state switching if you like.

I have just recently built up a complete receiver on a rack panel with preamp and power supply. Actually, I built two power supplies, one for the receiver and one for the preamp. This was actually simpler than you think. I got a single 24 volt center tap transformer and split the center tap and got two separate 12 volt windings. I then ran each of these into bridge rectifiers and filter capacitors and monolithic regulators (LM340-12). Test panels and test points along with an L-pad for local monitor level control and a few other bells and whistles and I have what I think will be an excellent control link receiver. I just don't know whether or not I will get away with the preamp. It is a very simple device made by Hamtronics. I built it up in a small Bud Box. It brought the sensitivity of the UHF radio down to .24 microvolts from .7 micros an improvement of about 9 db or so. I kind of hate to give up all the preselection



in the front end of the HT-200, but I do not operate in a particularly high RF density area. I have noticed though that every now and then, we get a high intensity "buzz" from somewhere which opens the squelch with some 60 Hertz garbage. It appears to be fairly wide band and I have heard a few of the commercial boys bothered with it. Good grief! Do the Russians have a secret UHF woodpecker? If the problem persists, perhaps we might get up a posse to go after it.

Micheal Salem N5MS

### MISSOURI-YOUR BASIC SHOW ME (SHOW EM?) STATE

As busy as things have been around here, I still stop to have a thought or two concerning a subject near and dear to my heart. Ahem. Sooner Football. Now I know that I haven't been too vocal about the fall football follies this year. And I generally don't get a chance to see the OU Varsity-Alumni game every spring (They have the bad fortune to schedule it just about the time of the Big Dayton Shindig. Well, I can go cold turkey for spring football.) . But that doesn't mean that I don't approach fall with visions of touchdown runs dancing in my head. My good buddy B.C. sees to that. This little gent sees to it that I am suitably informed concerned the latest football statistics and potential grist for the Sooner football mill. Now before you have a chance to ask. Yessir. I was at the fiasco in Dallas when those huns from the south whipped us good. Sigh. Sure takes the edge off the season, but OU bounced back and began grinding through the Big Eight schedule working toward the big shootout in Norman with those dreaded huns from the North, Nebraska. (Music cue: Low eerie sound and staccato drum roll).

WD5FVI and myself had plotted an airplane trip to Manhattan for the K-State game, but I had scheduled a seminar for myself that weekend and scrubbed the effort. As it turned out, the game did not get exciting until the second half when OU had to roar out and pull their cookies out of the fire. Glenn and I vowed that we would not miss our regular biannual trip to Columbia, Missouri for the annual battle with those dread huns from the Northeast, the Missouri Tigers (respectful pause).

We've driven this little treck the last three times we went. I did not look forward to spending 7 hours in a car. Glenn agreed. It was settled. We would fire up the old airplane and fly. Unfortunately, B.C. did not agree. Being a person who was not born with wings, this magic was not meant for him. We tried to convince him to do this two years ago and he steadfastly refused until we capitulated and drove. This time, assuming that the weather and the plane were go, it would be off into the wild blue yonder. The only problem was how to get B.C. into the plane. I think this would have left even Solomon scratching his head.

B.C. called me early in the week and wanted to know if we were going to drive. I said yes, we would drive . . . .to the airport and we would not take any of this bunk about him not having wings. Unfortunately, Bobby called in later and said that he had made plans to meet us in Kansas City on Friday nite. Darn, we should never told him that the plane was a definite go. He would not have had time to schedule around us. Glenn found another sooner fan who was a friend of his who offered to take B.C.'s place in the plane. The weather was absolutely beeyoutiful and I can only say the flight was a milk run. I yakked with WB5ADN on UHF from Tulsa and checked in on the Tulsa repeaters but didn't find much conversation around. We landed at East Kansas City airport and was met by Harriet, wife of John Shideler. I had hoped to see John, but Harriet said that John would not be back in town until the next day in the afternoon when we would be long gone.



B.C. did not show up until much later. Our flight took a little more than 2 1/2 hours. B.C. later said they got lost. I occupied myself by yakking with some transient on the 22/82 repeater which I could hit with the HT very easily. Otherwise, not much activity. I heard absolutely zero on UHF. A quick spin of the 8 channel VHF receive revealed some activity, but not many repeaters I could hit. I QSYed to the news on TV. B.C. showed up with Brad fuming about getting lost and vowed that he would consider the airplane ride. I offered to let him ride into Columbia the next day. He said no, He wanted to take my place for the flight back to Norman. I said nothing doing. We went out to Stephenson's Apple Farm Restaurant for dinner. My goodness, my taste buds have been waiting for this since I was in K.C. last for the Big Eight Basketball tournament. Stephenson's features all kinds of treats made with apples and some of the best beef brisket I have ever eaten. Bring on the apple fritters and the apple butter! I topped dinner with some of their famous coconut cream pie. Whipped cream atop the pie filling with large pieces of shaved coconut which tasted unavoidably fresh sprinkled generously. I hesitate to discuss it further for I am sure a small tear will come to my eye in remembrance. I picked up a couple of bottles of apple butter on the way out and a couple of trinkets. Oh yes, the corn relish they have is great also.

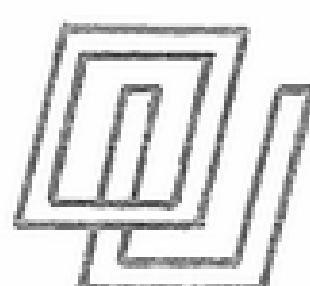
B.C. was anxious to leave early the next morning and I couldn't sleep past six thirty myself, so there was nothing to do except get up and get ready. We were out to the airport bright and early and a quick look over the airplane and a check on fuel and we were off to Columbia. I think that we saw Brad and B.C. on the highway below, but I don't think that they saw us. Actually, an airplane is not really a very exorbitant way to travel. We filled up again when we got to Columbia and used only 7 gallons of gas. Not bad for a trip of over 120 miles on the ground and 110 miles on the ground. Averages about 16 miles to the gallon. My Buick doesn't do that well unless it has a tail wind. We had a headwind into Columbia.

We parked at Columbia Regional and wandered over to the terminal to wait for some other friends who were flying in so we could share a rent car. Breakfast and some serious airplane watching broke up the morning until they arrived. The weather was again ideal for football and flying. Glenn indicated that B.C. got particularly revved up at the game and discussed the various heritages of several Missouri fans to their face. It's a good thing we play these people only every other year in Missouri. Any more than that and they might recognize faces. What can I say about the game? Billy Sims went crazy, especially in the third quarter when he broke his long touchdown run. I had retreated to a telephone to phone in a report and missed it. And live football games don't have instant replays. What a bite. The game was a barnburner, right down to the wire with the Missouri field goal kicker the game goat for kicking away two chances to win it for the tigers. I doubt that he will have a scholarship next year.

It took me a while to get out to the airport after the game and Glenn and Walter whiled away the time playing Hearts in the cafeteria. B.C. and Brad had already left. We went out and loaded up and took off. Humm. Big head wind, over 20 - 25 knots. A sharp pencil to the fuel situation revealed that there was nothing to worry about. It did take about 30 minutes longer than we originally calculated. At 10:00 p.m., we were safely back in Norman. A quick adjournment to one of the local bistros and I got my SX-70 for appropriate recording of what we were up to at 10:30 that evening. B.C. left an hour and a half before we did and didn't get back until 3:30 a.m. Sunday morning. I ask him the next day where he was at 10:30. He said that he thought they were outside of Springfield or Joplin. I showed him where we were. I think that he will fly next time.

Micheal Salem N5MS





UNIVERSITY OF OKLAHOMA  
Alpha Sigma Delta Radio Society

CLUB EDITOR  
Nathan Kirby, KB5BF

MEETS: 1st & 3rd Thursday (Sep-May)  
Room 449, Carson Engineering Center  
PRES James Gardner KA5DHF 321-8779  
V-P Dan Orr WD5GKZ 325-6951  
SEC Peter Richeson KA5COI 325-3015  
TREAS Nathan Kirby KR5BF 364-7979

### REPEATER DONATIONS UPDATE

As I mentioned last issue, the donations to keep the 146.28/88 repeater on the air have been far below the level they were at last year. The only thing I have to report is two people gave me a telephone call to check when their donation was due. I guess everyone else was too busy. One user suggested I send out written notices. This is a good idea, although it can be a time consuming practice. The other said he just forgets and he would appreciate a phone call. To those of you who called or who spoke to me in person, I say thank you for caring.

I hope to have some free time over the holidays to take the advice of one of the users and implement a limited written billing system. Starting now I will send out a notice to each Amateur letting you know when your donation is due. Because of the time involved and the postage expense involved only one written notice can be sent. Not only are electronic parts for the repeater getting more expensive, but postage is getting more expensive. I do not have the time to get into multiple billings, and I don't think those who do pay want their donation going toward a large postage expense. This makes sense to me and sure it will to most of you. In addition, I will live dangerously and make some phone calls. I do want each of you to know that I mean no offense if I do remind you your donation is due, and if my reminding any of you by phone offends you in any way I will make a notation on your 3 X 5 card and not bother you again. Your cooperation and especially your understanding will be appreciated.

### CLUB STATION EQUIPMENT INVENTORIED

The HF station, W5TC, was recently paid a visit by staff members of the university. Purpose of their visit was to inventory the Kenwood equipment recently purchased by the University of Oklahoma Student Association. A non-removable metal identification tag was placed on each piece of equipment.

### MORE CLUB STATION KEYS NOW AVAILABLE

Our able and energetic Faculty Sponsor, Laverne Hoag KB5DK, gave me some additional keys this month. When the lock was changed last time, the university wished to know who had access to the club station. Since I keep a record of all donations, it was natural that a notation be made on the 3 X 5 card whether or not the person had a key to the station. Give me a call if you wish a key, so you can use that fine Kenwood TS-820S station. Myself or the station trustee, John Stehr N5ABC are available to check you out on how to tune up and operate the TS-820S. Give us a call.

### CONGRATULATIONS TO SCARS

Congratulations to SCARS for getting the W5OU repeater on the air. This should be a big boost in providing redundancy during their ARES nets. With Norman now being the third or fourth largest city in Oklahoma two repeaters should give a big boost to amateur radio in Norman. Congratulations on getting the 147.66/06 repeater on the air!

THE OU CLUB WISHES EACH OF YOU A HAPPY NEW YEAR AND THANKS YOU FOR YOUR SUPPORT OF THE WR5AFW 146.28/88 REPEATER!





*Alpha Sigma Delta Radio Society*

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

**MARINE COMMUNICATIONS**

A Series by Nathan A. Kirby, KB5BF

Last month we discussed we discussed the three primary functions of marine radio which are SAFETY, OPERATIONAL, and BUSINESS. We also learned the distress frequency for the 2 - 4 MHz system is 2.182 MHz and the distress frequency for the 156 -162 MHz system is 156.8 MHz (Channel 16).

**2 - 4 MHz MARINE COMMUNICATIONS**

Since 1 January 1972, no new Double Side Band (DSB) licenses have been issued for the 2 - 4 MHz system. As we amateurs well know, Single Side Band (SSB) is more efficient than DSB. After 1 January 1977, the use of DSB is prohibited in the 2 - 4 MHz system. In order to encourage wider use of 156 -162 MHz VHF-FM marine communications, the FCC has also decreed that holders of 2 - 4 MHz band licenses must also have a licensed VHF-FM station on board the vessel.

Part 83 of the FCC rules give further details on licensing and use of 2 - 4 MHz transmitters. Many of these rules will be familiar to amateur radio operators. Examples are posting of licenses, authorized operators, license application instructions, and much more. If you will be operating your boat on the Gulf of Mexico and will need a range of 100 miles or so during the day and possibly over a thousand miles at night, then you should consider the purchase of a 2 - 4 MHz transmitter. Due to the skip conditions at night the FCC limits SSB transmitters to 150 watts. Because of the range of the 2 - 4 MHz system, the FCC and the Coast Guard prefers you use the VHF-FM system whenever possible. When you cannot use VHF-FM and must use the 2 - 4 MHz system, remember that this band is shared with over 150,000 other U.S. ship stations. Because of the safety and operational functions, the FCC imposes time limitations on how long you can talk on the 2 - 4 MHz marine band.

**TIME LIMITATION ON SHIP TO SHIP WORKING FREQUENCIES**

In amateur radio we do not have time limitations on how long we can carry on a conversation, a time limitation on each contact is imposed in marine communication in order to preserve its primary function as safety communications.

"Any one exchange of communication between any two ship stations on an intership working frequency shall not exceed 3 minutes in duration after the two stations have established contact by calling and answering"\*

"Subsequent to such exchange of communications on the intership working frequencies in the MF band, these frequencies shall not be used again for communication between the same two stations until 10 minutes have passed." \*

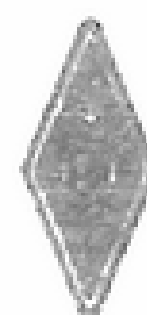
\*FCC Rules, Part 83.366





## BICENTENNIAL AMATEUR RADIO CLUB

MEETS: 7:00 PM on the 2nd Tuesday of each month  
at Air National Guard - Will Rogers World Airport  
President: Joe Couch WD5BNP 282-4353  
V. P. : Kay Northcutt WD5DYJ 842-1086  
Secretary: Tom Cassidy NSAOZ 751-1194  
Treasurer: Jim Buswell NSBEQ 947-1180



The December meeting was called to order at Cattlemen's Restaurant approximately 6:30 the night of the 11th with about 65 members and guests assembled with families and friends for Christmas dinner. Donna and Chuck Williams of Cattlemen's, mother and son, provided a festive atmosphere of glittering decorations and an excellent meal of ribs, ham and roast beef with peas, corn and mashed taters/gravies (and more deserts than I could eat).

There was no official business as such but there were some business announcements:

Don AE5N finds that he can no longer manage to represent the club at CORA and asks us to find a replacement.

Bill KB5BS needs each person who ordered club T-shirts to pay him before he can pick them up from the supplier at \$2.95 for the shirt, \$1.50 for the club logo on the front and 15¢ per letter for whatever you ordered; his home phone is 733-0889 and he could be reached at work at 848-7593.

the next MORI meeting will be Thursday rather than Tuesday, January 3 rather than New Year's Day, a dinner meeting in addition to business with the express purpose to roast Chuck; the place will be the Furr's cafeteria at NW 63 and MacArthur.

the next 76ers meeting will be January 8, Tuesday, 7 pm at the Will Rogers Air National Guard center, SW 54th.

There were four members who admitted to being charter members of the club but the records indicate that there were at least 10 members in attendance who date back to the club's inception, 21 Dec 76, and it sure was good to see the likes of Fred Miller WB5WLS and Jack Harkins W5CPI free from the hospital and from El Paso, TX, respectively.

this is probably not too late to restate that white blood cell donors are needed to report to the laboratory at Mercy Hospital to be screened for O negative type and white count for Sharon Williams, wife of Marshall K5MB.

After a Seasonally Inspirational talk by Coy N5OK well-enjoyed by all we proceeded to door prizes: antenna books, handbooks, callbooks, a popcorn popper and digital clock.

The dinner and meeting adjourned at 8:30 for socializing.

Remember, next meeting, 8 JAN 80 at the

Jim, N5BEQ  
Secretary.

Well I just got home from a very fine evening at the 76ers Christmas dinner. We had 67 show up on a very cold night, everyone had a nice time. I won a "BUTTER POP CORN POPPER". Sure makes GOOD corn.

The club needs a new representative to Cora, Don AE5N has served in that job but work schedules prevent him from continuing. Also Charlie WA4PLG has changed jobs and needs someone to take over as editor for the club. So if you would like to serve please let me know, the work is easy and the pay is right.... (NOTHING EXCEPT THANKS).

I read in 73 magazine again about unfriendly repeaters and users rights. He sure hasn't been on the 16/76 machine in CSC. For any new amateurs I will state our policy again, our repeater is open to any licensed amateurs. We also have an open autopatch star up and star down the call is WR5ANG. If you haven't visited our group yet, we meet the second Tuesday at the Air National Guard.

Joe WD5BNP



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

		12	1	2	3	4	5	6	7	8	9	10	11	12
MON	AM							KA5 DCM	WB5 NXO			WB5 TKG		
	PM				WA5 HTL	N5 BEQ		KA5 CXW						
TUE	AM							KA5 DCM	WB5 NXO			WB5 TKG		
	PM				WA5 HTL	N5 BEQ		KA5 CXW						
WED	AM							KA5 DCM	WB5 NXO			WB5 TKG		
	PM				WA5 HTL	N5 BEQ		KA5 CXW						
THUR	AM							KA5 DCM	WB5 NXO			WB5 TKG		
	PM				WA5 HTL	N5 BEQ		KA5 CXW					N5 BEV	
FRI	AM							KA5 DCM	WB5 NXO			WB5 TKG		
	PM				WA5 HTL	N5 BEQ		KA5 CXW						
SAT	AM											WB5 NMK		
	PM	N5 BEQ											N5 BEV	N5 GE
SUN	AM	N5 GE										WB5 TKG		
	PM	N5 BEV					N5 BEQ						N5 BEV	

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

THE LOWER LEVELS, OF THE POPULATION OF MANY GROUPS, ARE USUALLY  
PREOCCUPIED WITH THE DISCUSSION OF PEOPLE AND PERSONALITIES.  
A HIGHER LEVEL IS MORE CONCERNED WITH THINGS.

BUT, THE HIGHEST LEVELS STUDY IDEAS.



AE5N

DONALD H. DUCK

Special Instruments Representative

Bellone Hearing Aid Service

2828 N.W. 50th

Oklahoma City, Oklahoma 73112

Telephone (405) 947-4442

FOR SALE: Swan MB-80A 80/75 Meter SSB/CW Transceiver. 65 Watts  
Output, fully solid state for 12 volt mobile use. I  
bought it new. Asking \$215. Mac, K2GKK, 672-4947.



# Edmond Amateur Radio Society, Inc.

MEETS: 2:00 PM 3rd Sunday Room 205  
Science Bldg, Central State Univ.  
PRES Howard Wise WD5IDB 341-2510  
V-P Ken Stepp WD5HXX  
SEC/TR Bill Wright WA5ZLW

CLUB EDITOR Howard Wise, WD5IDB, 341-2510

MERRY CHRISTMAS

Since the C & E editing falls before our December 16th meeting, I can't really tell you what happened, but I can tell you what we have planned. First, the A.T.V. group is going to present a program for us. Both groups are meeting in Edmond and both have (or will have) repeaters on the KCSC tower; and its great that both clubs can share their interests and be of benefit to each other. I'm very anxious for their repeater to get into operation, so I can get a converter and keep an eye on them. In addition to the A.T.V. program, we will be exchanging gifts - or better described as "junk". We asked everyone to bring a useable, but inexpensive item from their "junk box", and wrap it in Christmas paper. We will tag each one with a number, and hopefully, everyone will go home with someone elses "junk". So that not everyone has to drag home a boat anchor, the club will donate a non-"junk" item to make it all worth while. It should be a lot of fun.

I would like to give some special recognition this month to Martin, WD5FEI for his continuing efforts on the 72-12 machine. Martin has spent a lot of his own money, and many hours on the tower so the rest of us can enjoy the use of the repeater. This past week-end (the 8th) Martin replaced a run of cheap coax with some good quality heliax; and Sunday, he spent 1½ hours putting up a new antenna. We are now receiving at 210' and transmitting at 100'. It's very hard for me to understand anyone who willing climbs over 200 feet straight-up, but thank goodness there are people like Martin who will. Thanks a lot Martin from all of EARS. Your efforts are greatly appreciated.

By the way, if you've not been on 72-12 yet, consider this to be your own personal invitation. It's an open repeater, so don't stay away just because you're not an EARS member. We put it up for ourselves.....and you!

I would like to remind all EARS members that our January meeting will be the election of officers for 1980; so everyone needs to be present (or you just might get railroaded). As a personal note, thanks for allowing me to serve this past year. It's been a great time, and we've seen a lot of progress for the club. I'm sure 1980 will be even bigger and better.

Most importantly, I pray that each of you will have a very MERRY CHRISTMAS.

73, WD5HXX *Ken*

AFTER THE TEN O'CLOCK NEWS AND JOHNNY CARSON'S MONOLOGUE,  
MANY OKLAHOMA AMATEURS ARE FINDING SOMETHING REFRESHING  
ON TWO METERS. MOBILES OUT-AND-ABOUT, LATE-SHIFT WORKERS,  
AND RELATIVELY DISTANT HAMS KNOW OF IT, TOO. IT'S CALLED  
THE NIGHT OWL NET, THE BEST WAY TO KEEP IN TOUCH WITH  
AMATEURS IN OKLAHOMA. EVERY AMATEUR, TECHNICIAN CLASS AND  
HIGHER IS WELCOME TO PARTICIPATE. THE NET PROVIDES  
ASSISTANCE TO MOBILES, PASSES TRAFFIC AND KEEPS THE BAND  
ALIVE WITH GOOD AMATEUR CONVERSATION. JOIN US ANY EVENING  
AT 10:30 P.M. - EVEN ON WEEKENDS. YOU MAY GET HOOKED!

**The Night-Owl Net**  
**146.07/.67 Oklahoma City**



AERONAUTICAL CENTER AMATEUR RADIO CLUB, INC.



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:

Well here we are at the end of another year. I hope your year has gone as good as ours has here at the ACARC. This past year we had one of the best Ham Holiday's ever, we have seen a number of club's join CORA, and we have seen the C & E mailing go from 700 + to almost a thousand (o'well things do change) our club has grown some this year too, we have added a Southwest Tech 6800 computer to our station. So far it is being used to run address labels and rosters for the C & E, but we plan to use it for some more things this year.

I would again like to thank all the club officers for all the help they have been this past year, and I know all the members of CORA would like to extend their thanks to Bob WB5NSV for the many hours he spent in front of the computer this past year. THANKS BOB!!!!!!!!!!

There are a lot of things I should be writing but I'LL save them till next year. I would like to close out this year by thanking the most important people to ACARC and thats our memm- bers, thanks everyone for comming to our meetings. Just to show you how good you'all are we had better than 80 members and guest at our Christmas dinner this past week.

MERRY CHRISTMAS AND A HAPPY NEW YEAR!!!!!! Get um Big Red. ....

*73, BOB PACE, WA5CJG*

MINUTES OF THE DECEMBER MEETING OF THE ACARC

As almost everyone knows, there was no regular meeting of the Aeronautical Center Amateur Radio Club. Our normal monthly meeting was replaced this month by our annual Christmas Dinner. Although actual counts are conflicting, my attendance count was 92 members and guests.

The Christmas dinner was enjoyed by all, especially Holly, N5ABL, who took home a picture of an FT-227 transceiver as a special surprize award!

I would like to take this opportunity to wish each and every one of you a very Merry Christmas, and a Happy New Year. I would also like encourage all of our membership to attend our January election meeting.

Bob Graham, WB5NSV, Secretary

FOR SALE: TEMPO S-1, TTP, charger, rubber duckie, case & belt clip, \$325.00. - DSI 350 frequency counter, antenna, "I" adapter and probe- \$80.00. Bill, WB5TZQ. Shawnee 275-0119.

FOR SALE: RA-62C Power Supply: \$15. Desk-top cabinet for 19 inch panels: \$10. BC-639 100-156 MHz rcvr: \$5. Mosley TA-33: \$100. Mosley 40 Meter add-on: \$45. Ham-M Series 5 rotor: \$55. Heathkit phone patch: \$25. audio patching box: \$22. Mac, K2GKK. 672-4947.



Red Cross. The Good Neighbor.



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 681-9222  
Sec Jim Buswell N5BEQ 947-1180  
Tres Jim Jones K5PER 634-5235  
Dues: Sid Gerber, 829 Bouse, WMC 73110

MORI Christmas party was held at Furr's cafeteria, combined with or instead of the regular monthly business meeting. This cafeteria is located at S. E. 74th & So. Shields, close to I-240.

Went through the serving line before 7:00 PM, and found that a great many had beat us there, but we wasn't last to arrive. There was quite a crowd behind us. Of course, the Hams were mixed in with regular customers, but we had a room reserved for us. There were approximately 85 present, as I understood the announcement. Nice crowd. There were quite a number of ladies present who are also Hams. Seems to me that the number of lady operators is increasing. Others just came to be with their husbands and for the company.

After feed, President Chuck called the short business meeting to order:

Chuck gave out drawing slips that we all signed and turned to him for the door prizes. Then we had self introductions of ourselves and guests. After this, Jim, the Treasurer, gave his report. There were also some announcements; among these was an announcement that perhaps amateurs would get some new bands -- Namely, Ten MHz. Eighteen MHz., and Twenty-four MHz. Let us hope that these are finalized for us. I don't know what segments of these bands will be available; perhaps, some of the others know, but I don't.

The final item was the drawing for the door prizes; and, believe it or not, I couldn't hardly, I received one. It was quite a cute arrangement of artificial holly leaves and buds, mounted on slender wires, in a cute red container. These would spring back and forth when brushed, or picked up, and I thought they were real pretty. Thanks, whoever picked them out.

I am supposed to be MORI Club editor, reporter, or what have you? Please, may I editorialize a little bit?

I never cease to be amazed at the hurry and scurry, and people getting dizzy, chasing their tails and otherwise going around in circles. In all the confusion of running here and there, buying gifts that will be set aside, or traded back or exchanged; also, buying expensive but maybe cheaply built toys, the kids are lucky if they last out Christmas Day. Let us slow down a little and remember the original reason we celebrate Christmas. It is the gift of our Maker; and it is supposed to be a season of peace and good will.

Where is the good will and peace? In traffic, if you are lucky, you might get some with only a scratch on your car. With all the "Whiz-bang" drivers that seem to be aiming at you, it is a real hassle. If you are shopping, you get pushed along with the crowd, butted around, your toes stepped on, etc. Seems like some one is always aiming at your "corn patch". There is no fury like that of a Christmas shopper with his or her elbows honed to a razor edge.

As Amateurs, we are supposed to be courteous, considerate and helpful and be good citizens. That is our stated purpose--no one is perfect--but, we can try to be unselfish and helpful to others. Many of us serve very well in emergencies and calamities. Many people have been helped by public spirited Amateurs. Not all can save lives, as some have, or make emergency transmissions, but we can try to be ready if the occasion arises.

Now, I am going to get off my soap box! Chuck has been a very good president, and he is a very talented gentleman for giving away door prizes--He has also had enough experience, at Ham Holiday, and all. Good luck, Chuck, in every thing. From the looks of things, you are going to be very busy through this coming year' what with CORA, Ham Holiday, 1980 and everything.

We welcome our new president, Fred, for the coming year, and wish him the best. We hope he will find us all very cooperative.

George, WB5NMK



The December meeting was held on the 4th at Furr's cafeteria, S. Shields, Oklahoma City, @ 7 pm. with 85 members and guests in attendance for Christmas dinner.

The business meeting consisted mainly of the Treasurer's report covering the new hardline for the .1 machine and the order for the new .67 machine (as well as the .94 repeater).

The entertainment identified itself as "Big Mac and the Three French Fries" - Mac K2GKK, Judy KA5BJS, Barbara and Ken, their harmonics - with the following rendition of "The Twelve Days Of A Ham's Christmas:"

"on the 12th day of Christmas my true love gave to me,

12 MORI meetings,  
11 tubes from Ellard (W5KE)  
10 theory classes  
9 new transistors  
8 rectifiers  
7 coax relays  
6 807's  
5 open bands  
4 microphones  
3 CQ's  
2 repeater guides

and a beam on a 90' tower."

(And you thought I wouldn't write it down, didn't you?)

Following the entertainment were prizes: handbooks, callbooks both foreign and domestic, antenna books, ashtrays, holiday candles and a hurricane oil lamp (and a very good time had by all).

The gathering adjourned for the "aftermeeting" at 8:30.

The next meeting will be Thursday, 3 January 80 at Furr's cafeteria NW 63 and MacArthur, 7 pm. We will have this extra dinner meeting to "roast chuck." So, mark your calendar, we need about 40 people, NW Furr's, see YOU there.

Jim N5BEQ,  
Secretary.

Scientists from the U.S. and 17 foreign countries are teaming up to study the sun as the time nears when sunspots and other solar activity reach a climax. Researchers seek to gain an understanding of how energy is released from solar flares and the effect of solar activity on the space between the sun and the planets.

There is recent evidence that the 22-year solar cycle is not the dependable periodic phenomenon it's been thought to be. Several times in history, in fact, polar activity did not occur. The last time that happened (or did not happen) it resulted in a little ice age from 1645 to 1715.

Solar activity last reached a peak in 1957 with the number of sunspots totalling 201, the highest ever recorded. 1980's total could rival that.

Reprinted from Jan 80  
Mechanix Illustrated

FOR SALE: Thorens TD-125AB Manual Turntable, Shure V-15 Type II Cartridge, hinged dust cover. Top-rated by Consumer Reports. Paid \$500. Want \$150. Mac/K2GKK. 672-4947.



We're beginning a great New Year. 1980 may prove to be the most eventful for the Ham Operator, due to rapid changes in technology with miniature rigs spotlighted in all the ads.

Can we draw on our many resources to set realistic goals of M O R I, and be motivated to reach these goals? I feel sure we can.

Our January meeting falls on Tuesday, New Year's Day, so we have decided to move to Thursday, January 3. We will not meet at EOC, but will have a dinner meeting at Furr's Cafeteria at N. W. 63 and McArthur. A room will hold 125. Simply go through the cafeteria line and join us. The reason for the change? Listen!!!

We are going to roast Chuck, K5NK, our 1979 President. We will have a famous group of Hams who remember the "I Heard" columns and his monthly humorous digs directed to our local hams. They are anxious to entertain with their comments (at Chucks' expense).

Put this meeting date on your calendar....  
Everyone is welcome

Fred, KA5CXW

If you notice that the type is different, its because I had some other ideas...

I wish to take this opportunity to exress how happy I am to serve with such a great slate of officers such as WB5PWZ, Bob; N5BEQ, Jim; and K5PER, Jim. My personal goal is to serve the club to the best of my ability and strive to improve my skills, if possible. I'm interested in public service particularly in activities such as ARES, and hope we can start the formal training ARRL officers real soon. I wonder how many ARES members live in Oklahoma? We sure need their participation along with our most capable EC, KB5BS, Bill Skipper and the 26 radio operators that checked in last Sunday for our "SET". "SKYWARN" a ARES program is active in many Oklahoma communities to provide a statewide weather warning and alert system. Oklahoma City, however has not accepted this program formally as yet. Join our net on 146.52 Monday at 2100 to hear more about it, and give us your idea.

I'm proud to announce that WE5DYI, Mark Northcutt has accepted the invitation to serve on our executive board. His excellent record of service to our community as CORA, 1979, President, 1979 76'ers President is well known, and we welcome his expertise.

May I take this opportunity to wish one and all a very happy holiday season and a properous New Year.

Fred, KA5CXW





AMATEUR RADIO EMERGENCY SERVICE  
(ARES)

Oklahoma County had its first Simulated Emergency Test(SET) since 1976 on Sunday the 9th of Dec. 1979.

At 1400Hrs local Fred Taylor KA5CXW started the SET as Net Control on 146.34/94Mhz., with Don Duck AE5N on 3.9Mhz.

The SET went as follows: At 1330Hrs. the National Weather Service (NWS) issued a severe weather warning and tornado watch for the following counties: Oklahoma, Canadian, Grady, and Cleveland.

At 1345Hrs. NWS issued a Flash Flood watch for the Oklahoma County and surrounding areas.

At 1350Hrs. the Red Cross contacted the county Emergency Coordinator (EC), Bill Skipper KB5BS and requested operators.

At 1400Hrs. ARES was activated. At this point the action started, with 26 participants varying from mobile and fixed stations, as far away as Stillwater Ok.

The floods started. We had reportes from all over the county that people were loosing homes. Fences and cages were destroyed from terrential flooding and wild animals were running loose.

The NWS issued a tornado warning for Oklahoma and surrounding counties.

Wall clouds and funnel reports poured in from everywhere. Finally the severe weather past, then the hard part started, making wind-shield serveys, finding shelters for the homeless, getting food, blankets, and setting up emergency power.

In the meantime a truck carrying radio active waste jack-knifed on I-40 at Morgan rd. The surrounding area was closed and evacuation was started due to high radation levels. A military aircraft crashed out in the Spencer area, no damage was caused to any homes.

Everything started to slow down, then K5JB Joe Buswell came on and reported that he was being attacked by deadly antenna eating termites moving towards the city. Everyone securd their antennas and wooden lags and met at Red Cross for coffee And doughnuts.If

Your'einterested in helping develop a good emergency plan for Ok. county,PLEASE join us on the 3rd Monday of each month at the Red Cross at 7PM. Thank You, Bill KB5BS

PS: You do not have to be an ARRL member to be an ARES member.

TO THE EDITOR:

Regarding the letter about "Problem CBer bringing grief to TV viewers":

Although I am not a CBer I am an amateur radio operator. Mr. Dillon definitely has a problem, not personally but with his television reception.

His letter put all of the blame on the CB operator. It is possible that the CBer IS running more than the legal limit with his transmitter but I believe facts should have been stated better.

The "engineers" he talked to misinformed him on several points. It is possible to communicate much greater distances with lower power than Mr. Dillon implied, by what is commonly called skip.

There is a definite correlation between this and the number of sunspots on the sun. The sunspot cycle is about 11 years long. We are approaching a peak in this cycle, which is expected to be one of the highest peaks observed. CB distances up to 1,200 miles can be expected, possibly more.

More often it is the fault of the television than a transmitter that it receives interference. This problem is not confined to TVs; some stereos, intercoms, PA systems have encountered problems with interference.

Legislation has been introduced that would require the manufacturers of entertainment equipment to provide more protection from interference.

I am not saying Mr. Dillon's TV is at fault. I am saying that many times it is the TV at fault and not the radio operator's transmitter. Mr. Dillon should contact the American Radio Relay League for information concerning cures of this type of interference.


If you suffer from interference on a radio or television don't jump to the conclusion that it is the radio operator's transmitter or that he is illegal.

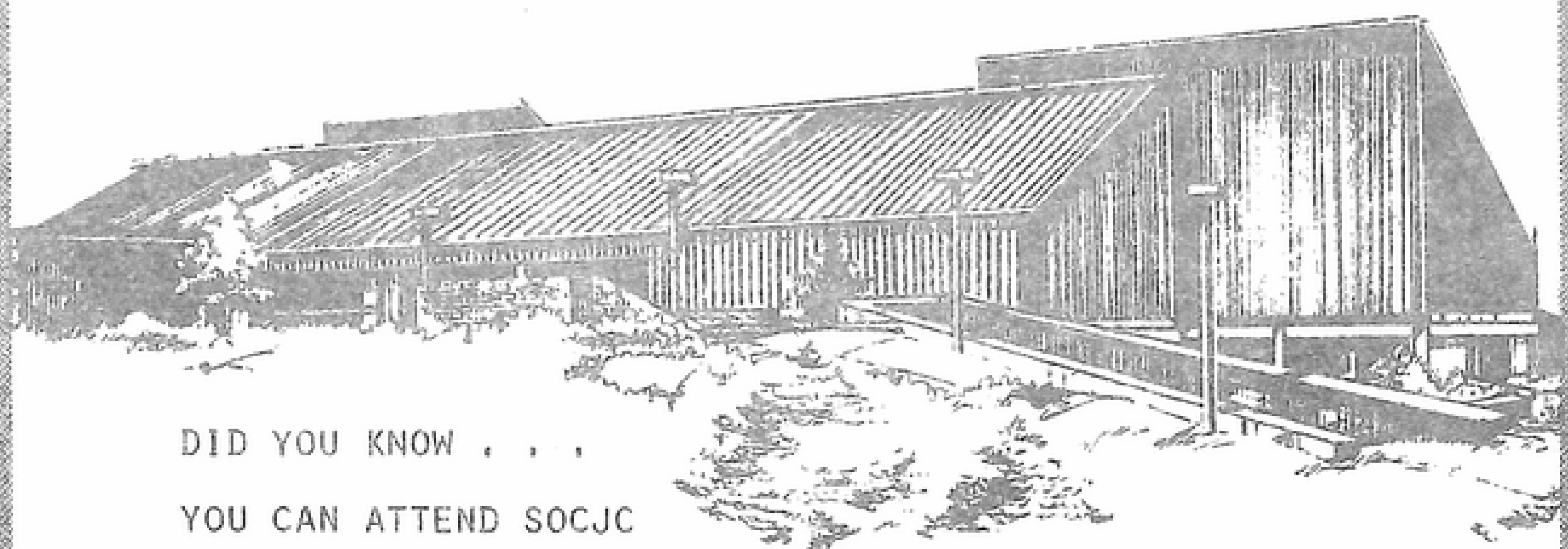
Amateurs ("hams") have been fighting myths like those Mr. Dillon was telling.

Lloyd Kirk, WB6HUP, City



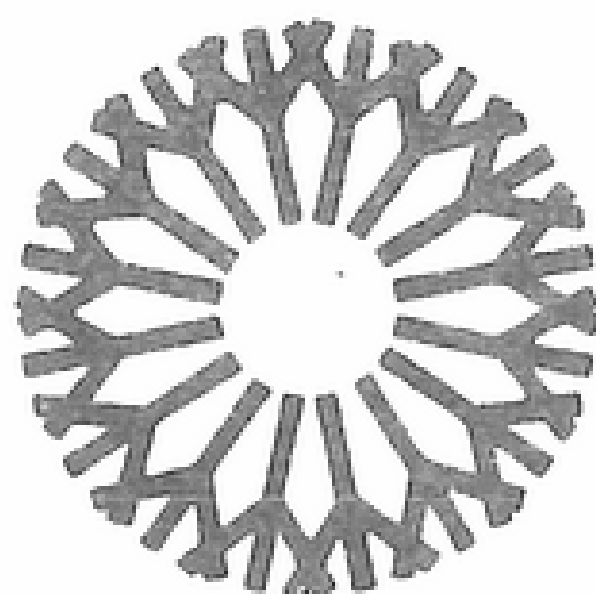
See individual club sections for times, places & details.

JANUARY 1980							HAM HAPPENINGS						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday							
		1	2	MORI ROASTS 3 CHUCK	ACARC 4	5							
WHEATSTRAW 6	EDMOND CLUB 7	OU SHAWNEE 8 76ers	9	KAY County ALTUS 10 ATV	11	12							
13	CHOCTAW 14 A.E.M.S.	15 OCAPA	16	16/76, YL NET, 17 9 pm every Thursday, 16/76 9:00 pm, 24	18 VHF	19 SCARS							
20 EARS	21 CORA EMERGENCY COMMITTEE	22 CORA	23 EDIT C & E	24	25	26							
27	28	29	30 SCARS MAILS C & E	31 16/76, 9 pm!									



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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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