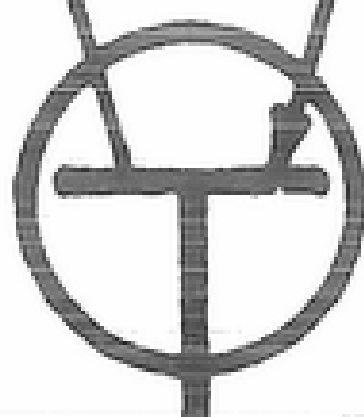


Central Oklahoma Radio Amateurs

COLLECTOR AND EMITTER

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AN INFORMATIVE MAGAZINE  
PUBLISHED MONTHLY BY AND  
FOR OKLAHOMA RADIO  
AMATEURS

AND ANYONE INTERESTED IN  
LEARNING ABOUT IT

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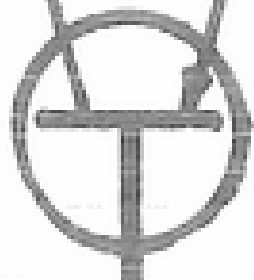
NUMBER 41



DAYTON HAMVENTION GRAND PRIZE WINNER, WB5YWO. SEE PAGE 3.

Central Oklahoma Radio Amateurs

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

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## COVER STORY--WHEN YOU WIN THE PRIZE, IT'S GRAND.

There are several reasons for attending the Dayton Hamvention for your basic amateur. First, the fantastic manufacturer's exhibits provide up to the minute info concerning any new goodies that have hit the market. Then, there is that incomparable flea market. That miraculous market where bargains of all types and varieties appear for two days and then are mystically swept back into hiding for another year. The nirvana where all flea marketeers turn to in quiet respect. And yes, you can win prizes at Dayton. I never gave much thought to the prizes. Dayton does seem to turn back more of the admission ticket than most hamfests, but as for me, I do not travel to Dayton for that one chance in 18,370 that I will carry home the biggie. Not everyone is like that. I have seen WA5JXX stand transfixed before the television monitors that are strategically placed around the Hamvention site checking intently for that one number that will just like magic bring radio riches. I prefer the humble approach and pretend that I never thought I would win.

Whenever the Grand Prizes are distributed, it is always to some person no one else knows who dashes to the stage, grabs the goodies and whisks them away, never to be seen again. But the 1978 Dayton Hamvention was different this year. This time, I have personal and conclusive proof that they really do give away those prizes. In fact, the Saturday of the Hamvention, several of us from Okla had dinner with the lucky duck who carried away a complete HF Kenwood station. And wonders of wonders, he is from Oklahoma. Check out the cover photo for this issue and meet Jim Shideler, WB5YWO, from Stillwater who made his first trip to Dayton this year and had the best kind of beginner's luck there is. Jim and his brother John (who bought the tickets and distributed the lucky number to Jim) had almost scrubbed the trip, but finally were able to go anyway.

So what exactly was the Grand Prize at Dayton this year. Well, a quick perusal of the front photo shows a TS-820-S transceiver with digital readout, the Model 820 Remote VFO, and the new Model 922 Linear Amplifier. The accessories include the MC5D microphone and speaker. Yes, it certainly can pay to go to Dayton.

The trip from Oklahoma is particularly tough. If you drive, it can be over 17 hours of cruise control. Jim flew up to St. Louis and drove in with brother John. He retraced the same route coming back on Sunday nite. However, he got stuck in St. Louis circling and didn't get back to Stillwater until 2 a.m. At 6:30 a.m., the phone rang. It was Noel McKeown, the prize committee chairman who told him he was the grand prize winner. "My first reaction was to tell the guy that if he was a friend of my brother's or Mike Salem, then he was in big trouble for getting me up so early in the morning for such a practical joke. After about 20 minutes or so of discussion, he convinced me that I really was going to get a complete station through the mail. He also told me stories about previous prize winners, such as one fellow's wife who won and had it shipped secretly to their house and then surprised her husband who had been licensed many years, but had never had a new piece of gear. Or the rich dude who lamented getting another rig because he didn't know where he could put it and finally sent his Lear Jet to pick it up. Jim called me that morning just to make sure that I didn't have anything to do with any joke.

The next step will be to upgrade so Jim will be able to put the linear on the air. He was first licensed in 1971 and let it lapse while moving around. After settling down again, he got another Novice and acquired a Drake R-4A and T-4XB combination. He intends to keep the receiver, but will probably put the transmitter up for grabs. John has promised that bad things will happen to his brother if he doesn't get upgraded at Ham-Com in Dallas. Ham-Com? You mean, Jim

is going to another Hamfest so soon? You bet. The preregistration prize is a Drake UV-3 transceiver. Don't want to miss any chances.

Prize winners at Dayton are nothing new. Joe Christian, K5HMD, won a book (well, its something), Joe, K5JB has been the winner of several prizes and Gill, W5NUT won a two meter radio last year. WB5YWO seems to be carrying on the tradition in a grand prize manner. Congratulation.

Micheal Salem N5MS

### HEAR YE, HEAR YE, OKLAHOMA REPEATER SOCIETY MEETING DEPT.

I got an announcement in the mail the other day concerning the next meeting of the Oklahoma Repeater Society in Tulsa on Saturday, June 3, 1978. The meeting is sponsored by the Tulsa Repeater Organization, Inc., and has been set for the Martin East Library located at 2601 South Garnett Road. Activities are scheduled to kick off at 10:00 a. m. and should wrap up by 4:30 p. m. Late word from Leonard Hollar WA5FSN is that Ben Barker from the Tulsa Weather Bureau will present a film and discussion on weather spotting. Those directorships of the ORS that come up for election will also be filled at the meeting. The TRO has established a \$2.00 registration fee at the door to offset expenses and provide a few amenities such as coffee, etc.

Everyone is invited. Make the trip to the other side of the turnpike to meet with one of the most important VHF/UHF - FM Societies in the state. The ORS provides several basic services to the FM community plus a forum for the resolution of problems facing the amateur using FM.

Micheal Salem N5MS

### HAM-COM COMES TO DALLAS

For some time, I have heard some rumblings about another hamfest in Dallas on June 17 and 18. I finally found out what it was all about at Dayton at the Ham-Com 78 booth. One week later at the Motorola sale in Dallas, I got a complete brochure with complete program information. The sponsors predict that attendance will top upwards to 5,000. If the success of selling the commercial exhibits is any indication, they may be right. I heard that all commercial space was gone within two days. A large flea market with space for 300 cars and lots of commercial exhibits are expected. The pre-registration prize is the Drake UV-3 VHF/UHF transceiver and the grand prize is your choice of an ICOM 701 HF transceiver or a home computer with 16K of memory.

The Ham-Com committee has planned other types of activities such as special discount tickets for Six Flags and Texas Ranger Baseball. A Bar-be-cue and dance have also been planned for Saturday night. For those interested in upgrading, a member of the Dallas FCC Office will be on hand on Saturday to administer amateur examinations. A schedule is available for the tests in the Ham-Com Brochure. It appears that pre-registration for the tests is not necessary.

The commercial exhibitors feature most of the local amateur radio emporiums plus several manufacturers. I noticed a few computer firms such as Rondure Company (they deal in used computer equipment). Perhaps the most interesting commercial exhibitor will be Weapons Corporation of America. I think that if I ask them the right questions, they might assist me with getting repeater users to properly identify and blowing a repeater off that provides a little QRM to our local system. I wonder what they have.



Preregistration is \$5.00 per person and registration is a buck more at the door. Rooms are available at the Convention site, Dunfey's Royal Coach Inn at 3800 West Northwest Highway in Dallas. The Convention site is adjacent to Love Field which makes it an attractive alternative for those who want to fly in. I understand (but have not confirmed) that buses and other transportation will be provided from Love Field.

I think that a big time Hamfest in the Southwest is a good idea. There should be no reason why Dallas cannot support something of this size and type. I notice that there are a few commercial type fellows associated with Ham-Com, but that shouldn't be discouraging. I am sure that there are a few bucks to be made, but it seems to me that the preregistration fee plus the commercial exhibits and 300 cars in the flea market at \$3.00 a shot adds up to some big bucks which don't readily appear to be returning to attendees. In any case, I'm game for it and hope to see you there. Ham-Com reservations and registrations should be sent to Ham-Com 78, 3321 Towerwood Drive, Suite 101, Dallas, Texas 75234 (this address is the same as ICOM East. Tom Gentry is in charge of Exhibits and Advertising).

Micheal Salem N5MS

#### AGGIE COMPUTER CONFERENCE BIG HIT IN OKC DEPT

It seems like every time I turn around some is sponsoring another computer conference somewhere. Not that it is a bad idea. I think that computers are taking over and will eventually provide as interesting a base for a hobby as amateur radio. And selling computers is getting to be a big business of some note. Some sources say that the potential of the market is so lucrative that computer stores are being billed as one of the ten best small business opportunities.

You don't have to be an IBM or DEC to grab off a share of the market. There are currently about 150 manufacturers of personal computing equipment and about 500 retail computer stores. No one really predicted the rise in personal computing as a hobby that has occurred in the last three years and many stores are catering exclusively to the small business and industrial applications.

The Oklahoma State Computer Conference was Wednesday and Thursday, April 12 and 13 and featured some 80 manufacturers and distributor's of computers and word processing equipment. Native Oklahoman, Dr. Portia Isaacson, owner of two retail computer stores in Dallas, consultant to Electronic Data Systems Corporation and one of the Chairpersons for the recent successful National Computer Conference in Dallas, was the keynote speaker. Dr. Isaacson noted that the low cost computer is creating a "proliferation of the personal computer throughout the corporation. An industry that started out selling primarily to computer hobbyists is now finding its largest market among business and industry with the hobbyists or 'tinkerer' making up only an estimated 20% of the market."

"Very good small business computers are now available for under \$8,000 and costs are still coming down, although not as rapidly as in the past couple years. The costs of the new smaller, but still very capable computers to business can now be estimated at as low as \$5.00 per day and for that, you can dedicate the computer to doing really simple-minded tasks." Dr. Isaacson cited the example of one Dallas bank which purchased a small computer for doing nothing more than figuring amortization schedules. The bank finds that it is saving at least 50% on its expenses because it used to have to buy the schedules from other banks.

What is the current prediction on the cost of hardware? Favorable, but not exceptional reported Dr. Isaacson. "The most costly components are not the semiconductor things, but mechanical things and although semiconductors are getting cheaper, mechanical things aren't. The computing power that can fit on just one \$10 micro-circuit 'chip' of roughly the size of a dime is almost unlimited. Within 10 years, it will be possible to have all the computing power of today's largest computer on just one chip because computer technology is advancing so rapidly.

I for one am all for small computer stores and manufacturers selling to business to supplement their income. It can only ultimately benefit the hobbyist user. The availability of hardware in such simple units as microprocessors will enable many new companies to enter to market with little expertise and capital investment. You don't have to buy computers anymore. You just buy your microprocessor and build your computers.

The Oklahoma State Conference was well organized and from any indications I saw, well attended. The program of seminars was plentiful and featured a good balance between beginner and advanced presentations, hardware and software. Roger Ryan, WA5JXX was featured in one of the afternoon sessions on Thursday afternoon discussing Microprocessing applications in Oil Well Drilling. I hope that there are plans for a son of Oklahoma State Computer Conference. Good show!

Micheal Salem N5MS

#### COMET CAPERS OR "A STAR IS BORN" DEPT.

Every now and then I dream of immortality (I spelled that right). Not just in terms of extending my life period, but some type or method of perpetuating recognition of the name. It can be done. Consider the case of Harvard astronomer Fred Whipple who hitched his fame to a star, or comet to be exact, in 1933. Whipple, a comet expert, discovered a comet which came to bear his name and which recently completed its seventh trip around the sun since he first spotted it some 45 years ago.

The comet never gets very close to the sun--about 230 million miles at its closest point--so it never gets very bright. In fact, the comet moves a few million miles farther away every year. But this doesn't discourage Whipple, who is the former head of the Smithsonian Astrophysical Observatory in Cambridge. "Well, it's kind of fun to have it come back seven times," he said, "Now, I've got to stick around for its eighth return--along with Halley's Comet-- in 1986."

I think that there might be some amateur radio applications for such a comet. Shouldn't be any reason why AMSAT might not consider the placement of some type of repeater system on Whipple's comet. Actually, maybe they will wait until I can discover my own Comet. It would, of course, have to be named after its discover.

Micheal Salem N5MS

#### FULLY SYNTHESIZED IC-22-S WITH A SINGLE SWITCH DEPT

I don't think I know of a rig that has captured the imagination and soldering irons of VHF-FM enthusiasts any more than the IC-22-S. The radio almost immediately became a big seller for ICOM and featured fully synthesized diode programmable frequency selection. (For more information regarding the synthesizer and how to program it, see the article in this issue by K5JB) The word is now out that ICOM is planning on discontinuing the rig. In fact, the latest brochure that

they were passing out at Dayton doesn't even have the 22Sierra listed. In its stead appears to be a new remotable 2 meter mobile, the IC-280. This radio is a microprocessor controlled unit which provided memory and synthesis located in a PLL control head. The main section of the radio is remotely mountable with an optional three meter, twenty-four conductor cable. The IC-280 can store three frequencies of your choice which are selected by a four position front panel switch. The frequencies are retained for as long as power is applied to the radio. Even when power is turned off at the front panel switch, the IC-280 retains its memories. When power is completely removed from the radio the  $\pm 600$  Khz splits are maintained. The radio has a selectable high and low power switch. The frequency coverage is from 143.90 Mhz to 148.11 Mhz. The radio is not yet available for sale, but is expected to be available soon.

The concepts and ideas behind the IC-280 is typical of what you come to expect from ICOM. These are the same type of innovative ideas that characterized the IC-230 and IC-22-S when they first popped on the scene. There is no question, but that ICOM intends to stay competitive in their market. I have only one basic gripe about their radios and I have owned several. There is no readily available service information for the equipment and that which is provided with the instruction manual is skimpy at best. I know that it is a complicated piece of equipment that is finicky at times, but I just don't see why I should have to send the radio all the way to Dallas just for an alignment because I don't feel comfortable tackling the tuneup without the proper information. I will admit that I did dig into the IC-30 and managed to accomplish a few improvements in power output (I got the radio second hand at Dayton and its performance characteristics were down) and receiver sensitivity. I don't think that I would tackle an IC-22S or IC-230 unless it were something simple. I have heard various excuses as to why service manuals are not available all the way from "They are printed in Japanese" to "You shouldn't have to realign." And I will say that generally, as long as you leave the radio alone, you shouldn't need much service. But that bothers me and I would like to every now and then personally verify the tuning of my radios.

In any case, the IC-280 is apparently the successor to the IC-22S. The 280 may have been the ultimate right ICOM was bringing out and decided to produce the IC-22S as a stopgap or intermediate step. I prefer to think that ICOM saw the way everybody and their dog was cutting up the IC-22S with modifications upon modifications to make them cover more frequencies and finally decided that people wanted more than just the simple radio. I don't think that an issue of 73 magazine goes by that someone hasn't put his 22S on the chopping block for major or minor surgery. Several companies are offering 22S modifications that allow the radio to cover the entire band. Even I must confess to being part of a group that plotted the construction of a remotely programmable attachment for the 22S (The design was by K5HMD and featured an interface to a microprocessor for those who would let their computer do the work of twisting the knobs and dials. Our first effort was with 1702 Eproms and was outboard to the radio. The second effort was completely contained inside the radio and featured a 5 volt ROM. The radio connected to the outside world through a multipin connector furnished by ICOM.)

Still, one of the niftiest modifications for adding frequencies to the IC-22S is the 42 channel switch from Valley Instrument Products. The occasion to examine one of the switches came when WB5POW purchased a used IC-22S at Dayton and stomped up to the Valley Instrument Booth and demanded complete coverage of all two meter frequencies (including 15 Khz splits) for the radio. They obliged with the VIP-42, VIP-15, and VIP -600 kits. These kits are ingenious and provide the frequency selection by entirely mechanical means. The VIP-42 switch is a 42 position switch that provide 40 channels beginning with 146.01 up to 147.57. Since the IC-22S is programmed by placing diodes in the slots

responding to the lower of the two frequencies (separated by 600 KHz) you intend to operate on, the VIP-42 takes the place of the diodes in the matrix. The two extra positions are available for programming of any two frequencies on the main diode matrix board. You, of course, can change these two frequencies either by reprogramming the matrix board or moving the wire from the switch to another switch position. The other two kits are simple SPDT switches that are small enough to mount on the front of the radio and provide 15 KHz splits and allows you to operate simplex on a frequency six hundred kilohertz above that which is programmed in the switch.

Larry and I got down to installing the switch one nite after returning from Dayton. The job is not that complicated, but it does involve removing the old 22 channel switch. This is not an operation for faint hearts. You must also drill out the front panel of the radio and do a considerable amount of hassling with the dial and other parts associated. The two small switches for the VIP-15 and VIP-600 are mounted by drilling out two screw holes, grinding away the bosses, and countersinking the switches. The VIP-42 merely fits (after drilling out the hole) in the same hole where the previous frequency switch was mounted.

Extra care must be exercised not to short the switch leads to ground. Doing so can result in the destruction of a resistor and transistor mounted in the radio. Valley Instruments recognizes that this will happen (it happened to me) and gives complete instructions on how to effect the repair.

The results were quite good. The switches all worked as advertised and we ran through checking all frequencies. The VIP kits are the least inexpensive of all the IC-22S modifications that provide direct readout of the frequency. The switch is spec to 100,000 operations.

I think that the ideal situation would be to use the switch and also place an electronic type of programmer inside the radio. That way, the radio could be used as a mobile rig with no additional parts external to the radio, then when you connect it to the microprocessor, you just connect the electrical portion to the computer and let it rip. The device adds a considerable amount of versatility to the radio. At last check, WB5POW was experiencing no difficulty with the switch.

Micheal Salem N5MS

#### HY-GAIN -- HI-FLYERS??

The bankruptcy of Hy-Gain Electronics Corporation has been a topic of interest to several amateurs over the last few months. The assets of the corporation were finally turned over to three banks in early April and sold to Telex Corp of Tulsa. The problems that Hy-Gain had in keeping up with the CB market was apparently only one of the problems faced by the company. UPI has reported that one of the Banks has announced its intention to begin an investigation to determine if some \$350,000 of Hy-Gain funds that belonged to the bank were "diverted" to improper use. This included some \$250,000 in accounts receivable from the Hy-Gain Canadian plant and more than \$100,000 in cash from sales at the so-called "company store" in Lincoln. These funds were apparently suppose to be turned over to the bank.

Telex bought antenna division and amateur and marine radio facilities in Lincoln and Puerto Rico for an estimated \$7.5 million.

Micheal Salem N5MS

## DAYTON DELIGHT OR "RADIO ENCOUNTERS OF THE BEST KIND."

I get asked a common question these days. "How was Dayton?" Not that I would respond that this annual pilgrimage to the mecca of hamfests has turned into a tepid event. Quite the contrary. The Dayton Hamvention is alive and well and doing quite well in, well, Dayton, of course. The official attendance this year was 18,370 and somehow it seems that every one of those attendees either bumped into me or stepped on my toes. Dayton is like a mighty river swollen from its banks. The crowd is unbelievable. The manufacturer's exhibits are enjoyable and the flea market borders on Nirvana. Hamfests occur year-round and I know that there is only one Dayton Hamvention, but somehow the hamfest season seems to start and stop with this three day extravaganza in Ohio. It is a time for unveiling of new equipment and hands on type demonstrations. Several of the commercial exhibits had Icom's new 701 HF transceiver. It's all solid state and features 100 watts continuous duty on all bands and modes. Tuning is semi-automatic. You have USB, LSB, CW, CW-N, RTTY, VOX, Semi break in CW, RIT, AGC, Noise Blanker and all those other magical letters. Icom also unveiled their new IC-280 remotely programmable two meter rig. Bearcat had their new 50 channel microprocessor scanner, the Bearcat 250. You could peruse the Drake booth and look at the new TR-7 with 0-30 Mhz continuous coverage. Kenwood had their new R-820 receiver. And I appreciate the way the manufacturers and exhibitors are few with the technical literature. Sensory overload is the order of the day and I am still examining books and other goodies picked up in Dayton. Sentry Crystal was selling a Quartz Technology manual that provides some basic general information concerning crystals, then lists page after page of radios and the proper crystal type for each one. Motorola literally was begging people to take manufacturer's literature off their table and were selling a nifty book on RF Transistor power amplifier design that contains a wealth of ap notes and transistor specifications. Microwave Associates had an entire collection of applications and experiments (including the description of a video microwave transceiver designed and built by Bob Cooper W5KHT. Bob recently put this Gunnplexer goodie on the block at an auction which was scheduled for two weekends that I was out of town). Science Workshop features the parts and instructions necessary to build a spectrum analyzer for less than \$100.00. The analyzer could cover through 900 Mhz using surplus TV parts. They sold out by the second day when I went back to buy a kit of parts.

The Portable Clinic was featuring new and wondrous things, including a sleeve for your HT that decodes touchtones and determines if a series of tones is the proper sequence to activate your radio. It's just like having a telephone. I met and talked to Jim Garrett WB4VVF, the designer of the Accu-Keyer and Accu-memory. I discussed the two CMOS versions of the Accu-Keys that I have built and the addition of the memory to one of them. CW Keyboards were all over the place and one ingenious fellow in the flea market had built one using an 8080 and total parts of about \$55.00. For a couple of bucks, he would sell you a set of plans.

In the truest sense of the word, Dayton is a happening. It is the only place where certain items you are looking for will ever be found. I perused the flea market and found a fellow who deals in spare time bases for my Monsanto Counter. He had a couple and I now have a spare. I checked Mendelson's surplus in downtown Dayton and found some 150 Mhz decade counter boards for my Counter (Just what I had been looking for) that would have cost an arm and a leg if I tried to buy them from the manufacturer. I paid 50¢ apiece for them. I also found a couple of plug-ins including one that will take the mainframe to 12.5 Ghz. If I could get the counter mobile, I could begin checking out police radar. 1000 pf feedthroughs were 10¢ apiece.

This year, in traveling to Dayton, we thought that we would do it in style.

Captain Christian, K5HMD, had just finished his multi-engine rating, so it was only appropriate that we take the Aztec that he had been flying. The difference in speed was significant and the passenger load went up drastically. (At one point, I thought we were going have to take a single engine plane and Joe told me that the weight load for each of us would be zero baggage. He threatened to make us turn our underwear inside out so as to conserve weight). We did learn one physics lesson on the flight up on Thursday and that is you can not shut the door of a twin engine plane when the door pops open in flight. I tell you folks, it got cold in that plane. However, the chills I experienced when the door bounced open were not due to the temperature, but to the fact that my 450 Mhz and two meter HT-220's were swinging from a clothes hook near the door while I was yacking with WB5UIY and WB5POW in another plane a mile or so ahead. When the door opened, the plane lurched downward and to the right with the increased drag. Gulp, I looked up and saw my HT.'s swinging toward the open door and into free space. Roger said he was afraid that I might try to follow them down if they had come off the hook. I told him that was a dream. (I think). In any case, I managed to grab both radios and stash them back behind the seat. Fortunately, neither of them fell off the hook when the door open. We landed at a small airport a few miles up the pike, closed the door and got back in the air with only about 5 minutes total time lost.

Dayton was nice and clear. So we decided to take in the Air Force museum again. It had been a couple of years since I saw it last and they have added a few basic exhibits of interest including an actual Gemini capsule.

Friday morning was the trip to Mendelson's Surplus. We met Dennis, WB5ISN, and the group that went up with him. There were lots of goodies to look out for. Then a trip out to the Hamvention site and a perusal through the manufacturers and commercial exhibitors. Roger and I both intended to get up early the next day and be in the flea market by six O'clock. We made and it was not disappointing. I notice this year that more and more people had HT-220's, but fewer radios were for sale in the flea market. This was a contrast to last year when many radios were available. Some careful scrounging and bargaining produced a couple of used slimline batteries at a reasonable price. I later turned up two brand new, but out of date batteries at a bargain basement price. The deal was so good that K5JB standing beside me bought a couple of the batteries also.

The flea market produced a few moments of hilarity. One guy had set up and had his table out. He placed his Walkie Talkie on the car of the guy next to him. What he didn't see was that the fellow had gotten in his car and was getting ready to move the car. The first guy's radio then does a swan dive off the car which prompts him to yell at the car's driver. The driver, unaware of what's going on, thinks he has run over the first guy's foot or toes and puts the car in revers and backs up, smashing the Walkie Talkie. My spy left just as the conversation between the owner of the Walkie Talkie and the driver of the car was beginning to heat up. "Sorry isn't quite going to cut it, Buddy. You drove over my Radio." We have no final disposition of this matter.

The clouds started building Saturday nite, so we decided to check the weather first thing out and leave early Sunday morning. As it was, the flight was a milk run (Usually the only milk I have before a flight is two Dramamines and a glass of milk; my usual Dramamine cocktail). We got back into Norman about 3:30 p.m. that afternoon. We got on the ground just as things started to heat up in excitement that night. Several tornadoes were spotted and I understand the weather net got quite a workout. Home at last, but I'm ready to go again.

Micheal Salem N5MS





ALTUS AREA  
AMATEUR RADIO  
ASSOCIATION

President - Bob Bratton, WD5BBW

Sec/Tres. - Janice Simms, WB5WMN

The ALTUS AREA AMATEUR RADIO ASSOCIATION met Thursday, May 11, 1978 at the North Main Fire Station, 7:30 PM. Twenty-three were present

President Bob Bratton, WD5BBW, called the meeting to order. After introductions, Mike Schenkle reported that the amateur class was over and the tests had been given. Now for the waiting!

Loren Simms, WB5CBF, reported that the amplifier board for the repeater had been replaced and power was up to 40 watts. More work and repair is to be done.

FIELD DAY 1978 will be held June 24-25. It was decided to have two individual operating locations instead of the one club station as has been done in the past. One station will operate from the Lugert area-hopefully the 3rd pavillion north on the south shore and the other location around the Otter Creek area near Jerry Bryan's. More details and directions for these locations will be available at the June 8 meeting. Everyone is invited and encouraged to attend Field Day at either or both locations.

Dues for June: Cecil Brownlow, Bud Smith, Gene Gunkle,  
Bob Bratton, Chuck Nichols.

Dues Past Due: Don Hays (May), Richard Spencer (April), Danny  
Watson (April), Brent Haught (April),  
Cal Hunter (March)

Janice, WB5WMN

\* \* \* \* \*

FOR SALE: Heath HR-10B, Contact Kenneth Ingram, WD5BBT, 798 Liberty Circle, Altus OK 73521, Phone (405) 482-8355.

FOR SALE: YAESU FT 227R (2 meter synth) \$280; WR 500 Rotor, \$90, CDR AR22 Rotor, \$40, TH3jr 2015 (10 meter) beam, \$110, pair 4-400 with sockets, \$20, 30A fil choke (B&W), \$14; Air DUX HR2K tank circuit with switch, \$20, plate choke, \$5, 4Cx50B & 4C300YS (2 ea) \$5 each. Mark Flavinm N5MF, Box 217, Burns Flat, OK 73624

FOR SALE: Hammerlund HXL-1, Linear Amplifier, 2000 Watts PEP, 10-80m, like new, \$300. HORNET beam, 10-15-20 m, \$50. Gary, W5GNV, 737-2962.

\* \* \* \* \*

Gene Halley, WB5SQC (Now a Texan) received a Public Service Award in connection with his help in a tornado at Houston TX Dec 13, 1977.

\* \* \* \* \*

Tulsa Repeater Organization, Inc. will host the OKLAHOMA REPEATER SOCIETY on 3 June 1978. at the Martin East Library, 2601 S. Garnett Road, Tulsa. 10:00 AM to 4:30 PM. Parking area will be provided north of the library at the Christview Christian Church parking lot. \$2.00 registration fee at door. EVERYONE interested in repeaters, their operation and use should attend this important meeting.

FOR SALE: HW-16, HG10B VFO, H51661 Speaker, MFJ CW Filter, Brass Key, \$175. All excellent condition with manuals - set up and operating. Bob Stubbs, WB5ZLU. 632-1840 after 1800, 840-5551 ext 390 0800 - 1715 Hrs.



U.S. DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration  
NATIONAL WEATHER SERVICE - Forecast Office  
P.O. Box 59997  
Oklahoma City, Oklahoma 73159

April 25, 1978

Mr. H. O. Townsend  
2346 Louise Lane  
Norman, Oklahoma 73071

Dear Mr. Townsend:

The National Weather Service is the government agency designated by Congress to issue weather warnings to the public. These warnings include everything from winter storm warnings to fire danger warnings to severe thunderstorm and tornado warnings. The National Weather Service, in carrying out its mission, uses a variety of meteorological tools, each of which makes its contribution, but also has its limitations.

In the case of tornado warnings, radars presently in use detect less than half of the tornadoes that occur. The human eye in the form of spotter networks, and the rapid and efficient communication of what is observed, are vital parts of an effective tornado warning service. The National Weather Service recognizes that the Radio Amateur organization, with their unique communication system, can make a very valuable contribution to an effective warning system.

The National Weather Service, in its efforts to serve the general public, shares information it has about severe local storms and issues warnings about the storms, to all news media. We feel that the radio amateur groups would offer a valuable service to the general public by sharing with us the information they have about severe thunderstorms and tornadoes.

We are looking forward to a closer working relationship with the Radio Amateurs.

Sincerely,

*R. C. Crooks*

R. C. Crooks  
Meteorologist in Charge

FOR SALE: TR 2200 2M FM Transceiver w/TTP. Has 52/52, 07/67, 81/21, 22/82, 34/94, and 37/97, \$150. Excellent condition with manuals for rig TTP & VFO. Bob Stubbs, WB5ZLU. 632-1840 after 1800, 840-5551 ext 390 0800 - 1715 Hrs.

Cecil E. Pegors, Manager 787-0560

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OFFICE OF THE  
SECTION EMERGENCY COÖRDINATOR

---

OKLAHOMA

H. O. TOWNSEND WA5MLT

QST  
OFFICIAL ORGAN

May 22, 1978

Mr. Ray Crooks, Meteorologist in Charge,  
National Weather Service - Forecast Office,  
P.O. Box 59997,  
Oklahoma City, Okla., 73159.

Dear Mr. Crooks,

Thank you for your letter. I am delighted to learn of your expanded interest in the public service aspect of Amateur Radio and what it has to offer through its unique communication systems and its trained operators.

Since 1913, amateur radio has been the primary, and in many cases the only, means of outside communications in several hundred floods and earthquake emergencies. For example, the earthquakes in Alaska in 1964, Peru in 1970, Guatemala in 1976, the floods in the Dakotas and the aftermath of tropical storm Agnes in 1972 called for the amateur's greatest emergency effort. This does not include the numerous tornados, sleet storms, forest fires and blizzards where amateur radio participated before, during and after the crisis.

Amateur radio exists because it qualifies as a public service. Its continued existence and growth depend to a great degree not on the service we have performed in the past, or on our potential for service, but on what we are performing now and will continue to perform in the future.

Recognizing this principle, amateurs and the ARRL in 1935 organized what is now known as the Amateur Radio Emergency Service. It is composed of licensed amateurs who have voluntarily registered their capabilities for communications duty in the public service when disaster strikes. I believe the success is due to the fact that every licensed amateur, whether or not a member of the ARRL, is eligible to participate. The only other qualification is a sincere desire to serve.

With this in mind and your sincere request for amateur radio assistance, I feel the future holds a deep and personal commitment for both the National Weather Service and the radio amateurs of Oklahoma to work together for the betterment and benefit of our fellow neighbor.

I look forward to meeting with you in the near future to work toward our common goal.

Sincerely,

H.O. Townsend   
SEC, Oklahoma  
Fifth U.S. Call Region Representative,  
ARRL Emergency Communications Advisory Committee

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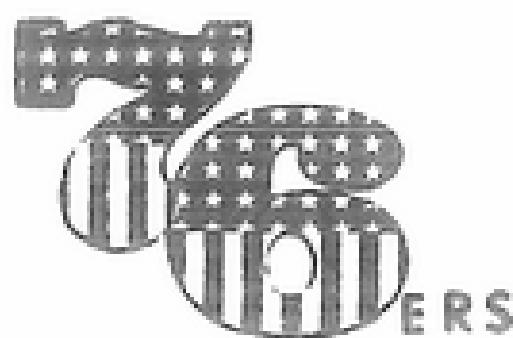
LET'S EAT - PLAY - EYEBALL - AND JUST HAVE FUN

MORI invites one and all, short and tall, fat and skinny and you name it to a big Family Picnic on June 6th from 5 PM to 10 PM. Midwest City Regional Park on East Reno between Midwest Blvd and Douglas at the playground. Lots of room, rides, swings for the kiddies, Picnic, bring your own covered dish. Big covered pavilion Fireplace. Everybody is invited.

June 1978

-13-

CORA Collector & Emitter



## THE BICENTENNIAL AMATEUR RADIO CLUB



FROM THE SECRETARY

The May meeting of the Bicentennial Amateur Radio Club contained some much-awaited business matters. A roster sheet counted 55 members and guests present, a fine attendance for such great weather. The club roster now includes 82 members, with 53 of those ARRL Members. An ARRL Affiliation for the club is now almost a certainty, with paperwork well underway.

After balking at the idea, the club has now put a determined effort into making the ladies' program at Ham Holiday a success. The Ham Holiday Ladies' Program Committee, headed by Don, WB5UAP, is reporting good progress in this area and will still welcome new ideas and volunteers. The committee has toured the convention site, talked to former successful planners, and has an optimistic attitude toward a program for the ladies that will be enjoyable. A keystone in the ladies' program will be a ladies' luncheon and styleshow Saturday. Plan for your YL to attend.

Bill Riddles, N5WM, gave a report on the recently completed classes in amateur radio. The '76ers have always given much time and attention to training, and this year's classes have been very successful. Approximately 35 new amateurs have been added to our ranks, with many, many upgrades, including nine Extra Class operators. The Club's thanks goes to Coy Day, N5OK, Novice Classes; Ernie Wolf, K5YKD, Technician and General Classes; and Bill Riddles, N5WM, Advanced and Extra Classes.

Under recommendation of the "Repeater Committee", Coy Day, N5OK, presented a motion to assume the responsibilities of the ailing Oklahoma City Repeater Club, Inc., sponsors of the 37/97 repeater with open autopatch. Also in the motion was a provision to form a committee to recommend financing procedures for the repeater. Those recommendations will be presented at the June meeting. No constitutional changes were made at the May meeting, but the June meeting may include such--so once again--plan to be there!

ARRL Field Day will occur the weekend of June 24, with the '76ers operating Class 2A (two simultaneous transmitters). Our Field Day site will be Woodson Park, near 29<sup>th</sup> and South May. The following amateurs are heading up their respective responsibilities:

Rigs and Antennas. . . . .	Tom, N5GE (ex WB5QGE) and Lloyd, WB5HUP
Housing. . . . .	Dick, WB5TMW
Generators. . . . .	Ken, K5UAB
Operations. . . . .	Ken, K5GI
Concessions. . . . .	Bob, WB5SSX and Don, WB5UAP
Publicity/Cleanup. . . . .	C. Y., WB5TKG

Equipment and volunteers are shaping up well, but if you have something we may be able to use, including yourself, let one of these guys know. It will be appreciated.

The program for the May meeting was given by Chuck Wilhite, K5NK, on the Antenna Meter. This device is particularly useful in setting antenna resonance without ever applying power from your transmitter. This procedure eliminates having full transmitter power applied to a high SWR, non-resonant antenna circuit. The meter has been responsible for extending final life for a number of amateurs. It was an interesting program and was appreciated.

Next month's agenda will deal primarily with Field Day activities and voting on the recommendations of the repeater committee. Plan to attend, and remember--everyone is welcome to a '76ers meeting. 73

Mark, WD5DYI, Secretary

THE LADIES ACTIVITIES COMMITTEE IS IN NEED OF VOLUNTEERS TO DEMONSTRATE CRAFTS AND PROVIDE OTHER ASSISTANCE AT THE 1978 HAM HOLIDAY. ANY SUGGESTIONS WILL BE WELCOMED.

IF YOU ARE WILLING TO ASSIST OR KNOW SOMEONE WHO MIGHT, PLEASE CALL  
LLOYD KIRK 685-4873, DON DUCK 681-0133, OR LARRY KERR 946-7941.

## HAM GEAR INSURANCE OFFERED

The ARRL is now offering an insurance package to its members to protect your ham gear against fire, theft or other losses. The package does *not* include antenna systems, but it covers your rig and accessories whether at home, in your car, or even at a Field Day site. ARRL officials describe the package as being better coverage at lower cost than others currently on the market. The plan was designed specifically for "Hams" and its success is directly related to the number of members that participate.

Most ARRL members have already received a brochure describing the insurance package, but for your convenience, we will reprint key parts of it here.

### PERILS COVERED:

This policy insures against direct physical loss or damage caused by:

- (a) Fire, lightning;
- (b) Tornado, cyclone, windstorm, hurricane, hail;
- (c) Explosion;
- (d) Collision of the transporting vehicle with any other vehicle or object, it being understood that the Company shall not be liable for loss or damage caused by the load or any portion thereof coming in contact with any other object unless the transporting vehicle also collides with such object, coupling of cars not to be deemed collision;
- (e) Overturning or upset of the transporting vehicle;
- (f) Collapse of bridges, trestles, culverts, elevated roadways, manhole covers and roadway drain basins;
- (g) Riot, riot attending a strike, and civil commotion;
- (h) Aircraft or by object falling therefrom;
- (i) Smoke (meaning only smoke due to a sudden, unusual and faulty operation of any heating or cooking unit, only when such unit is connected to a chimney by a smoke pipe, and while in or on the premises described in this policy, excluding, however, smoke from fireplaces or industrial apparatus);
- (j) Earthquake, volcanic eruption, subterranean disturbance or other convulsion of nature;
- (k) Stranding, sinking, burning or collision of vessels, including general average and salvage charges incurred;
- (l) Theft.

### CLAIM SETTLEMENT BASIS:

Covered claims will be settled on a "replacement cost" or equivalent basis. Equipment is *not* depreciated at claim settlement time as is with most homeowners coverage.

### DEDUCTIBLE:

Ten Percent (10%) of the insured value, subject to a \$50.00 minimum per loss. Deductible does *NOT* apply if homeowners deductible is paid.

### PREMIUM COST:

\$1.00 per \$100.00 of replacement value. (Minimum premium is \$10.00, regardless of coverage in amounts less than \$1000.00 replacement cost.)

### POLICY YEAR:

Policy will become effective on the first day of the month following receipt of the premium and application. (Please allow at least sixty (60) days from the date the application and check are mailed for the policy to be issued.)

# HOW TO ENROLL

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- A. List on the application ALL radio equipment owned or leased. The member must insure ALL of his equipment valued at more than \$50. He may *not* be selective. (Excluding antennae, towers, and rotators.) Use a separate sheet of paper if more space is needed.
- B. List a total "replacement" value for each piece of your equipment both in the home and automobile.
- C. After arriving at the total replacement cost, compute annual insurance premium based on the rate of \$1 per \$100 of total replacement value. Minimum premium \$10.
- D. Make check or money order payable to G & H Insurance Administrators and return with completed application to: **AMERICAN RADIO RELAY LEAGUE, 225 Main Street, Newington, Conn. 06111.**

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## APPLICATION FORM:

16

1. Name of Applicant \_\_\_\_\_
2. QST Control No. (from QST Label) \_\_\_\_\_
3. Address \_\_\_\_\_
4. Address of Principal Location: \_\_\_\_\_
5. Give details of previous losses during the current year and the preceeding three years, including dates, amount of loss, and cause of loss: \_\_\_\_\_  
\_\_\_\_\_
6. Has any insurance company cancelled or refused to issue any similar insurance during the current year and the preceeding three years: \_\_\_\_\_  
If yes, what company and why? \_\_\_\_\_
7. The premium check must be made payable to:  
**G & H INSURANCE ADMINISTRATORS, INC.**
8. Use this listing to describe *all* radio equipment in your possession. (Use separate sheet of paper if more space is needed.)

June 1978

CORA Collector & Emitter

Description Including Manufacturers Name, Model and Serial Numbers or Other Identification	Date of Purchase	Purchase Price \$	Amount of Insurance (Replacement) \$

17

Blanket on Miscellaneous Items (Valued under \$50.00 each)

\$ \_\_\_\_\_

Total \_\_\_\_\_

9. \_\_\_\_\_  
Signature Date

10. Mail application and check today to: **American Radio Relay League  
225 Main St., Newington Conn. 06111**

It is understood and agreed that the completion of this application does not bind the company to issue nor the applicant to purchase this insurance. Coverage is not effective until the policy is issued.

### PROGRAM ADMINISTRATION

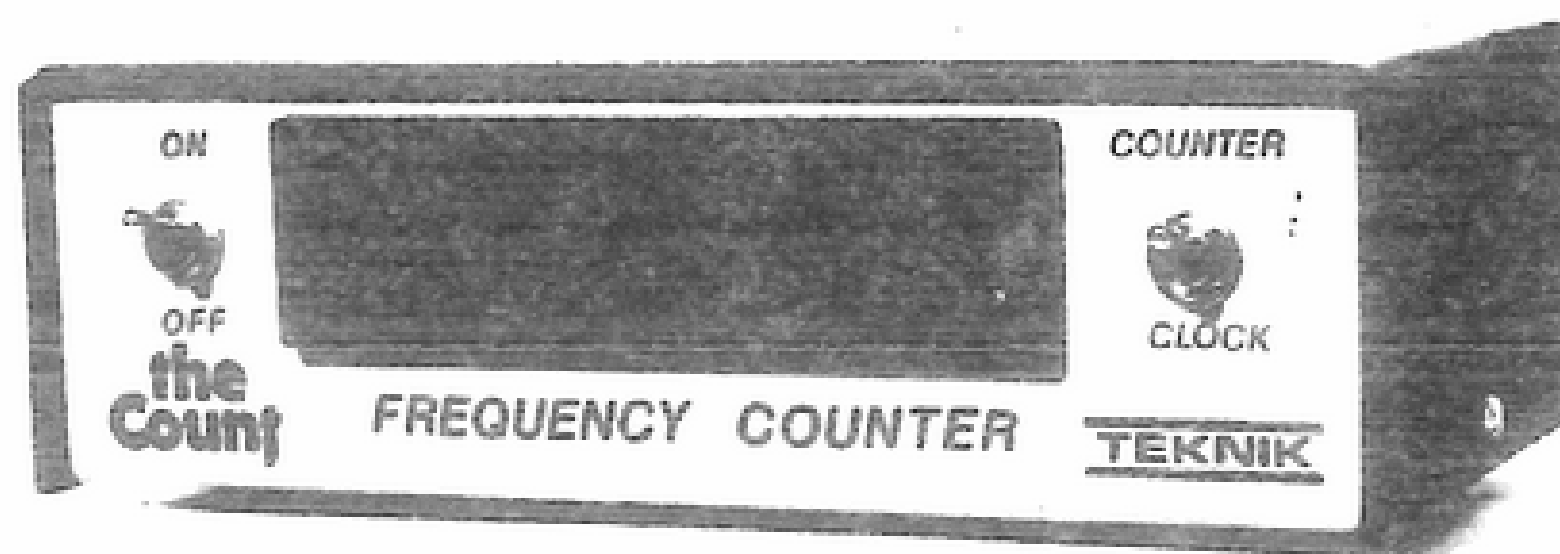
The program will be administered by Bonn A. Gilbert, President of G & H Insurance Administrators, Inc., with Marketing Offices at 4000 Park Road, Charlotte, North Carolina 28209, and Services Offices located at 649 North Virginia Avenue, Azusa, California 91702. Toll-free IN-WATS lines are provided for your convenience. Please call 800/432-6597, should you need assistance or additional information.

June 1978



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## MODEL FC-106 BA



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100 HZ-40 MHZ Typical  
Time Base—6.5536 MHZ Crystal Oscillator  
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Display—6 High Intensity LED's  
Power Req.—10 VAC, 9 VDC at 300 MA  
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Size—2" X 6" X 4"  
Clock—12 or 24 Hour  
4 or 6 Digit

For an instant Frequency check or Time check the FC-106 BA is the answer. The 106 BA employs the same circuitry as the rest of the 106 line to provide the user with exceptional accuracy and stability. A convenient front panel switch allows easy selection of Frequency Counter Mode or Clock Mode. The clock may be programmed for either 12 or 24 Hour Mode or 4 or 6 Digit Display. The clock time base is crystal controlled for superior accuracy and 12 vdc operation.

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WITH TONE PAD, CASE, AND CHARGER

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PLEASE PRINT CLEARLY

NAME \_\_\_\_\_ CALL \_\_\_\_\_

LADY \_\_\_\_\_ CALL \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

PRE-REGISTRATIONS @\$ 3.00	\$ _____
LADIES LUNCH/STYLE SHOW @\$ 4.25	\$ _____
QCWA BREAKFAST @\$ 3.00	\$ _____
SUNDAY BANQUET @\$ 5.25	\$ _____
RESERVE FLEA MARKET TABLE (non-commercial)	

PRE-REGISTRATIONS MUST BE MADE BY JULY 21ST TO QUALIFY FOR THE PRE-REGISTRATION AWARD. MAIL TO THE ABOVE ADDRESS. TICKETS WILL BE HELD AT THE REGISTRATION DESK. SEND S.A.S.E. IF CONFIRMATION IS DESIRED. USE SEPERATE FORM FOR ROOM RESERVATIONS.

CORA Collector & Emitter



Club  
NEWS

VSLW  
The Elmer Goodwin Memorial  
Section

## MINUTES OF MAY MEETING

MEETING WAS CALLED TO ORDER MAY 19 AT 8:05 PM BY PRESIDENT KEN, WB5KHU, WITH 21 MEMBERS AND GUESTS PRESENT.

JOE, WA5ZNF, IN A FIT OF GENEROUSITY, FORKED OVER \$5.00 TO ELLARD FOR THE PROJECTOR (SEE LAST MONTH'S MINUTES).

WOODY, W5FMX, ANNOUNCED JIM WILLIAMS (CHANNEL 4) IS GIVING A STORM ALERT MEETING IN EDMOND NEXT SUNDAY HE GAVE DETAILS SO MEMBERS COULD EXPAND THEIR WEATHER KNOWLEDGE.

JOE, WA5ZNF, REPORTED ON CORA PROGRESS ON HAM HOLIDAY PREPARATIONS.

CARL, W5JJ, REPORTED ON FCC ACTION REGARDING NEW STYLE TEST QUESTIONS FOR ADVANCED AND EXTRA CLASS LICENSES.

KEN, WB5KHU, SOLICITED VOLUNTEERS FOR MAILING C&E. (HE GOT 50% PARTICIPATION OF MEMBERS PRESENT--MORI TAKE NOTICE!)

IT WAS APPROVED THAT THE JUNE MEETING BE MOVED TO FRIDAY JUNE 23 AT LAKE OVERHOLSER AND BE A JOINT MEETING WITH ACARC. FIRST ORDER OF BUSINESS WILL BE SET UP FOR FIELD DAY, PICNICING AND KIBITZING.

SINCE JULY MEETING WILL FALL THE WEEK BEFORE HAM HOLIDAY IT WILL BE CANCELLED.

AUGUST MEETING WILL BE A WATERMELON FEED. THE SITE WILL BE ANNOUNCED LATER.

COY DAY, N5OK, OKLA COUNTY ARRL EMERGENCY COORDINATOR GAVE A PROGRAM ON EMERGENCY PREPAREDNESS. HE SHOWED A FILM PRODUCED BY AMERICAN SECURITY COUNCIL, EDUCATION FOUNDATION. THE FILM DEPECTED COMPARATIVE MILITARY STRENGTHS OF THE USA AND USSR. COY WENT ON TO DESCRIBE RUSSIAN MILITARY AND CIVIL DEFENSE PREPAREDNESS. HE USED THESE EXAMPLES TO SHOW HOW AMATEUR RADIO CAN BE IMPORTANT CIVIL DEFENSE ASSET AND ULTIMATELY INFLUENCE STRATEGIC POSTURE OF THE U.S. COY DESCRIBED OKLAHOMA CITY'S CIVIL DEFENSE PLAN CALLED CRISIS RELOCATION. THIS PLAN CONSISTS OF RELOCATION OF OKLAHOMA CITY'S POPULATION TO NEIGHBORING AREAS. AMATEUR RADIO HAS BEEN ASKED TO PARTICIPATE IN COMMUNICATION MATTERS. COY ASKED SOME POINTED QUESTIONS ABOUT HOW WELL WE ARE PREPARED TO COMMUNICATE IN TIME OF REAL CRISIS. HE EXPRESSED A DESIRE TO START A TWO METER TRAINING NET. THERE WAS MUCH PROVOCATIVE DISCUSSION ABOUT HOW AMATEUR RADIO OPERATORS WOULD BE USED IN CRISIS RELOCATION.

AFTER PRIZE DRAWING, MEETING WAS AJOURNED AT 9:45 AND THE GROUP MOVED TO THE COFFEE POT TO RESUME THE LIVELY DISCUSSION OF CIVIL DEFENSE. JOE, K5JB, SEC'Y

### QUOTE

PROFANITY IS A CRUTCH FOR THE CONVERSATIONALLY CRIPPLED. RELAYED BY WB5OHK

### ANOTHER QUOTE

AN OUNCE OF DUMB LUCK IS WORTH A POUND OF PREPARATION. K5JB

### IC-22S - SO THAT'S HOW THOSE DIODES DO IT!

LARRY, WB5POW, SUPPLIED TABLE 1 WHICH CONTAINS DIODE PLACEMENT WHICH EXTENDS THE THEORETICAL FREQUENCY RANGE OF THE IC-22S BELOW 146 MHZ. IN TESTING ONE RADIO, I FOUND IT WOULD NOT GO TOO FAR BELOW 146 BEFORE THE PHASE LOCKED LOOP CIRCUITRY FAILED TO FUNCTION PROPERLY. IT MAY BE THAT SOME RADIOS WILL PERFORM LOWER THAN OTHERS AND IT MAY BE THAT SIMPLE ADJUSTMENT WILL ALLOW THE THING TO GO LOWER. I'LL LEAVE THAT TO SOME OF YOU EXPERIMENTERS TO WORK ON. PASS YOUR EXPERIENCE ALONG AND WE WILL PRINT IT IN C&E.

IN LOOKING THE LIST OVER, IT OCCURRED TO ME THAT IT EXTENDS THE LIST PROVIDED BY ICOM IN THE OWNERS MANUAL. WHEN I FIRST LOOKED AT THE OWNERS MANUAL, I WAS PUZZLED BY THE INSTRUCTIONS WHICH WERE WRITTEN WITH TYPICAL ORIENTAL FLAIR. PERHAPS THE REAL DIFFICULTY IS HAVING TO THINK IN BINARY ARITHMETIC, WHICH IS

ALIEN TO THE EDUCATION I RECEIVED WHICH CONSISTED OF USING THE TEN FINGERS AND TOES TO COUNT ON RATHER THAN BITS AND BYTES.

TABLE 1 - LARRY'S TABLE

FREQUENCY TO CALCULATE "n" NUMBER		N = (F <sub>0</sub> - 144.39)							
		-----							
		.015							
		128	64	32	16	8	4	2	1
FREQUENCY	"N" NUMBER	D7	D6	D5	D4	D3	D2	D1	D0
-----									
145.995	107		x	x		x		x	x
145.980	106		x	x		x		x	
145.965	105		x	x		x			x
145.950	104		x	x		x			
145.935	103		x	x			x	x	x
145.920	102		x	x			x	x	
145.905	101		x	x			x		x
145.890	100		x	x			x		
145.875	99		x	x				x	x
145.860	98		x	x				x	
145.845	97		x	x					x
145.830	96		x	x					
145.815	95		x		x	x	x	x	x
145.800	94		x		x	x	x	x	
145.785	93		x		x	x	x		x
145.770	92		x		x	x	x		
145.755	91		x		x	x		x	x
145.740	90		x		x	x		x	
145.725	89		x		x	x			x
145.710	88		x		x	x			
145.695	87		x		x		x	x	x
145.680	86		x		x		x	x	
145.665	85		x		x		x		x
145.650	84		x		x		x		
145.635	83		x		x			x	x
145.620	82		x		x			x	
145.605	81		x		x				x
145.590	80		x		x				
145.575	79		x			x	x	x	x
145.560	78		x			x	x	x	
145.545	77		x			x	x		x
145.530	76		x			x	x		
145.515	75		x			x	x		
145.500	74		x			x		x	
145.485	73		x			x			x
145.470	72		x			x			
145.455	71		x				x	x	x
145.440	70		x				x	x	
145.425	69		x				x		x
145.410	68		x				x		
145.395	67		x					x	x
145.380	66		x					x	
145.365	65		x						x
145.350	64		x						

IT OCCURRED TO ME THAT PERHAPS A TABLE COULD BE GENERATED A LITTLE EASIER BY LEAVING OUT THE REFERENCE TO "N" NUMBERS WHICH REALLY ARE OF LITTLE USE EXCEPT IN THE MATHEMATICAL EQUATION WHICH DESCRIBES THE FREQUENCY GENERATION.

IF A TABLE IS PREPARED WITH ACTUAL FREQUENCY STEPS ACROSS THE TOP IT WOULD LOOK LIKE TABLE 2, NEXT PAGE. NOW WE ARE NO LONGER ADDING BINARY NUMBERS. WE ARE ADDING FREQUENCY CHUNKS. NOTICE THAT DIODE ZERO POSITION REPRESENTS 15 KHZ, DIODE ONE POSITION REPRESENTS 30 KHZ, DIODE TWO POSITION REPRESENTS 60 KHZ, ETC.

A PERSON COULD START A TABLE WITHOUT REFERENCE TO THE BOOK IF HE COULD REMEMBER

JUST ONE FREQUENCY AND CORRESPONDING DIODE PLACEMENT. WITH NO DIODES INSTALLED THE FREQUENCY OF THE RADIO WOULD BE 144.39 MHZ. SINCE THE UNIT PROBABLY WON'T TRANSMIT AT THAT FREQUENCY, IT MIGHT BE EASIER TO SELECT A FREQUENCY IN THE 146 MHZ BAND TO REMEMBER AS STARTING POINT. 146.07 MAY BE EASY TO REMEMBER SINCE IT CONTAINS THREE DIODES IN AN UNBROKEN ROW, D6, D5, and D4. THESE DIODES REPRESENT 960, 480, and 240 KHZ, RESPECTIVELY. ADD THESE TO 144.39 AND YOU GET 146.07 MHZ.

TABLE 2 - IC-22S DIODES AND FREQUENCIES

FREQ. (MHz)	D7 1920	D6 960	D5 480	D4 240	D3 120	D2 60	D1 30	D0 15	(kHz)
144.39									
			(NO DIODES)						
146.01		X	X		X	X			
146.07		X	X	X					
146.22		X	X	X	X		X		
146.25		X	X	X	X	X			
146.28		X	X	X	X	X	X		
146.31	X								
146.34	X							X	
146.37	X					X			
146.52	X				X	X	X		
146.94	X		X		X		X		
147.03	X		X	X					
147.27	X	X							
147.75	X	X	X						
147.99	X	X	X	X					

PERHAPS IT WOULD BE EASIER TO REMEMBER 146.31 AS A STARTING POINT SINCE IT ONLY CONTAINS ONE DIODE, D7. 144.39 PLUS 1920 kHz EQUALS 146.31. THE ONLY PROBLEM WITH THIS IS IN GOING BACKWARDS, ONE HAS TO DO A LOT OF SUBTRACTION AND I MAKE A LOT MORE MISTAKES SUBTRACTING THAN I DO ADDING.

TABLE 2 CONTAINS A SAMPLE OF TYPICAL REPEATER FREQUENCIES. LOOK AT IT CLOSELY AND I THINK YOU WILL BE ABLE TO SEE HOW SIMPLE IT IS TO FIGURE DIODE PLACEMENT WITHOUT REFERRING TO THE "N" NUMBERS.

IF YOUR RADIO HAS BEEN MODIFIED WITH ADDITION OF ROCKER SWITCHES TO ALLOW EXTERNAL PROGRAMMING, YOU MIGHT BE ABLE TO CHANGE FREQUENCY WITHOUT REFERRING TO THE TABLE IF YOU CAN REMEMBER HOW MANY KILOHERTZ EACH SWITCH REPRESENTS. LETS SAY YOU HAVE IDENTIFIED THE SWITCHES WITH THE SAME SUBSCRIPTS AS THEIR ASSOCIATED DIODES, E.G., SWITCH 0 SWITCHES DIODE D0 WHICH REPRESENTS 15 KHZ.

LETS SAY YOUR RADIO IS SET ON 146.31. SWITCH 7 IS SET. TO MOVE TO 146.34 YOU NEED 30 KHZ SO YOU FLIP SWITCH 1. NOW SAY YOU WANT TO TRANSMIT ON 146.94. THE ICOM PEOPLE DIDN'T THINK YOU WOULD WANT TO DO THAT WHEN THEY DESIGNED THE MACHINE SO YOU HAVE TO REPROGRAM. YOU NEED 600 kHz, RIGHT? FLIP SWITCH 5 AND SWITCH 3.

NOW THE PROBLEM. WHAT IF YOU HAVE TO SET A SWITCH (ON) AND IT IS ALREADY SET? SWITCH IT OFF AND SET THE ONE LEFT OF IT ON. IF IT IS ALREADY ON, SWITCH IT OFF AND SWITCH THE ONE LEFT OF IT ON, AND SO ON, UNTIL YOU RUN OUT OF SWITCHES, OR BAND, WHICHEVER HAPPENS FIRST.

THE REAL MIND BOGGLER OCCURS WHEN YOU HAVE TO REDUCE FREQUENCY. WHEN INCREASING FREQUENCY, WE "CARRY" BY FLIPPING THE SWITCH TO THE LEFT. WHEN DECREASING FREQUENCY, WE "BORROW" FROM THE SWITCHES AT THE LEFT. LET'S SAY WE ARE ON 146.31 AND WE WANT TO GO TO 146.28. SWITCH 7 IS ON AND ALL THE OTHERS ARE OFF. WE NEED TO DROP 30 KHZ SO SWITCH 1 HAS TO BE SWITCHED OFF. IT IS ALREADY OFF SO SWITCH IT ON! BORROW FROM SWITCH 2 BY TURNING IT OFF. OOPS! IT'S ALREADY OFF! WELL SWITCH IT ON AND BORROW FROM THE SWITCH AT THE LEFT. IT IS ALREADY OFF SO SWITCH IT ON. KEEP GOING UNTIL YOU RUN OUT OF SWITCHES WHICH IS SWITCH 7. THE RESULTS ARE SHOWN IN TABLE 2.

ALL OF THE FORGOING IS PROBABLY THE REASON THE SWITCH MODIFICATION HASN'T TAKEN THE IC-22S OWNERS BY STORM. IF THERE IS SUFFICIENT INTEREST, PERHAPS I WILL TRY AND NAG SOMEONE WHO HAS DONE IT A LITTLE DIFFERENTLY TO DESCRIBE HOW TO MAKE THE '22S THINK FOR ITSELF AND TAKE DECIMAL SWITCH INPUTS AND INTERNALLY CALCULATE THE CRAZY SWITCH SETTINGS AND SET THEM AUTOMATICALLY. JOE, K5JB



UNPACK BAGS - WASH CLOTHES - RE-PACK BAGS - GO

CONTINUING IN THE VEIN OF DIVERSIFICATION STARTED A FEW MONTHS AGO IN C&E I THOUGHT SOME OF YOU MAY BE INTERESTED IN SOME NOTES FROM K5JB'S TRAVEL GUIDE. SINCE LAST MONTH'S C&E, K5JB HAS OPERATED PORTABLE IN DAYTON OHIO, TOPEKA KANSAS, WASHINGTON DC, WOLF CREEK PASS COLORADO AND HAPEVILLE GEORGIA.

IN BRIEF SUMMARY, DAYTON (HAMVENTION) WAS A BLAST, TOPEKA SIRLOIN STOCKADE IS SAME AS ANYWHERE ELSE, WOLF CREEK PASS IS A REAL ZINGER AND HAPEVILLE GEORGIA A REAL ZERO. EVERYBODY ALREADY KNOWS ABOUT WASHINGTON DC.

LETS TAKE CARE OF WASHINGTON FIRST. THE ONLY REPEATER I COULD HIT, I THINK WAS 28/88. IT PRATTLED ALL NIGHT LONG AND IT SOUNDED LIKE THE WORST OF 75 METER AM. PERHAPS IT GOES ALONG WITH THE PREVAILING WASHINGTON PHILOSOPHY OF PRESERVING HISTORIC FEATURES OF OUR CIVILIZATION. IN SEVERAL HOURS OF MONITORING, I LEARNED THREE THINGS: THE SUN WAS UP (DOWN), TRAFFIC WAS HEAVY (LIGHT), RIG SOUNDED FULL QUIETING(NOISY). HO HUM.

DAYTON IS PROBABLY COVERED ELSEWHERE IN THIS ISSUE BUT I'LL ADD A FEW NOTES FROM BEAUTIFUL DOWNTOWN DAYTON AND THE FABULOUS (SNICKER) BILTMORE HOTEL.

JOE, WA5FLT, AND DEBBY, WB5AAX, TRAVELLED TO DAYTON HAMVENTION WITH ME AND WE JOINED LARRY, WB5POW, STAN, WB5UIY, JOHN, WD5IDF, AND TROOPER KEN, (A HAM RADIO HANGER-ON WHO DOESN'T HAVE A CALL). WE COMBINED FORCES TO TAKE OVER THE SIXTH FLOOR OF THE BILTMORE WHICH REALLY WASN'T TOO HARD SINCE THERE WAS A SIGN ON THE MAIN ELEVATOR LANDING WARNING THAT THE SIXTH FLOOR WAS CLOSED AND TRESSPASSERS WOULD BE ARRESTED. ASIDE FROM A LITTLE PLASTER FALLING, THE SIXTH FLOOR LOOKED RELATIVELY SAFE TO ME.

I DISCOVERED A FAMILIAR CALL ON '52 SUNDAY MORNING. APPARENTLY MAC, K2GKK, BILL, K3TGY, AND JIM, K8ESH, WERE HOLED UP A FEW FLOORS ABOVE US. ASIDE FROM ATTEMPTING TO WORK A LITTLE 450 DX TO THE HOLIDAY INN ON THE NORTH EDGE OF TOWN THERE WASN'T MUCH YACKING ON THE RADIO. THE NORMAN CONTINGENT WAS MAINTAINING RADIO SILENCE BECAUSE I'M SURE THEY HEARD STAN AND ME WHEN WE CLIMBED OUT ON THE ROOF WITH OUR UHF HT'S.

THE RADIOS WERE HOT AT THE HAMVENTION SITE, HOWEVER. WE WERE ALL PREPARED WITH UHF RADIOS ALL EQUIPPED WITH A COMMON DIRECT FREQUENCY AND WENT INTO THE FLEA MARKET WITH KEEN ORGANIZATION. WHEN SOMEONE THOUGHT OF SOMETHING HE WANTED, HE JUST PUT OUT A QST AND WITHIN MINUTES WAS GIVEN COORDINATES TO THE LOCATION OF HIS DESIRED ITEM. I NEVER SAW ANYTHING SO SLICK IN ALL MY BORN DAYS. THE ONLY THING MY LITTLE HEART DESIRED WAS A MOTOROLA EARPHONE. I WOULD HAVE NEVER FOUND IT IN ACRES OF FLEA MARKET BUT SOMEONE DID AND LEAD ME TO IT. SOME ITEMS WERE FOUND IN MINUTES AFTER A QST.

THERE WERE MANY OTHER OKLAHOMA CITY AREA AMATEURS AT DAYTON; AT LEAST TWENTY ONE AT ONE COUNT. I WON'T TRY TO TATTLE ON ALL OF THEM. IF THEY WANT TO SEE THEIR NAMES IN PRINT THEY'LL JUST HAVE TO WRITE UP SOME OF THEIR EXPERIENCES OR DEFENSE OF THEIR ACTIONS. IN SHORT, DAYTON HAMVENTION IS NO DOUBT AN AMATEUR RADIO "HAPPENING" THAT IS HARD TO BEAT.

BEFORE I EXPAND ON WOLF CREEK PASS, LETS DISPATCH HAPEVILLE GEORGIA. I THOUGHT I WAS GOING TO ATLANTA SO I WAS PREPARED WITH ADVICE LIKE "DON'T GO DOWN ON PEACH STREET. THAT'S WHERE ALL THE HOOKERS ARE!" I WAS NOT PREPARED TO HIKE FROM THE HOTEL, WHICH WAS SELECTED FOR A MEETING BECAUSE OF ITS LOW COST, TO THE NEAREST TRACE OF CIVILIZATION WHICH WAS AT LEAST FOUR MILES AWAY. NEEDLESS TO SAY, I HAD PLENTY OF TIME TO PREPARE SOME MATERIAL FOR C&E.

ON MAY 12, TWO FRIENDS OF MINE AND I FLEW UP TO PAGOSA SPRINGS TO DO SOME WORK ON A CABIN. BOB, (NO CALL YET) THE OWNER OF THE CABIN WANTED TO GO UP AND DO SOME ELECTRICAL WORK AND INSTALL A ROOF JACK (GADGET THROUGH WHICH THE FLUE FROM A STOVE PASSES). WE LEFT FRIDAY AFTERNOON AND LANDED IN PAGOSA SPRINGS INTERNATIONAL AIRPORT AT 6:15 PM, MOUNTAIN TIME, AFTER A FIVE HOUR FLIGHT. WE RENTED A CHEVETTE AND STUFFED IT ABSOLUTELY FULL OF ELECTRICAL BOXES, GENERATOR, TOOLS, LUGGAGE AND SLEEPING BAGS. WE FOUND OUT THE SKYLANE WOULD CARRY A LOT MORE STUFF THAN A CHEVETTE.

WE HAD PLANNED TO STAY OUT AT THE CABIN SO SLEEPING BAGS AND MUCH WARM CLOTHING WERE BROUGHT TO SURVIVE THE CHILLY (28°) NIGHTS. AS IT TURNED OUT, THE SLEEPING

BAGS WERE UNNECESSARY BECAUSE WE FOUND A DELIGHTFUL PLACE TO STAY THAT I CAN HIGHLY RECOMMEND. BOB'S SON HAD DISCOVERED A PLACE ABOUT A MILE SOUTH OF THE CABIN WHICH WAS CATERING TO SKIERS. THE PLACE CALLED INN AT THE PASS WAS CONSTRUCTED VERY RECENTLY BY AN INDIVIDUAL TO BE USED AS A RESIDENCE BUT HE NEVER LIVED IN IT. THE PRESENT OWNERS BOUGHT IT AND CONVERTED IT INTO A LODGE AND RESTAURANT. THERE ARE VARIOUS PLANS AVAILABLE WITH VARIOUS PRICES. TWO LARGE ROOMS CONTAIN BUNKBEDS AND PROVIDE MENS' AND WOMENS' DORM FACILITIES. THERE IS ONE APARTMENT IN THE MAIN STRUCTURE AND TEN HOUSEKEEPING CABINS IN SEPARATE STRUCTURES. GUESTS CAN COOK MEALS OR TAKE MEALS IN THE LODGE. THE PLAN WE WENT FOR WAS DORM SLEEPING AND BREAKFAST, LUNCH AND DINNER FOR \$18.00 PER PERSON. THAT RATE MAY HAVE BEEN LOW BECAUSE OF OFF SEASON CONDITIONS BUT SEEMED PRETTY REASONABLE.

ONE OF THE ATTRACTIONS IS AN EIGHT FOOT REDWOOD HOT TUB LOCATED OUTSIDE AND CONTAINING WATER MAINTAINED AT 105°. AS YOU MAY HAVE HEARD, HOT TUBS ARE GETTING TO BE A FAD ON THE WEST COAST. THEY SERVE AS A "SOCIAL GATHERING SPOT".

ANOTHER SOCIAL GATHERING SPOT, OF MORE CONVENTIONAL STYLE IS THE WICKED WOLF TAVERN WHICH PROVIDES A COZY ATMOSPHERE WITH SEATING AROUND A FIREPLACE AND INTERESTING MOUNTAIN TYPE STORIES AT NO EXTRA CHARGE.

THE DINING AT INN AT THE PASS WAS SUPERB. WE WERE OFFERED MUCH MORE QUANTITY AND VARIETY THAN WE COULD POSSIBLY CONSUME. AT BREAKFAST, KERRY, A CO-OWNER RUSTLED UP SPANISH STYLE EGGS, BACON, BLUEBERRY BISCUITS WITH HONEY AND PANCAKES. YUM. THE OTHER MEALS WERE LOADED WITH ITEMS SUCH AS LASAGNA, STUFFED PEPPERS, CORNISH HENS, SOME FRENCH DISHES I HAVE NO IDEA WHAT THE NAMES WERE AND AN ASSORTMENT OF VEGETABLES AND DESSERTS FOR FINAL COUP DE GRAS. I THINK THE SATURDAY SUPPER AND SUNDAY DINNER, WHICH WERE SERVED BUFFET STYLE COST DINERS WHO WERE NOT GUESTS ABOUT \$4.00 EACH.

THE DAY WE RETURNED, I DESERVED SOME KIND OF AWARD FOR SELF CONTROL. IT WAS MY TURN TO DO THE DRIVING AND WE WERE PLANNING TO TAKE OFF RIGHT AFTER LUNCH. AS MUCH AS I WANTED TO SAMPLE A LITTLE OF EACH ITEM DISPLAYED ON THE SPECIAL MOTHER'S DAY SPREAD, I RESTRAINED MYSELF AND ONLY HAD ONE PLATE FULL OF CHOW AND EVEN SKIPPED DESSERT.

THE INN AT THE PASS IS OPEN YEAR AROUND. RESERVATIONS AND INFORMATION CAN BE OBTAINED BY WRITING JERRY AND KERRY DERMODY AT PO BOX 1569, PAGOSA SPRINGS CO 81147 OR CALL (303) 968-5885.

THE FLIGHT HOME WAS RATHER UNEVENTFUL. I WENT SOUTH FAR ENOUGH TO FIND A LOW SPOT IN THE MOUNTAINS AND HIGHER SPOT IN OUR CLIMB, TURNED EAST AND FLEW 'TIL WE GOT TO A BIG CITY AND LANDED. THE RETURN FLIGHT WAS FOUR HOURS WHICH IS MUCH EASIER ON THE BODY THAN A FIVE HOUR FLIGHT BUT STILL A LITTLE LONGER THAN WHAT I WOULD CALL "COMFORTABLE" IN VIEW OF MY COFFEE DRINKING HABITS. JOE, K5JB

\* \* \* \* \*

DEAR EDITOR C&E: (Believe-It-Or-Not Department)

After spending 180 hours trying to build a system similar to the FUZZ-COMM<sub>R</sub> system described by N5MS and K5JB in the April Collector & Emitter, I gave up. I had completely smoked 3 Police Radar Detectors that I had purchased trying to make the system work ....Then, when I received HR Report #196, April 7, 1978, I picked up my notes and started again. I've now smoked 7 more radar detectors. However just before giving up, I reviewed my three pounds of notes and found the technology to design a radar detector smoker. I call it "FUZZSMOKER I" and to my delight, I have received a government contract to build 10,000 units to be distributed to all 50 states for their Highway Patrol Divisions. Don, K5CKQ

(Editors note: Don, I invite you to write a two page article on the construction, complete with schematics. Also I will be looking for an article from you for the APRIL issue 1979. Joe, WA5ZNF)



## MINUTES OF THE AERONITICAL CENTER AMATEUR RADIO CLUB

The meeting was called to order by President Graham at 8:PM. A round of self introductions was called for. President Graham reported that Bob James, K5FW, resigned and the secretary-treasurer job will be filled by Bill Oliver, K5KDR. He also reported that John Walvogel, W5UNA, was in Dallas and would pick up the club repeater. George, W5NTL, reported on the club station and also CORA business. Robby, K5QR, and Charlie, WA5JGU, will head up field day this year again. The president is still looking for someone to head up radio classes at the Red Cross. Charlie Greene, WA5JGU, needs some relief at this position. The status of the OKC weather station was requested and it was reported that the station is still indefinite. Jerry, W5MCJ, gave a report on the ship NEMO on a voyage at the turn of the century. Ed, K5LIL, gave the program along with Bob, WB5NSV, on direction finding the FAA way.

The meeting with 41 members and guests were adjourned at 9:00PM.  
respectfully submitted,  
Bill K5KDR sec.&tres.

Yakkey-Dee-Yak from Dave W4YDY/K5NC

Hope you are all doing O.K. there. We are doing fine. The winter was not bad and now the dogwood trees are at full bloom. We have about 25 in our yard and the woods must have twice that many back of the house. I have an acre in the country in a small development. the house on one side is about 250 feet away. It's on that side that I have started putting up a new Rohn foldover tower (58'). I will put the TA-33 on it and a couple of 2 meter 11 element yagis above it. I should be able to hit about 35 repeaters with that. I can hit about 20 with the vertical on top of the house now.

Went to the Charlotte hamfest last weekend. There were about 8000 there and 100 exhibitors. The FCC gave about 700 exams and I was roped in helping them for about 2 hours. They were run over. Susan, WB4AKB, won the Sunday 12 noon prize. About \$50 worth of goodies. I am going to the Raleigh hamfest on the 23rd.

I haven't been able to swing a short school at OKC yet. If I do get one, I hope it's when the club meets. I always look forward to the C&E. I want to thank everyone for being of such great help to me while I was there. I'm sorry that I had to pull out in the middle of my term as president, but that's the way the FAA goes. It was an honor to serve.

73

Dave, W4YDY/K5NC



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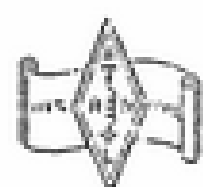
PHONE AHEAD

TO  
677-0561

ED BLACKWELL

WD5FKG

Manager



W5PAA

## RANDOM WORDS FROM THE PRESIDENT

Saturday May 13, 1978, was a busy day for quite a few Aeronautical Center Amateur Radio Club members, and I want to take this opportunity to tell you about it, as well as to thank officially everyone involved.

Workers started gathering at about 9:00 AM for a third try at the antenna party that we have been talking about for so long. Well, by 10:00 AM Randy, WB5CNM, Holly, WD5EPN, and myself were atop the club stations windmill tower, while Bill, K5KDR, Gene, WB5SQC, Howard, W5WSW, Joe, WA5POR, and several others were busy collecting and sending up materials as a ground crew. Meanwhile back in the club station, (sounds like a bad western doesn't it) George, W5NTL, Bob, WA5CJG, John, W5UNA, Bob, W5HXL, Al, WB5KCU, and again several others were busy putting the W5PAA repeater on the air! (Sorry I couldn't name all that helped, but there were several that I either didn't know or can't remember.)

Well, several hours, donuts, and cups of coffee later, the job was finished. I want to thank everyone that helped, and special thanks to Holly Holcomb for putting together the adapting hardware for the new rotator installation, to Bob Pace for putting together the ID and control circuits for W5PAA/R, and to Howard Ridgway for loaning me his jacket (it was cold up there!). It's people like those present at W5PAA, May 13, 1978, that make the Aeronautical Center Amateur Radio Club the fine organization that it is.

Our June meeting will feature Bob Pace, WA5CJG, who will be telling us about the circuitry that he has installed in our repeater. Bob has presented some very good programs for us in the past, and this one should be of interest to everyone.

At our May meeting I announced that Bob James, K5FW, had resigned as secretary of the Aeronautical Center Amateur Radio Club. Bob has done a truly outstanding job for us, and deserves much-much thanks and appreciation. Thanks Bob from all of us.

Bill Oliver, past club secretary and current member of our Board of Directors, has graciously agreed to fill this vacancy for the remainder of the year. Bill now serves as Secretary, CORA representative, and Collector & Emitter representative for our club. Obviously he could use some help. For this reason I am looking for someone to take the Collector & Emitter representative job. If you might be interested in helping out with this job, Please contact either Bill Oliver, K5KDR, or myself as soon as possible.

Several members have asked about what will be done with the Telex rotator that was taken down. Well, we are currently accepting bids in letter form (addressed to ACARC, Postal Station 18, OKC, Okla., 73169). We will be selling to the highest bidder, with all bids to be opened at the July meeting.

As a final note I would like to thank Ed Murta, K5LIL, for helping me with the May meeting program. I think it was enjoyed by all.

73 Bob Graham, WB5NSV

FOR SALE: The Aeronautical Center Amateur Radio Club is accepting bids for;

1. A Telerec Antenna Rotator & Indicator.
2. A PE-75 Standby Power Generator with enclosed trailer.

All bids will be opened at the ACARC Club meeting, July 7.

FOR SALE: Complete 6M station. Transciever Heathkit Seneca VHF1. 6 & 2M AM 120 watts out CW. Reciever Hammurland HQ 170 160-6M. Gonset Communicator III 6M AM transciever. Shields M102 mike. Hammurland HQ145 160-10M. All 3 for \$300. Contact Richard Wood, K5QNN, 677-0363.



## OKCAP NEWSBRIEFS

### TECHNICAL COMMITTEE REVIEW

Bob Williams - K5PJU reports that the .81-.21 and .22-.82 repeaters are now up to full power which should result in the greater effectiveness we've been discussing in days gone by.

Some of you may have noticed that the .81-.21 machine was "off the air" temporarily causing some minor inconvenience in autopatch usage. Bob tells us that whenever this happens, the autopatch facility will be transferred to the .22-.82 machine. Same access codes will apply.

By the time this item is being read, our new solid state 444.3 MHz system should be off and running. If you haven't worked this equipment, consider this your "red letter" day for a new experience.

### NEW CONSTRUCTION PLANS

Response to our plea for help and funds for implementing improvements in our overall program of operations has been quite favorable (especially the physical effort). We can still use a little boost financially. Send that help to Hobe - WB5MLN.

### MAY FLEA MARKET

We had quite a turnout for this session but the display of goodies was rather sparse. Those items shown were noteworthy - no boat anchors in sight. We all enjoyed some great eyeball QSO's. Keep in mind that we will host another flea-market in July. Plan on it, now.

### SSB CONVERSIONS

Some of our members have converted some SSB CB rigs into effective 10-meter units. Hobe - WB5MLN chalked up a QSO with ZK2TT in the NIUE Islands (and that's a "fur piece" while mobiling).

Frank - N5FM tallied several contacts with Japan, New Zealand, and Hawaii on just a few watts from his automobile.

Lloyd - WB5ZOI is having a ball conversing with fellow members of the amateur fraternity south of the border.

Which leads to one thing: Ten-meter conversions have a lot of merit. If you're so inclined, latch on to some of those surplus (or even new) rigs and have a ball.

### JUNE MEETING REMINDER

A formal meeting is scheduled for June 20, 1978, at 8:00 p.m., at the old stand.

All OKCAP members are urged to be in attendance for this session.

Visitors are welcome.

\* \* \* \* \*

Remember Safety Pays.....switch off current when repairing your equipment!

AMATEUR RADIO NEWS SERVICE BULLETIN  
(Extracts from May, 1978 Issue)

DO YOU EVER THINK YOU ARE ALONE?

(From Sine of the Times Newsletter, Indiana Penna)

Sometimes the feeling comes over one when "at the mike" that he is alone with his one listener and lets his hair down in what he says or who he talks about. One forgets that "the whole world is listening"...with baited breath, even! Never, never forget that you have other listeners by the score...from another ham to the many, many scanners. A good rule to follow is to speak over the air as you would were you in front of or with a group of listeners "in the flesh."

WHO IS RESPONSIBLE?

When someone picks up your mike or you have left on the VOX...or for some other reason you are not aware your station is "on the air"...are you responsible for what goes out over the airwaves? You bet you are! So take care that: 1. You are aware of all transmissions, 2. Your VOX is not operating when it should be OFF, 3. Have some positive switching so that an unauthorized person (a child?) can't turn it on. Those nice shiny knobs are very inviting to the little fingers: Remember, it is your ticket that is at stake.

PUBLIC RELATIONS HINTS & KINKS

Mike Kay, WD9DJC of Wheeling, IL was mobiling along listening to a disk jockey on the BC radio. When the DJ announced that requests for numbers could be made by phone, Mike called the station on his 220 Mhz radio autopatch. He explained that he was an Amateur Radio operator calling from his car, gave his call letters, and his request. The DJ later announced on the program the interesting happening of being called from a ham's car, etc. Now, if every ham DJ listener would call in a request from his car with proper explanation about ham radio.....

NEWS ITEMS OF INTEREST

Some of the recent graduates from Frank and Bob's classes who hold Novice licenses might be interested in knowing that their tickets will be valid for a 5-year period as are other classes of Amateur licenses. They may also be renewed per FCC Docket 20282.

As of May 15, 1978, holders of Technician licenses may operate on all Amateur frequencies above 50 MHz, also as a result of the Commission's action on Docket 20282. OK! Let's start using those 6 and 2-meter segments, fellers.

FROM HR REPORT

GENERAL-CLASS LICENSEES will be permitted use of 50.0-50.1 MHz in a rules change just announced by the FCC. The change brings General 6-meter privileges in line with those of Technicians, who were granted the low end of six in the second Report and Order on Docket 2028 adopted March 22. Effective date is May 15.

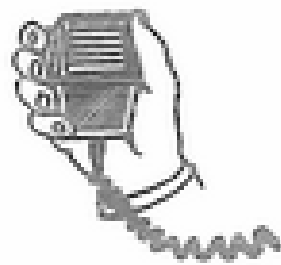
\* \* \* \* \*

BARTER & EXCHANGE

For Sale: Drake 1A receiver. Mint condition. \$125.00. Call Lloyd Wright - WB5ZOI at 235-3777 (office) or 843-6811 (home).

For Sale: Regency HR 2 modified by factory as 2A. Equipped for .22-.82, .16-.76, .34-.94, .52-.52, and others. Asking price \$120.00. Call Joe - WA5ZNQ, 781-3131 (office) or 789-8587 (home).





THE **Z**ANY **N**EW**S** **F**REQUENCY  
By JOE, WA5ZNF

TURN THIS PAGE AND LOOK AT YOUR ADDRESS --- As explained earlier I am in the process of switching from Addressograph metal plates to a computer prepared stick on label (not that I want to but that's the way it is). Since it will require a lot of work and some changes in format it would help tremendously if EVERYONE would just look - and then act of necessary. WHAT TO LOOK FOR: The top line is a "key" that is used in location one of 750 plates, the only thing you should be concerned about is your call sign. The "A" means we have no record of your call. NAME: Might as well have it correct. STREET ADDRESS: Is it exactly like the post office carries it? CITY: Correct? STATE: correct? ZIP: Real important!

\* \* \* \* \*

F C C LICENSE EXAMS WILL NOT BE GIVEN AT HAM HOLIDAY - - They were contacted but felt that with their limited staff and the closeness of the dates to their regular quarterly visits to Oklahoma City that they should pass up the offer. It really only effects those from out of the Oklahoma City area, but that's the way it is.

\* \* \* \* \*

THINK YOUR EQUIPMENT IS INSURED? - LOOK AT YOUR POLICY - - Due to the problems caused by so many CB rip-offs most insurance companies have changed or added a rider to their policies that used to protect us. ARRL has made arrangements for a special policy. The center fold this month doesn't have a nude but a way to keep your shack or car from being nude, as to radios. Clubs can also insure the club station equipment. There was a cutoff date of 15 April, but that has been extended for an indefinite, but probably limited, time. If you have questions call the insurance carrier (1-800-423-6597) during Pacific Daylight Savings Time office hours.

\* \* \* \* \*

WANT A DATE - - WITH CORA? - - Wednesday night, June 5th is the night that at least 25 CORA members (by the way, if you are reading this you are a member) meet at the American Red Cross building, 10th & Hudson about 7:30 to participate in the annual cross checking of the C & E mailing list with the roster of those that attended HAM HOLIDAY last year as well as the 1380 names of amateurs who live within 200 miles of Oklahoma City, to eliminate duplicates prior to mailing the July issue to everyone who might be interested in attending HAM HOLIDAY. Your help is needed. Don't assume that plenty will show up, we could use a hundred, but 25 will do.

The next date you should be interested in is Monday night, June 26. Different place, same time, different purpose. As you know, surely you do, the C & E is collated, folded, stapled and mailed by a volunteer crew from a different club each month. Since the next issue will be mailed to more than twice the regular number it was decided to make it a CORA night. For this issue we need a minimum of 12 workers. Call Bob Ashby, W5HXL, or Mark Northcutt, WD5DYI and tell them you will be there. Their phone numbers are on page 2.

\* \* \* \* \*

\* \* \* \* \*

Just found out that middle age is selecting the temptation which gets you home the earliest.

SECOND CLASS POSTAGE PAID  
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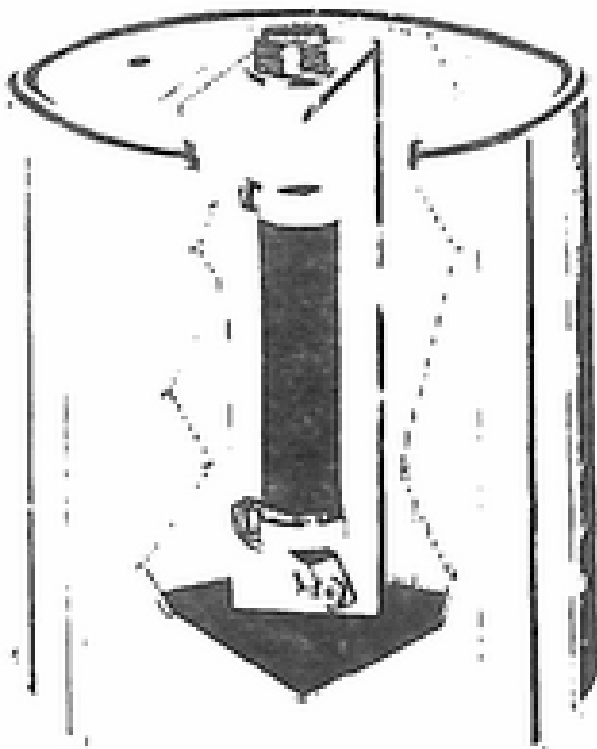
JUNIO HAM HAPPENINGS						
SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
				1	ACARC 2	3
		MORI ... OU 6	7	ALTUS AARA 8	9	10
11	12	13	14	15	16	17
18	EDIT C&E 19	OCAP ... 76 20	21	22	PICNIC AT FIELD DAY SITE 23	FIELD DAY 24
FIELD DAY 25	CORA MAILS C&E 26	27	CORA MEETS 28	29	30	

See page 2 and/or individual club sections for details

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