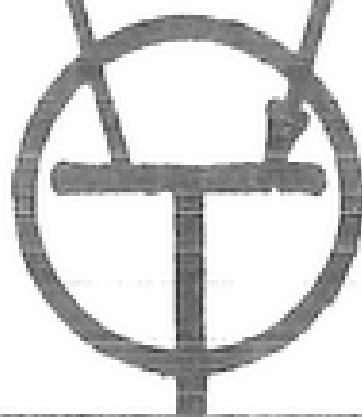


Central Oklahoma Radio Amateurs

COLLECTOR

EMITTER

AND



SINGLE COPY

25¢

OCTOBER 1977

Vol. 3 No. 33

AN INFORMATIVE MAGAZINE
PUBLISHED MONTHLY BY AND
FOR OKLAHOMA RADIO
AMATEURS

AND ANYONE INTERESTED IN
LEARNING ABOUT IT



AMATEUR RADIO NEWS SERVICE

ANNUAL

PUBLICATION AWARD

FOR THE ADVANCEMENT OF AMATEUR RADIO JOURNALISM

* * * CORA COLLECTION AND EMITTER * * *

EDITED BY:

JOE K. HARDING, WA5ZNF

having been judged

Second Place in Class B-3

is hereby awarded this testimonial in official recognition of the excellence of its performance and outstanding contribution to Amateur Radio journalism during 1976

August 15, 1977

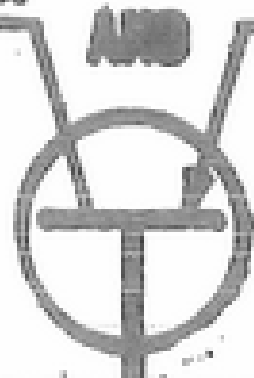
Dated

Norm Monroe, K4FRE
Vice-President A.R.N.S.

Bob Ross, W5KR
President, A.R.N.S.

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 73115

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SECOND CLASS POSTAGE PAID AT OKLAHOMA CITY OK
Publication No. 116150

Managing Editor Joe Harding, WA5ZNF 737-1044

Subscription: CORA members \$1.50 a year. All others \$3.00 a year.

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

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PARTICIPATING CLUBS FOR CORA COLLECTOR & EMITTER:

AERONAUTICAL CENTER AMATEUR RADIO CLUB
Postal Station 18, Okla City OK 73169
MEETS: 8:00 PM First Friday each month
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Assist	Lloyd Kirk	WB5HUP	685-6566
V-P	Vacant		
Sec/Tr	Robert Runyon	W5JES	373-1818

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

Pres	Chet Hazelwood	W5GDL	427-1439
V-P	John Huckaby	K5QDR	672-4706
Sec/Tr	Richard Zanni	WB6FYL	691-1809
Dues: Sid Gerber, 829 E Bouse, MWC, 73110			

OKLAHOMA UNIVERSITY AMATEUR RADIO CLUB
202 W Boyd, Room 219, Norman OK 73069
MEETS: 7:30 PM Alternate Tuesday STUDENT UNION Room 161

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V-P	Kenny Hutchison	WB5RXZ	364-3001
Sec	James Jones	WB5RKQ	
Treas	Mike Salem	WA5EPK	321-5453

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AIR National Guard, Will Rogers Airport

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V-P	John Oltmans	WB5PZG	525-6066
Sec	Jim Townsend	WB5VCB	632-5445
Treas	C Y Chandler	WB5TKG	232-9005

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

Pres	T. Van Woody	W5FMX	942-2831
V-P	Ken Ford	WB5KHU	528-8770
Sec	Joe Buswell	WA5TRS	732-0676
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OKLAHOMA CITY AUTOPATCH ASSOCIATION
MEETS: 7:30 PM 3rd Tuesday, Bi-Monthly
Oklahoma Military Academy 36th & Grand

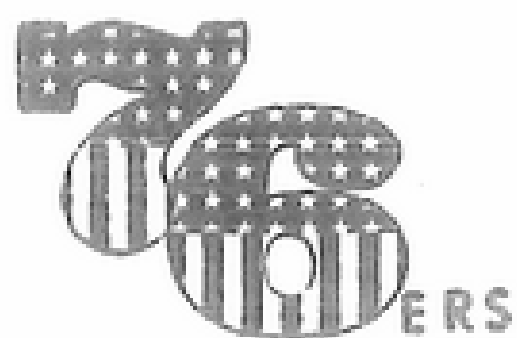
Pres	Jim Denman	WB5OEL	681-6048
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CENTRAL OKLAHOMA RADIO AMATEURS,
MEETS: 7:30 PM, fourth Friday.
Red Cross Bldg., 10th & Hudson.
Come to the alley entrance.

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

Pres	Loren Simms	WA5CBF
Sec/Tr	Deanna McEndree	WB5UMH





THE BICENTENNIAL AMATEUR RADIO CLUB



Minutes of the meeting of Sept 20, 1977 of the Bi-Centennial Radio Club-- The Seventy Sixers.

Meeting was called to order by President Ken Newberry, WB5PYN, at 7:05 PM.

The Treasure report was read to the Club by President Newberry.

Volunteers were asked to help fold and staple the Collector & Emitter on Thursday night, Sept 29th. Attention was brought to the Members that the Collector & Emitter is edited on Monday night, so anyone that has an article to put in, to have it ready by Monday night.

Attention was brought out that applications for special car tags with your call letters should be in to the Oklahoma Tax Commission by Oct 1, 1977.

Dennis, WD5CSM, gave a talk about a repeater Club for across the State coverage. Invitations for Membership were extended to the members and guests.

Coy, N5OK, gave a talk on applications for QSL league membership and use. He will also take applications for memberships tags with the help of his daughter, Edie, WB5XHG.

The Club adjourned for coffee at 7:30 PM.

The Club reconvened at 8:10 for continuation of the business meeting.

The guest speaker was Russ, who gave a talk and demonstration on Micro Processors. He demonstrated different usages, patterns and programs which the Micro Processor and the Mini-Computer can do.

For use of the Amateur Radio Operator and the individual, the usage is unlimited, only what the Operator wants to do and the speed he wants to use it at is the question which is answered by the Operator.

There were many questions asked about the possibilities and the expense of the equipment. The Guests and Members enjoyed the talk by Russ and a lot of interest was shown in what the Future holds for the Ham and Amateur Operator by the use of this Mini-Computer type of equipment.

Meeting adjourned at 9:30 PM.

Jim, WB5VCB

Sect.

FOR SALE: SONY TC 252D, REEL TO REEL TAPE DECK, WITH DUST COVER, \$110.00. ALSO MANY ASSORTED ALBUMS ALREADY RECORDED, \$3.00 EACH. CUSHCRAFT 4 ELEMENT 2 METER BEAM, \$10.00. KEN, WB5PYN, 685-2717.

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All Clubs Co-operating To Advance Amateur Radio

I hope you have missed this column. If you haven't, then bear with me one more time. For those of you who don't know, I will soon be leaving for Houston on permanent change of station. In my short association here with amateur radio and CORA, I have been exposed to a great hobby and some tremendous friendships. I wish to thank all who contributed in any way to the furtherance of either.

During the next year a sincere and dedicated group will be aiming toward Ham Holiday 1978. Directors have been, will be or should be nominated or appointed from the major clubs in the State of Oklahoma. I submit to these directors that your club has placed confidence in you to represent the club. You must be present to represent. You must meet with your own club, for you also represent CORA. You must use any resources available to get the help required for Ham Holiday or any other projects that need be taken care of. Above all, you must dedicate yourself to the furtherance of CORA and Amateur Radio. To the remainder of the amateur radio community, you must also dedicate or rededicate yourself so as to maintain the privileges we now have and justify those we seek. Keep the airwaves occupied by skilled amateurs so they are not taken over by the (intentionally left blank).

A DOZEN WAYS TO DESTROY YOUR CLUB

1. Don't go to any meetings.
2. But if you go, go late.
3. If the weather doesn't suit you, don't think of going.
4. If you do attend, find fault with the work of the officers and members.
5. Never accept and office. It is much easier to criticize than do things.
6. Get sore if you are not appointed on a committee. Should you be appointed, don't attend any meetings.
7. If you're asked to give your opinion on some matters, tell the chairman you have nothing to say. After the meeting is over tell everyone how it should be done.
8. Do nothing more than is absolutely necessary. When others roll up their sleeves and unselfishly use their ability to help, complain that the organization is run by a clique.
9. Hold back your dues as long as possible.
10. Make no effort to assist new members.
11. Don't be sociable either within or outside the club.
12. If you should get a good idea, don't tell anyone.

Make a concerted effort in the future to improve: Improve your ability, improve your public image, improve Amateur Radio, and improve your willingness to help toward the betterment of CORA and Amateur Radio.

'Til our next QSO, 73.

Gene

C-O-R-A BOARD MEMBERSHIP FOR 1978

As reported to the Board on September 23, 1977:

Frank McCollom, N5FM, OCAA
H. B. "Zack" Zachry, WB5QPI, OCAA
Hobe Bergman, WB5MLN, OCAA
Carl Drumeller, W5JJ, ACARC
Frank Arnold, W5PDH, MORI
Ken Eason, K5VVZ, MORI
Ken Burdick, K5UAB, 76er's

Bob Ashby, W5HXL, OCARC
Bill Oliver, K5KDR, ACARC
George Lagaly, W5NTL, ACARC
Ellard Foster, W5KE, OCARC
George Lee, WB5NMK, OCARC
Coy Day, N5OK, 76er's



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

MINUTES OF SEPTEMBER C-O-R-A BOARD MEETING

Meeting was held on the 23rd of September at 19:30 local time at the Red Cross Building. President Gene, WB5SQC, opened the meeting with eleven board members and two visitors present. (Attendance roster attached to these minutes.) The Treasurer's report was presented by Ken and approved by the Board. (Copy attached)

Election of officers for 1978 was held with the following individuals being elected.

President	Bob Ashby, W5HXL
Vice President	Frank Arnold, W5PDH
Secretary	H. B. "Zack" Zachry, WB5QPI
Treasurer	Ken Burdick, K5UAB

The meeting was turned over to the new officers with Bob presiding. The Board expressed their thanks to Gene for a very successful year.

The Board voted to continue Ham Holiday in 1978 following a poll of the Clubs to determine interest. A Site Selection Committee was formed with Carl, W5JJ, serving as chairman. Other members include Frank, N5FM; Ken, K5UAB; Joe, WA5ZNF; George, W5NTL. A tentative check list of items to be considered in site selection included adequate space for the flea market, dealer displays, parking, and a dining area for 700 or more. Meeting rooms for technical programs and ladies hospitality are also important. Close by parking for campers and motor homes would be desirable. The Committee is to report to the Board at the October meeting.

The date for Ham Holiday 1978 is to be somewhat flexible until site selection is made. The organization of the standing committees was discussed and the Board assigned each committee function to a club. Chairmen for each committee will be named by October. Club assignments were:

Programs	OCARC
Prizes	ACARC
Registration and Publicity	MORI
Ladies Activities	76er's
Facilities	OCAA

Meeting time for the C-O-R-A Board has been changed to Wednesday evening at 19:30 local time. The October meeting will be on the 26th of October.

Frank, N5FM, presented a status report on his efforts to obtain QSL cards for local members. The State will not furnish cards this year; however, the OKC Chamber of Commerce has expressed interest. Methods for applying call signs to these cards were presented.

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GREETINGS TO THE OKC/CORA GANG:

Well here I sit with six weeks done and 46 left to go. Judy dropped a letter regarding Ham Holiday IV with all of the short notes so many of you took time to write. I really appreciated and enjoyed them. HH IV was apparently quite successful. Judy said the micro computer/processor sessions were Standing Room Only. I was glad to see that this year the major prize was an HF rig. That in itself indicates that HH is a "hamfest" as opposed to an FM-oriented doings. It needs to be kept that way in my opinion. I can visualize continued growth for HH in the future. Always remember that the Dayton Hamvention started in 1952 with about 250 registered the first time. If everything were as successful this year as it seems to have been, registrations might go to 1000 or more next year. I definitely will be there in '78. Assuming I get a license up here, you can put me down on next years program for "Hamming In The Land Of The Midnight Sun".

Speaking of hamming up here, I'll try to bring all of you up to date on the situation. Prior to about 1970, The Government of Iceland (GOI) granted licenses to U.S. hams. About that time the GOI extended the "12 mile limit" out to 200 miles for fishing, just as the U.S. did recently. The British did not take too kindly to that and came inside the new 200 mile limit with Royal Navy destroyers, etc. to back them up, thus opening what were known as the "Cod Wars". The U.S., since it is allied with both Iceland and Great Britain was in a virtual "between a rock and a hard place" situation. The U.S. position at the time displeased the GOI considerably. About the same time, a TF ham who was a ham in the GOI went to the U.S. and tried to get FCC operational okay there. He was told he couldn't because of no reciprocal treaty. For better or worse, the system here is of a socialistic nature. The Vietnam war was quite a big affair at the time also. As most of you recall, the U.S. did not enjoy any great swell of popularity among socialist nations at that time. In any event, as an apparent result of these and other factors, the TF licenses of U.S. hams were revoked. Since that time the GOI has moved back a bit toward being pro-West, thus changing the climate a bit. Also IRA (equivalent to ARRL) elected a new president who is in favor of reciprocal agreement. Negotiations between the Foreign Minority and the US State Department were started last fall. Enter the evil villain from stage left. Icelandic amateur regulations provided for licensing if non-citizens but required residency of 6 weeks before granting a license. Since none of the other 48 reciprocal treaties the US has entered into had any such condition the US halted the negotiations so as not to set a precedent. That is where things have been until May or June. The amateur radio rules here have been re-written to eliminate the 6 week residency requirement. They have been "officially" translated to English now. As soon as the official English rules are printed the negotiations will be re-opened. I have hopes that all will be well in two or three months. There is one other possibility. A friend from my days in Germany is married to a YL Icelandic ham and has good contact with some of the TF hams. He has made a formal request that foreigners be allowed to take the Icelandic amateur exams. We hope that will go through more quickly. We would also get a TF call rather than operate /TF. Keep your fingers crossed.

There is a 2 meter repeater going up in the near future also. I expect it will be out of range for me here since it will be about 200 miles away. I'll keep everyone posted on the progress. The States comes through weakly around 1200% to 1400% and also 1700% to 1900% on 20. I am using (SWL) a KWM-2 and dipoles (not ham band) at 70 feet. I found a brand new TA-33 in a box in the MARS station two weeks ago. Tower is already up but rotator is shot. There is also an old Ham-M (I think)

CORA Collector & Emitter

October 1977

without a control head. Unless I can conjure up some means to rotate it, the beam will have to be fixed in one direction only. It looks like Judy may really get after it and get a license to operate HER newXCVR. She made no bones about letting me know whose rig it is, HI!. I've got to try to keep from nagging her about it too much, though. Another motivation for her is that the GOI will not allow MARS to make phone patches or even send messages by voice. She will have to get a license to talk to me. Telephone calls are \$5 per minute. Well, now everybody knows that even without a rig and/or repeatOr, I can still be long-winded. Hope to be able to QSO with you all soon.

73 from the land of the midnight sun.

Mac, K2GKK/DL4AM/TF????

* * * * *

A MINORITY VIEW: "CODDLING HAMS"

CODDLING - - To treat with extreme caution or sensitivity; to "handle with kid gloves." -- Webster

By the time you read this, one of Oklahoma City area's newer amateur radio stores will have closed its doors. In a state where we often hear talk about the scarcity of ham outlets, the closing is of interest.

In an informal conversation recently, the owner of the store spoke candidly of a number of reasons for the closing of his new business. One of his comments struck me as particularly significant.

He said he had been naive in his plans for the ham trade. He said most amateur radio operators who visited his establishment expected a bigger discount from the list price than he got as a markup from the manufacturer. It was not unusual, he said, for a ham to demand a 15% discount on an item on which the dealer's margin was only 10-12%.

What happened when the dealer refused the traditional "ham discount?" The prospective customer, more often than not, walked out. Result: The store closed.

As a relative newcomer to the amateur ranks, I have been mystified by the general attitude that hams can blandly ask for a discount. True part of the fun in the hobby can be looking for bargains and in seeing how much can be obtained for how little investment. But many hams seem to think a discount is their right, and it's this attitude that I think is wrong and harmful to the amateur radio business side in Okla.

Sure, there are places more densely populated which do so much business that they can buy in quantity, get gear somewhat cheaper, and can therefore offer discounts. And I agree with my friend Carl, WB5QNK who can get downright rhapsodic about how much better and more helpful some of the big stores in the east can be. My point though, is that our part of the country does not have the population density to support those big operations; I sincerely believe that we hurt the local ham stores -- and in the long run diminish their quality (and hence our fun) by always pressing for discounts when these may not be possible with the local volume.

Personally, I've tried to buy from local outlets, and I've never asked for a discount. The system -- which most of us are so eager to defend -- builds in the dealer's margin of profit by setting a suggested retail price. When you go in and seek a discount, it may make you feel clever; in my view, it's an attempt to subvert the system.

What should you ask for from a local dealer in exchange for your business at suggested retail price? I think you should demand:

1. Full information about the product, its claims, method of operation, and so on.
2. Prompt delivery in mint condition.
3. Help -- via telephone or by in-store contact -- if you have trouble making the gadget work.
4. Quick and expert service locally under warranty, w/o charge.
5. Quick and expert service locally, for a fee, after the warranty period.

(more)

6. A fair trade-in if you decide later to go back and upgrade to some better piece of gear.

Most of these services cannot be had from a mail-order discount house. As 73 magazine pointed out in its September issue, many of the big mail discounters put each other out of business, and your dealer may not even be there if you try to go back.

Of course I know that there are items we all have to buy from mail houses because they aren't available to us by any other means. And no one in his right mind would turn down a chance to buy a great piece of gear for a small price on a trip to Japan, say, or even Ohio. What I'm arguing against is the long-term assumption that we as hams have a discount coming always, AS A RIGHT.

We don't in my opinion, and as long as most of us expect local dealers to coddle us in this way, we're going to have stores with low inventory, missing product lines, and sales staffs that are not always on the ball.

Because as long as we think it's our God-given right to get things cheaper than the average bear, that's what we're going to get, you see: cheap service. When hams are willing to pay the suggested retail price they may pave the way for the kind of retail operations locally that they say they want.

Jack, WB5TZZ

THE FCC DOES A GOOD JOB - - Although I did not pass the test to upgrade my ticket in July at Oklahoma City, I would like to congratulate the FCC Examiners for the efficient way that they handle the timing of the appointments. They were spaced into about thirty minute intervals and although they ran a little bit behind it worked real well, as in contrast to April when there were about 140 of us taking the exam and at that time they wanted us to take the code test in the morning and come back at one PM for the written. Some of us already had plans for the afternoon and we were allowed to take the test in the AM, yet this did not seem fair to me, especially for the ones that had to travel several hundred miles, to and from home, and there were a lot of them. So, once again, I would like to say, THANK YOU and I am sure that the people who had to travel so far will join me. All-in-all I would like to suggest to the FCC that they schedule Okla City more often or please give these people more help especially since they have taken the burden of the Tech license truly their task is not an easy one.

Alvin J. Bruning, WB5OHK

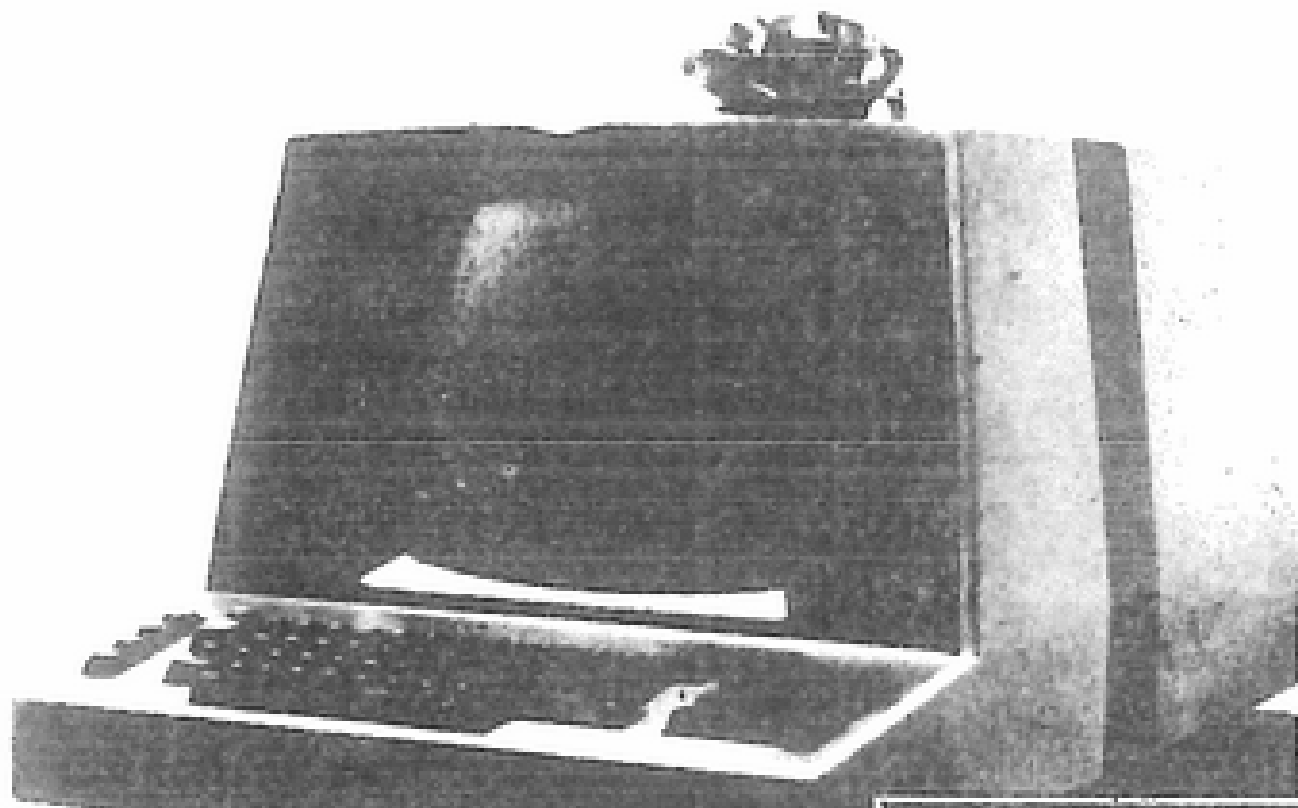
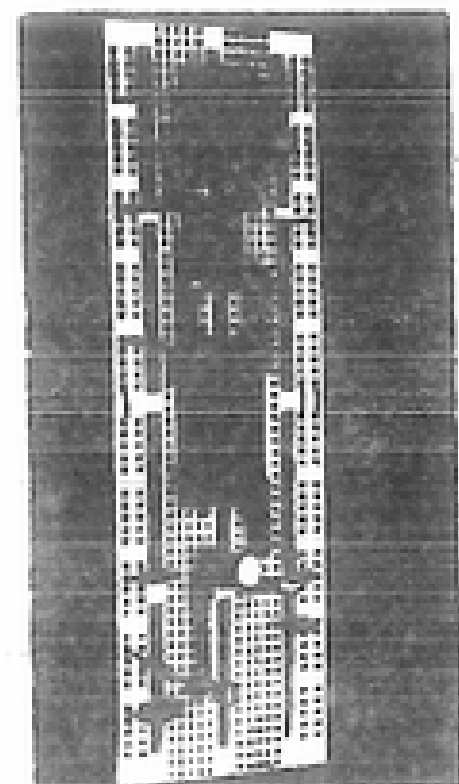
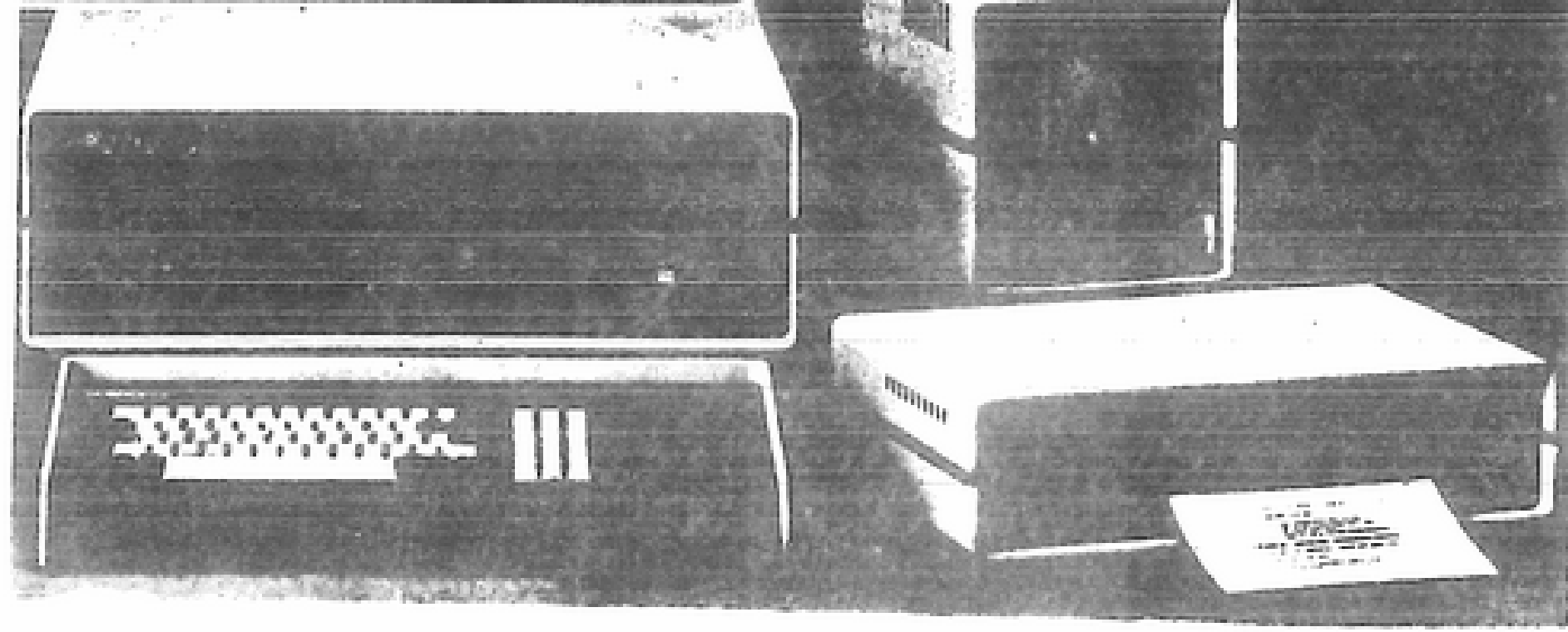
Since the article appeared in CORA C&E about me renewing my novice ticket I have had a few inquiries bout the procedure, so for those who may yet wish to know, one must take the test by a volunteer as before. But a word of caution, make arrangements to take the test prior to at least 60 days before expiration of your license, otherwise you might have to shut down your station until arrival of the new license. Also, be sure to show RENEWAL on Form 610 so that you may keep your present call letters.

Alvin J. Bruning, WB5OHK

H E L P

One of our Oklahoma City amateurs needs help. Stan Schoenberg, WB5ZOF, a graduate of the WB5JBL-N5FM novice school last year is badly in need of blood donations. As of 16 September Stan has used 19 pints of blood. He has no health insurance, so your help will be greatly appreciated. Donations may be made at the Oklahoma Blood Institute, 701 NW 13th. Make sure that Stan and Deaconess Hospital gets credit for your donation.

the digital group

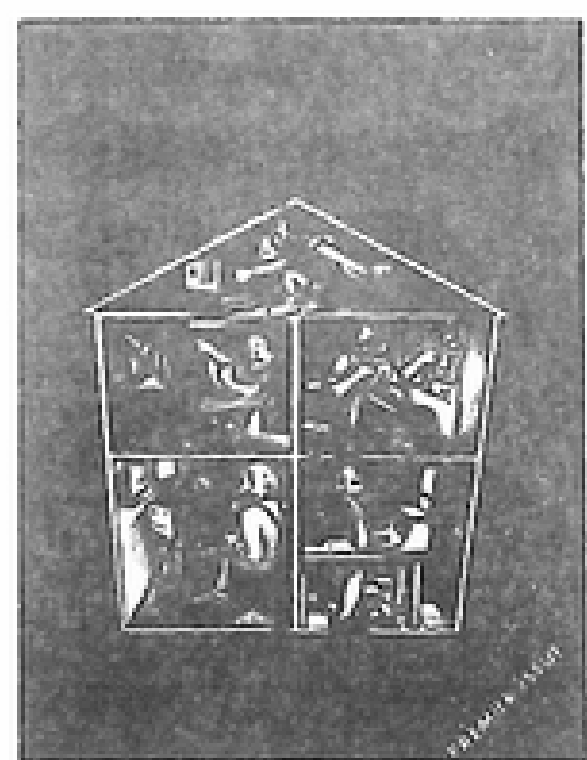


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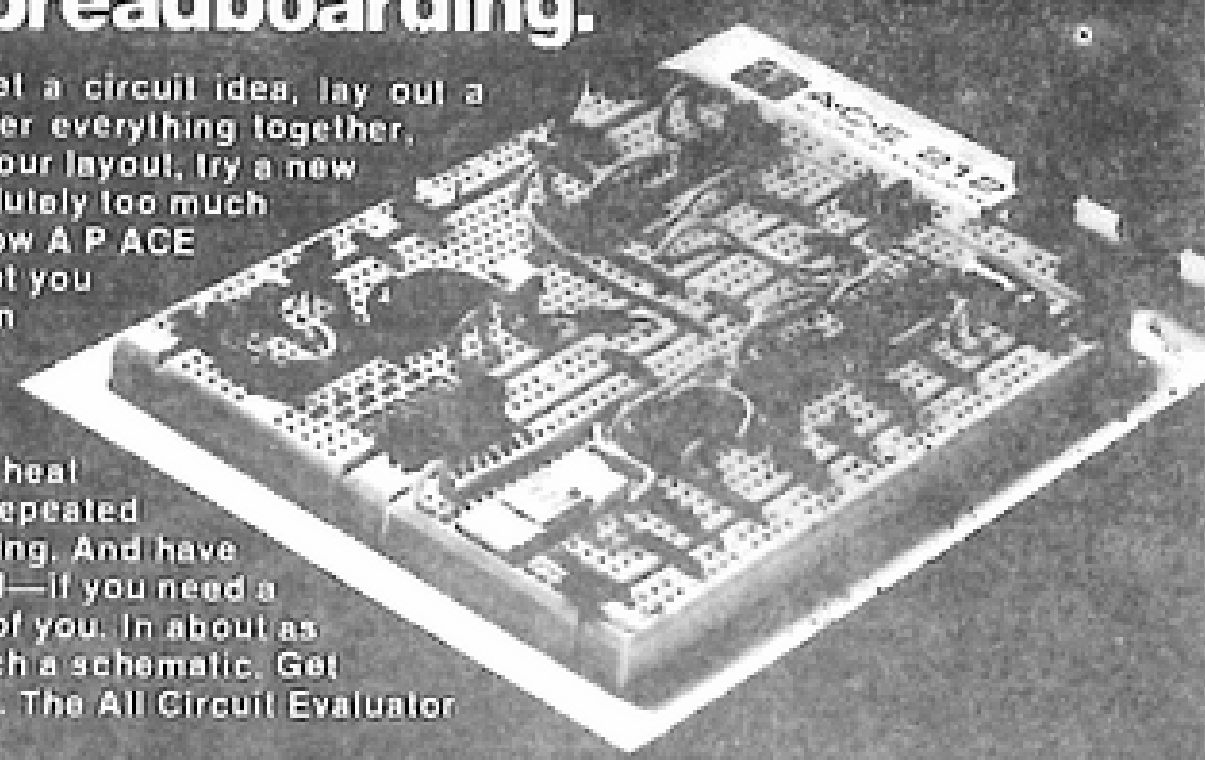


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President: Loren Simms, WA5CBF
Sec./Tre.: Deanna McEndree, WB5UMH

The Ham Club met 8 Sept. 77 at 1930 hrs. at the North Main Fire Sta. Loren, WA5CBF called the meeting to order. Deanna, WB5UMH asked that the minutes be approved. An introduction of guests followed. 25 persons were present.

Chuck, WB5MJS and Richard, WB5PUF gave a report on the ham class. Registration will be Tuesday 27 Sept. at 1830 hrs. in Room 6A at Western Okla. State College. The college will collect \$10 registration fees. Students must buy their own books. The book, "5 to 1000 Watts", by Radio Shack will be used.

Chuck, WB5MJS and Richard, WB5PUF reported on their program to The Lawton - Ft. Sill Ham Club. They showed the Tipton, Ok. tornado slides and gave a report on the club's involvement in the disaster. They reported a good attendance and a welcome reception from the Lawton club.

Dwight, WB5KRH read a letter from Bill Weedon, Lt. Commander, Troop H, O.H.P., thanking the club for past help to the force.

Ham Fest Committee reports: Food Committee: Janice, WB5WMN and Deanna, WB5UMH reported that the club could buy hamburger patties, buns and cokes if club members would supply the trimmings. A motion to do so was made by Deanna, 2nd by acclamation. Publicity Chairman: Loren, WA5CBF reported the fest will be held on South shore of Lake Altus at 1000 hrs. There will be space for a flea market. Communications Chairman: Richard, WB5PUF reported he would have radio equipment at the lake and would monitor 79.

A discussion of our regular monthly newsletter versus Collector & Emitter was brought before the club. Janice, WB5WMN made a motion to ammend the club constitution to read, "The Ham Club will submit its monthly newsletter to C.O.R.A. for publication in Collector & Emitter. There will be no other newsletter sent out by the club." Motion 2nd by Oliver, WA5OGC and approved.

Dwight, WB5KRH gave a report from S.O.R.A. A trip was made up the mountain for repairs. The present antenna has been badly damaged by lightening. A new antenna, Z matching and PA stage have been ordered. Hopefully our noise problem will soon be eliminated.

Loren handed out forms for obtaining call letter vehicle license plates. Technician Class and higher qualifies. They must be sent in by Oct. 1.

Dave, KØJPX gave a report on the 160 meter contest to be held the 1st weedend in Dec. He asked for club participation. A report by him follows the minutes.

Chuck, WB5MJS gave a demonstration of a VIP program switch he

installed in his IC 22S. For a cost of \$26, he now has 60 pre-program channel readout. It is easily installed.

Gary, WB5TUB, made a motion to adjourn, 2nd by Dwight, WB5KRH. Motion carried. Refreshments this month from Deanna. Next months committee: Janice, WB5WMN and Shirley Stevenson.

Dues paid by Chuck, WB5MJS, Kenneth, WD5BBT, Bob Henry, WB5VUM, Phil Simms, WB5LCM, Brownie, WA5MYF, Keith, WA5ZFI and 2 yrs. dues by Butch, WA5WIC. Two Novices recently upgraded to General Class, D.L. Hinkle, WB5SOH and Kenneth Ingham, WD5BBT. D.L., WB5SOH recently received his W.A.S. award.

Next club meeting 13 October, 2nd Thurs.

73's

Deanna, WB5UMH

Lawrence Moore, WD5BBP, is looking for a VF-I to go with a DX-35. 362 B South Ash, Altus, Okla. 73521.

Larry, WD5BBP

Steve Norris, W5KI, and Dave Horn, KØJPX, are making plans for the 160 meter contest in December. They have permission to use the old remote receiver site east of the air base. The major logistics problems have been solved, but several items are needed to make the operation competitive. If you have any of the items and are willing to loan them for a weekend, contact either Steve or Dave.

Wire for beverage antenna - Radial wire for the vertical - 100' of RG 11 or 59 - Head set extension cords - Patch cords with $\frac{1}{4}$ " phone plugs - A back-up generator.

Some multi-op aids must also be built. We will need several $\frac{1}{4}$ " phone jacks - small chassis boxes - and DPDT switches. Look in your junk box and see if you have anything you can donate to the project. The completed operating aids will be given back to the club.

Dave, KØJPX

What a relief! The Altus Ham Fest is over for another year. It was held from 1000 hrs to 1600 hrs. A total of 64 persons attended. We cooked 100 hamburgers plus numerous other goodies. A big thank you to Phil, WB5KPM, Loren, WA5CBF and Phil, WB5LCM for playing Chef. We had a grand time, met a lot of fine people and had lots of true treasures to sell or trade. We hope to have as much fun next year, but right now I don't want to think about that!

Deanna, WB5UMH

OKLAHOMA REPEATER SOCIETY INC.

THE BOARD OF DIRECTORS MET SUNDAY, SEPT. 11 1977 IN KINGFISHER FOR THE PURPOSE OF ELECTING OFFICERS AND CONDUCTING OTHER BUSINESS NEEDED TO FURTHER THE ORGANIZATION OF THE SOCIETY. OFFICERS ELECTED WERE: PRESIDENT, LEONARD HOLLAR, WA5FSN; VICE-PRESIDENT, RAYMOND WILLIS, W5ATO; SECRETARY, DANIEL SCHROEDER, K5FVL; TREASURER, DAN PRATER, K5CAY;

THREE STANDING COMMITTEES ARE AUTHORIZED IN THE ADOPTED BY-LAWS. THE COMMITTEES AND THEIR DUTIES ARE: TECHNICAL: THE TECHNICAL COMMITTEE WILL INVESTIGATE METHODS AND TECHNIQUES DESIGNATED BY THE BOARD RELATIVE TO THE SOLUTION OF TECHNICAL PROBLEMS EXPERIENCED BY MEMBERS OF THE SOCIETY. THE TECHNICAL COMMITTEE WILL PROVIDE TECHNICAL INFORMATION TO, AND ASSIST THE BOARD IN THE FORMULATION OF SUGGESTED POLICY FOR THE ACHIEVEMENT OF THE PURPOSES OF THE SOCIETY.

FREQUENCY COORDINATION COMMITTEE: THE FREQUENCY COORDINATION COMMITTEE WILL ACCEPT AND RECORD VOLUNTARILY SUBMITTED USER FREQUENCIES AND PROVIDE INFORMATION TO USERS REGARDING POSSIBLE CONFLICTS IN FREQUENCY USE AND ASSIGNMENT. USER REQUESTS FOR NONDISCLOSURE OF UTILIZED FREQUENCIES WILL BE HONORED.

LEGISLATIVE COMMITTEE: THE LEGISLATIVE COMMITTEE SHALL COMPLETE AND ASSEMBLE INFORMATION REGARDING GOVERNMENTAL OR PRIVATE REGULATION OF AMATEUR RADIO AND ITS RELATED ACTIVITY. SUCH INFORMATION SHALL BE AVAILABLE TO THE BOARD AND MEMBERSHIP FOR THE FORMULATION OF SOCIETY POLICY.

IT WAS DECIDED TO WITHHOLD APPOINTMENT OF THESE COMMITTEES UNTIL A SURVEY OF MEMBERS COULD BE MADE, THEREFORE IT IS ASKED THAT THE ATTACHED MEMBERSHIP APPLICATION BLANK BE FILLED OUT COMPLETELY, TO ASSIST THE PRESIDENT IN MAKING THE COMMITTEE APPOINTMENTS AS SOON AS POSSIBLE.

IT WAS DECIDED TO HOLD THE NEXT GENERAL SESSION OF THE SOCIETY IN EARLY JANUARY 1978, AT A TIME AND PLACE TO BE DECIDED LATER.

IF THIS ORGANIZATION IS TO SUCCEED, IT MUST HAVE THE FULL SUPPORT OF EVERYONE INTERESTED IN REPEATER OPERATIONS.

APPLICATION FOR MEMBERSHIP
OKLAHOMA REPEATER SOCIETY

NAME AND CALL: _____

ADDRESS: _____

I AM INTERESTED IN: TECHNICAL _____, FREQ. COORDINATION _____, LEGISLATIVE _____,

ARRL MEMBER _____

CLUB AFFILIATIONS: _____

AREA OF OPERATING INTEREST: TRAFFIC _____, PUBLIC SERVICE _____, RAG CHEWING _____.

MEMBERSHIP \$3.00 PER YEAR NO. YEARS _____

REMIT TO: DAN PRATER, P. O. BOX 261, ENID, OKLAHOMA 73701

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FOR SALE: HRZB Regency 2m FM, 1-15 watts. \$125. Hobe Borgan WB5MLN, phone 751-1646.

FOR SALE: Insulated camper shell to fit Toyota pickup bed size, 59x74" Real nice - \$150 or best offer. Hobe Borgan, WB5MLN, phone 751-1646.

THE PERFECT SQUELCH: Some time ago on 20 meters, an oldtimer was heard putting a youngster and newcomer to ham radio in his place. He, in no uncertain words, told the young ham how lang he had been in ham radio, how extensive his knowledge was, how much experience he had, etc. When he finally turned it back to the young fellow, the newcomer replied: "Well sir, you have really taught me something. I never knew, before today, that the degree of senility was a guage of sagacity"! W5QFH

WANTED: A Micro-Computer with keyboard, 4K or more of memory, and preferably with BASIC and television interface. Contact: Robbie Reid, WB5VXL, 321-0077 in Norman.

WANTED: Novice trainee wants to buy a Receiver/Transmitter, antenna, etc. It needs to work and be inexpensive. Bill Jones, phone 373-2857.

FOR SALE: Swan 270 transceiver, 10-80, \$200. Collins 75A3 receiver W/ 3 filters, 10-160, \$200. Drake receiver, 2A/NB, 10-80, \$110. Nick Bayouth Phone 787-4094

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Club NEWS

W5LOV
The Elmer Cooker Memorial
Station

MINUTES OF SEPTEMBER MEETING

Meeting was called to order at 8:00pm by President Woody, W5FMX. George, WB5NMK, announced his son was just operated on with good news, a worry of Cancer was unfounded.

Representatives of CORA were selected. They are Bob, W5HXL, George, WB5NMK, and Ellard, W5KE.

After much discussion a poll was taken regarding location of next year's Ham Holiday. Consensus was a preference to have it at the same place as this year.

Carl, W5JJ, brought copies of director's letters he had received and discussed some of the points covered therein.

Next meeting will be replaced by a weiner roast at Will Rogers Park, South Picnic Shelter. It should start around 7:30pm, October 21. Bring your own chow.

Gil, W5RB, Net Manager OLZ, presented the first program of the evening on CW Traffic Handling. Among other things he provided information on the following nets which meet daily: CAN, 3670 kHz, 8:30pm, RN5, 3645 kHz, 7:30pm and 9:30pm, and OLZ, 3682.5 kHz, 7:00pm (times are local time).

After a short break, the second program was given by Ellard, W5KE. He talked about how an amateur can get started without spending a lot of money. As in real life, as Ellard went on, prices went up.

Meeting was ajourned at 10:07pm. Minutes were taken by Jim, K5VRL, who bailed the Secretary out. The Secretary missed the meeting because of a broken calendar.
Joe, K5JB

I DON'T WANT A PICKLE,

I just wanna ride on my motorsickle. The opening lines of a currently popular song by Arlo Guthrie are just about as silly as one has to be to pull off a stunt like I just finished. I always wanted to do some touring of New England so when an opportunity to make a company sponsored visit to Springfield, MA came up, I packed up my motorsickle and headed Northeast.

If this was a motorcycle publication, I would elaborate on the motoring, but it is not, so let me say briefly that I rode 1700 miles to Springfield, 1300 miles around New England and 2000 miles back (through Smokey Mountains). I arrived home is pretty good shape except fatigued from a bad cold I caught before I left Springfield.

Here is the radio part of the story. The first free evening I had, I went to Newington, Connecticut to, you guessed it!, ARRL Headquarters. The HQ office was closed but W1AW was open. I have misplaced the name and call of the gentleman who was operating the station but he was very accommodating and friendly, giving me a very detailed tour of the station, even down in the basement, where the most amazing collection of QSL cards I could ever imagine were kept. (Chris, W1EH, ed.)

When I arrived, he was taping bulletins to be aired later. W1AW was not operating so he asked if I would like to operate. I told him not really, unless the 75 meter band happened to be open into the Midwest (weather net time). He retuned the final amplifier and remote antenna tuner to 3900 kHz and seated me at one of the visiting operator's positions equipped with a TS-820. The band was not open so as it turned out, the only operating I did was to key the transmitter while he tuned the final. After I finished with my frivolity, he retuned to 80 meters for code practice.

Code practice is sent by using a five level (Baudot) teletype tape prepared by

using a keyboard/video/punch machine. The tape is fed to a reader which converts the Baudot code to telegraph code with insertion of proper letter, word and sentence spacing. A single master oscillator is heterodyned to the operating frequencies and a bank of amplifiers simultaneously transmit on all bands. On HF, the station transmits code using 160 & 80 meter doublets, 40 meter yagi and a pair of phased 20 meter yagis. A rhombic which has been tried on 40 meters was unsatisfactory because it was too directional! It covers Southern California well but misses the Pacific Northwest. The yagi has been much more satisfactory.

The station is equipped with emergency generator and many back-up systems to allow it to have a high degree of reliability. The equipment installation is neat with cabling and wiring running in raceways in the floor joists, accessible in the basement. Most coax feedlines are run underground to the towers.

I looked at some of the hardware from past projects such as Oscar antennas and equipment and the operator fired up a rotary spark gap equipped with a code wheel to send "CQCQ WIAW." It was the first time I ever saw a rotary spark gap in operation and I must say that now I understand why the big ones were described as "impressive."

My operating was confined to two meters, FM while I was on the trip. On a motorcycle one doesn't do too much radio operating while on the move. At rest stops, I would whip out the Handie Talkie ® and see who I could contact. I was never out of range of a repeater whenever I tried it. I made some nice acquaintances around the Hartford/Springfield area, getting a couple of invitations to visit. With all the sightseeing, I thought I might run into an amateur somewhere but I never did.

In conclusion, I will answer the question that many have asked, "Would you do it again?" My answer is well, not quite the same way. Nothing is more boring than interstate highways on a motorcycle. Whenever possible, I would like to allow more time, take the secondary roads and further investigate some of the scenery, people and places off of the concrete rat race.

ANOTHER REAL PICKLE

A trucker who had been away from his newly wed wife for over a week was briskly driving homeward (high balling it) with great anticipation. About a hundred miles from home, he heard strange sounds coming from the trailer so he stopped to investigate. Well, it seems that lug nuts on one wheel were loose, and the holes had become enlarged (wallowed out). He got his lug wrench and tightened the nuts hoping the thing would hold together til he got home. He started up again and about 75 miles from home the wheel started getting loose and clattering. He started worrying and thinking about his little wife waiting at home for him. Then suddenly, the wheel let go and rolled right past him. As he headed for the shoulder he was heard singing, "You picked a fine time to leave me loose wheel!" K5JB

NEW REPEATER REGULATIONS

The following came off the teletype and was submitted by Joe, WA5FLT:
NEWINGTON CT SEPTEMBER 22, 1977
TO ALL RADIO AMATEURS BT

ON SEPTEMBER 21, 1977, THE FCC ACTED ON DOCKET 21033, REPEATER RULE SIMPLIFICATION. EFFECTIVE IMMEDIATELY NO NEW APPLICATIONS FOR NEW REPEATER, AUXILIARY LINK, AND CONTROL STATION LICENSES WILL BE ACCEPTED. THE FOLLOWING ARE ALSO EFFECTIVE NOVEMBER 4, 1977. DISTINCT LICENSES FOR REPEATERS, AUXILIARY LINK, AND CONTROL STATIONS WILL BE ELIMINATED. THESE MODES OF OPERATION WILL BECOME PRIVILEGES INHERENT IN ALL INDIVIDUAL PRIMARY LICENSES AND CLUB STATION LICENSES. THIS MEANS THAT DISTINCTIVE WR PREFIXES FOR REPEATERS ARE BEING ABOLISHED. HOWEVER, PRESENT REPEATER, AUXILIARY LINK, AND CONTROL STATION LICENSES REMAIN IN EFFECT TILL EXPIRATION, AT WHICH TIME THEY WILL NOT BE RENEWABLE. ALSO, APPLICATIONS FOR REPEATER STATION LICENSES NOW ON FILE WILL BE DISMISSED WITHOUT ACTION. PORTABLE AND MOBILE OPERATION OF AUXILIARY LINK STATIONS HAS BEEN APPROVED. IN ADDITION TO THE PRESENT REPEATER SUBBANDS THE FOLLOWING FREQUENCIES HAVE BEEN MADE AVAILABLE FOR REPEATER USE. 144.5-145.5 MHZ, 220 MHZ AND UP, EXCEPT FOR 435-438 MHZ. TECHNICIAN CLASS LICENSES HAVE BEEN GRANTED ADDITIONAL PRIVILEGES AT 144.5-145 MHZ SO THAT THEY MAY USE THE NEWLY CREATED REPEATER SUBBAND ON TWO METERS. THIS GIVES TECHNICIANS PRIVILEGES ON 144.5-148 MHZ IN ALL ON TWO METERS. THE IDENTIFICATION INTERVAL FOR REPEATERS HAS BEEN EXTENDED TO AT LEAST ONCE EACH 10 MINUTES. STATIONS OPERATING

IN THE REPEATER MODE SHALL IDENTIFY EITHER BY PHONE BY ADDING THE WORD REPEATER AFTER THE PRIMARY CALL SIGN, OR BY CW BY FOLLOWING THE PRIMARY CALL WITH /RPT. STATIONS OPERATING IN THE AUXILIARY LINK MODE (OR CONTROL MODE - THE CONTROL FUNCTION HAS BEEN COMBINED WITH THAT OF AUXILIARY LINK) SHALL IDENTIFY EITHER BY PHONE BY APPENDING THE WORD AUXILIARY AFTER THE PRIMARY CALL, OR BY CW BY INCLUDING /AUX AFTER THE PRIMARY CALL. TRANSMISSIONS FROM OPEN ACCESS AUTOMATICALLY CONTROLLED REPEATERS NEED NO LONGER BE MONITORED OR RECORDED. THERE WAS NO ACTION TAKEN ON THE ESTABLISHMENT OF PRIORITIES FOR FREQUENCY USE, ON MODIFICATIONS OF THE PRESENT EFFECTIVE RADIATED POWER VERSUS HEIGHT ABOVE AVERAGE TERRAIN REQUIREMENTS, OR ON THE ELIMINATION OF THE REQUIREMENT THAT A RECORD OF THIRD PARTY TRAFFIC MUST BE MAINTAINED IN THE LOG OF A REPEATER STATION, OR OF A STATION OPERATING IN THE REPEATER MODE. AR
TV

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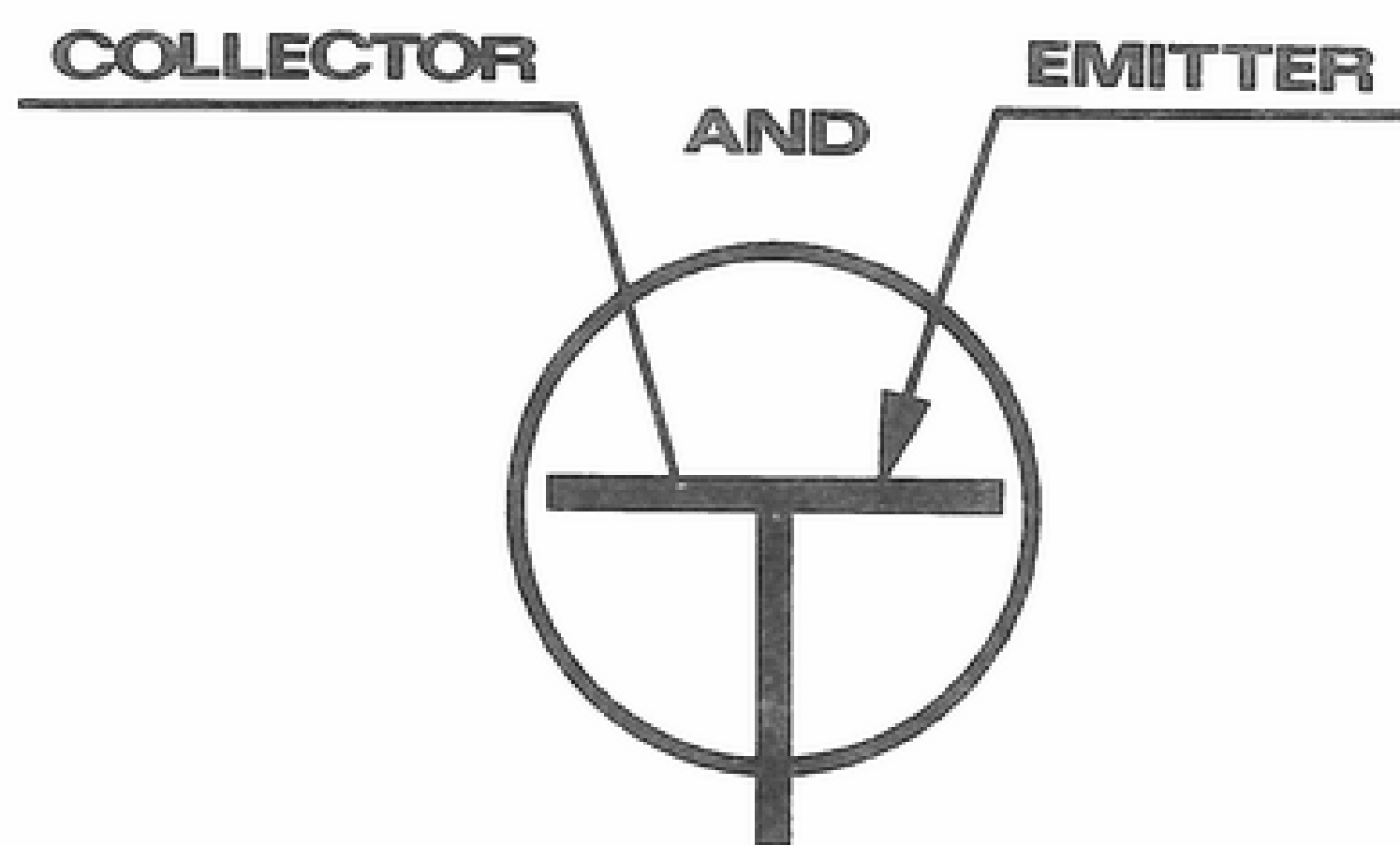
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W5HMT, Telephone 405/848-2185.

ROSTER OF
C.O.R.A.*
MEMBERS

***Central Oklahoma Radio Amateurs**



September 1977

LIC.	NAME	ADDRESS	CITY/ST.	PHONE
A	ALFRED M ADAMS	PO BOX 32545	OKC	
A	W I ADAMS	7212 WEDGEWOOD CIR	OKC	843-6415
A	JUNE ALLEN	7309 S DOUGLAS	OKC	632-1708
A	ROBERT ALLEN	7309 S DOUGLAS	OKC	632-1708
A	JACK ALLISON	2817 NW 13	OKC	947-5840
A	BARRY ASHWORTH	4612 NW 32	OKC	942-0660
A	JOHN ASHWORTH	1125 ELMHURST	MOORE	794-6188
A	DAVID ATNIP	809 PLAZA DR	MOORE	794-0460
A	G C BANDY	223 SE 45	OKC	794-3414
A	NICK BAYOUTH	5731 NW 36	OKC	787-1618
A	LARRY BEAVERS	4912 LARISSA LN	OKC	942-2386
A	RICHARD BENNETT	1321 NAIL PKWY	MOORE	794-8262
A	JOHN BIGLER	112 W JARMAN	MWC	732-6260
A	JAMIE BIRD	5408 S YOUNGS PL	OKC	681-4290
A	ED BLACKWELL	9304 S MCKINLEY	OKC	
A	JOHN BLANK	830 MARSALIS	ABILENE TX	
A	DAN BLUNDELL	206 NE 19	MOORE	799-4879
A	GARY BREWER	4812 NW 37	OKC	789-2756
A	MIKE BUCKPITT	2341 N W 12TH	OKLA CITY OK	-
A	L J BURNS	320 S MEADOW LN	MUSTANG	376-3616
A	LARRY CADELL	RT 1 BX 750E	BLANCHARD	485-2047
A	MELVIN CAMPBELL	1440 SW 45	OKC	685-2517
A	ROBERT CARTMILL	518 SW 3	MOORE	794-1869

LIC.	NAME	ADDRESS	CITY/ST.	PHONE
A	RAYMON CASTRO	11612 LOCHWOOD	YUKON	354-8396
A	PAUL CHRISTIAN	732 N WARREN	OKC	946-7579
A	JOE COUCH	RT 5 BX 494	GUTHRIE	282-4353
A	HENRY CROSSETT	724 NW 16	MOORE	794-2758
A	H L CULBREATH	11008 N BLACKWELDER	OKC	525-7361
A	DOYLE CURTIS	3814 NW DELLA	NORMAN	329-6349
A	DONALD W DAVIS	3709 SPRINGLAKE	OKC	478-0542
A	A1C MARK EARLE	PSC 1 BX 360052	LACKLAND AFB TX	
A	GARY ENGLAND	3101 ORLANDO RD	OKC	
A	DIANNA FOGLE	1407 SE 19	OKC	672-8506
A	JERRY FOGLE	1407 SE 19	OKC	672-8506
A	CHARLES GOSSETT	BX 6369	MOORE	794-2604
A	BILL GREEN	1309 SW 71	OKC	685-7191
A	A B GRIFFIN	PO BX 165	PRAGUE	
A	A E HALL	2508 NW 58 PL	OKC	843-6890
A	WOODROW HARWICH	900 NAIL PKWY	MOORE	
A	SANDY HAWKINS	116 SW 11	MOORE	794-6144
A	FRANK HENDRICK	4316 N STERLING	OKLA CITY OK	789-6023
A	WAYNE HESTAND	5810 S ROBINSON	OKC	632-2823
A	MITCHELL HILGER	1145 SW 78 TERR	OKC	634-5213
A	HARLEY HOLCOMB	345 SE 39	OKC	
A	HARRY HOLZMAN	23 SE 39	OKC	634-9889
A	WAYNE HUNTEMAN	2101 SW 28	OKC	634-1896

LIC.	NAME	ADDRESS	CITY/ST.	PHONE
A	JIM IMMEL	5704 MACARTHUR BLVD N	OKLA CITY OK	789-1138
A	ALAN JONES	1421 OAKCREST	NORMAN	364-7642
A	ALVIN JONES	2405 SW 51	OKC	681-5606
A	HOWARD KINSLEY	1115 1/2 S DOUGLAS	MWC	
A	CARL F KLEPZIG	2233 NW 26	OKLA CITY	
A	RON KOLAR	3116 SW 42	OKC	685-7025
A	FORREST LADD	4301 NW 59 TERR	OKC	946-8670
A	ROBERT LEDBETTER	5208 N BILLEN	OKC	842-1719
A	NELSON LEE	3928 NW 59	OKC	946-2743
A	MELVIN LUMMUS	1120 SW 60	OKC	634-0856
A	AL MARCH	4425 SE 40	DEL CITY	670-3491
A	RAYMOND MARCH	12100 SW 89	MUSTANG	376-3165
A	DONALD MAYES	108 S NORMAN	MOORE	794-2178
A	CHARLES MCCOWN	226 MIMOSA DRIVE	NORMAN OK	321-1061
A	JOHNNY MCGOWEN	7324 S DREXEL	OKC	681-7243
A	JESS MCKENZIE	2632 TRENTON	NORMAN	329-1543
A	W J MCMULLIN	2011 HUNTINGTON	OKC	842-7537
A	ROY MILES	1118 ORCHARD	STILLWATER	
A	RON MILLS	ROUTE 3	BLANCHARD	
A	ROBERT A MOORE	2721 N MERIDIAN	OKC	946-5713
A	RALPH MOULTON	2601 ATWOOD DRIVE	NORMAN OK	329-5602
A	FRED NORMAN	BOX 32325	OKC	
A	DEWAYNE ORR	2400 S MACARTHUR	OKC	681-0262

LIC.	NAME	ADDRESS	CITY/ST.	PHONE
A	FRANK OWEN	ROUTE 2	JONES	
A	PHILLIP PACK	536 SW 43	OKC	632-1904
A	DENNIS PATTERSON	8300 NW 19	OKC	495-0769
A	AL PECK	RT 1 BX 200	OKC	
A	GREG PECK	RT 1 BX 200	OKC	
A	JAMES PERTREE	309 W CHARLOTTE	OKC	794-0362
A	JIMMIE PHILLIPS	2948 HILLCREST	MOORE	794-1490
A	LEON PHILLIPS	RT 2 BX 270	MCCLOUD	
A	MARY PHILLIPS	RT 2 BX 270	MCCLOUD	
A	RON PHILLIPS	3114 SW 37	OKC	685-8612
A	WALT QUITTER	6801 N HARVARD	OKC	721-1536
A	RONALD J REID	9415 GOLD HILL	SAN ANTONIO TX	
A	JACK SCHERF	2324 NW 28	OKC	524-2764
A	HEINZ SCHILLING	1436 SW 64	OKC	
A	FOREST SCHOOLING	616 SW 51	OKC	634-2961
A	SCOTT SHORT	212 BYRD DR	MWC	732-6735
A	E H SIMMS	900 N WILLARD	ALTUS	482-2761
A	DIANNE SIMS	5601 ARROWWOOD	OKC	
A	WILLIAM SIMS	5601 ARROWWOOD	OKC	
A	EARL SINCLAIR	1817 WESTCHESTER	OKC	843-3438
A	LEE SMITH	3807 N YOUNGS	OKC	942-5351
A	JERRY SPROUL	128 RANCHWOOD	YUKON	354-2061
A	LESLIE STEWART	3117 NW 13	OKC	947-1839

LIC.	NAME	ADDRESS	CITY/ST.	PHONE
A	BOBBY D STUBBS	713 SW 24	OKC	632-1840
A	E H TAYLOR JR	2213 NW 12	OKC	528-5816
A	VAL TERRY	1033 SW BINKLEY 9	OKC	634-7170
A	WILLIAM VLAMING	11400 BLUFF CREEK	OKC	722-0536
A	TOM VORE	1100 NE 4	MOORE	794-1288
A	ROGER WALKER	303 ROCK PL	MOORE	799-2585
A	DONNA WARD	RT 10 BX 296	MOORE	799-2376
A	HAROLD WARD	RT 10 BX 296	MOORE	799-2376
A	MARK WEAVER	FAA AAC5 PO BX 25082	OKC	
A	LESTER WOOD	700 ASKEY DR	MWC	732-5586
A	ALDEN WOODS	8100 NW 31ST TERRACE	BETHANY	787-7196
A	RICHARD ZANNI	719 SCOTT ST APT 1	DEL CITY OK	677-8193
W5AA	RALPH REA	2213 S W 69	OKLA CITY OK	685-0898
W5AAR	FRANK WILDEBOOR	BOX 176	CROSWELL MI	
WB5AAY	LARRY BUGG	7620 N W 20	BETHANY OK	789-4180
WD5ABT	BOB ODOM	612 S 9	MOORE	799-3173
WA5ACB	WAYNE HOGAN	113 E MORNINGSIDE DRIVE	MIDWEST CITY OK	732-1870
WB5ADN	DEEDS BIGELOW	ROUTE 6 BOX 8	EDMOND OK	341-0556
W5AEF	EUGENE HARRIS	4301 N W 15TH	OKLA CITY OK	946-7023
WD5AGT	JOE PAUL COUCH	908 E HILLS	MOORE	799-2943
WB5AGX	RICH SINCLAIR	9901 NICHOLS ROAD	OKLA CITY OK	528-3136
WB5AGZ	MARTIN MCCORMICK	3401 BAIRD DRIVE	EDMOND OK	341-2620
N5AH	BILLY ATKINS	321 N POST RD	MWC	737-6984

LIC.	NAME	ADDRESS	CITY/ST.	PHONE
K5AHJ	BOB LUTZ	4000 W LIBERTY	OKLA CITY OK	942-3077
W5AIC	DENZIL CRIST	BOX 6	GEARY OK	965-2641
W5AIP	FORD MICHAEL	833 S FLOOD	NORMAN OK	321-4301
K5AJW	MAURICE HOLDING	2736 S W 53	OKLA CITY OK	685-3803
K5AMI	CLARK MARLER	4820 BYPASS TERRACE	OKLA CITY OK	681-7229
WB5ANA	STEVE RICHERT	5212 S E 46	OKLA CITY OK	672-0453
W5AOB	WAYNE HOGAN	113 E MORNINGSIDE DR	MWC	732-1870
K5AOT	ROBERT CARLILE	117 E MARSHALL	MIDWEST CITY OK	737-8469
WA4AOW	CARL FREEMAN	PSC4 BX 17431	APO SAN FRANCISC	
WD8AQZ	RICH BARBER	459 HARR APT C	MWC	737-9162
W6ATC	HARRY GARTSMAN	9921 SUNSET BLVD	BEVERLY HILL CA	-
W5ATO	RAYMOND WILLIS	401 N MAIN ST	GRANITE OK	539-2184
WB5AUF	W A CROOK	3448 NW 18	OKC	943-4731
W5AVK	JOHN NELSON	2001 TEXAS ST	NORMAN OK	321-8566
K5AWD	WILLIAM F JONES	5021 BUDDY LANE S	OKLA CITY OK	685-9842
WB6AWM	C J APPEL USCGD	423 GREGORY APT 22	FAIRFIELD CA	
W5AYL	ED D OLDFIELD	2221 NW 26	OKLA CITY	
K5AYL	ROBERT LYON	4409 WOFFORD ROAD	DEL CITY OK	677-7200
W5AYO	HORACE MARRINAN	312 WILDWOOD TERRACE	OKLA CITY OK	842-8959
W5BBH	EARNEST NEFF	2909 PRIMROSE	FT WORTH TX	
WD5BBJ	DONALD SEVEDGE	1126 N CRAIN	ALTUS	482-0102
WD5BBM	OWEN RICHARDS	912 EDWARDS	ELDORADO OK	633-2321
WD5BBN	CHARLES NICHOLS	819 N SPURGEON	ALTUS OK	477-0943

LIC.	NAME	ADDRESS	CITY/ST.	PHONE
WD5BBP	LAWRENCE MOORE	362-B SOUTH ASH	ALTUS	477-0091
WD5BBR	MARY LONGBERRY	RT 1 BOX 23A	BLAIR	563-2612
WD5BBS	LARRY JONES	409 N NAVAJOE	ALTUS	482-5576
WD5BBV	RALPH GILMER	409 HARDIN	MANGUM	782-2607
WD5BBW	BOB BRATTON	129 EAST CLEVELAND	MANGUM OK	782-3073
WB5BCR	JIM WORTHY	5935 N W 43RD	OKLA CITY OK	789-6954
WB5BCZ	BRUCE STEVENS	437 E MOHR LANE	MUSTANG OK	376-2501
WD5BDS	JOHN VAN HAUEN	7717 HILLCREST	OKC	682-1339
WA4BFL	JIMMY FERGUSON	4537 CRUMP RD	GERMANTOWN TN	
WD5BID	RON W ROBISON	753 N MCARTHUR	OKC	
K5BJJ	CLARENCE ENG	7900 N W 14	OKLA CITY OK	787-0060
W5BKN	ELMER FIELDS	3811 N LINDA	OKLA CITY OK	943-4979
WD5BKU	BILL JOHNSON	4205 NW 33	OKC	
WD5BLM	RON G LEWIS	RT 1 BX 194B	MUSTANG	376-3317
WB5BNN	FAY STEPHENSON	9 RED ROCK RD	SHAWNEE	273-1336
WA5BNZ	ROBERT MADOLE	2640 S W 57TH	OKLA CITY OK	685-9659
K5BPE	MARY BRYAN	PO BOX 246	KINGSTON	564-2177
WB5BRX	JIM SNOW	1908 SHEFFIELD ROAD	OKLA CITY OK	848-2946
WA5BTQ	LARRY W HARDIN	5708 NW 86	OKC	721-5598
WB5BTT	RAY PETERS	208 N JACKSON	MIDWEST CITY OK	732-6498
W5BUX	GEORGE STEED	2309 W 37	PINE BLUFF AR	-
WB5BWQ	PAT CALDWELL	3120 NW 61 TERR	OKC	842-7280
WD5BXW	GORDON C JOHNSTON	7213 CROWN POINT RD	OKC	

LIC.	NAME	ADDRESS	CITY/ST.	PHONE
K5CBA	PRESTON GEORGE	1812 S RANKIN	EDMOND OK	341-0751
WA5CBF	LOREN SIMMS	P O BOX 71	ALTUS	477-0921
W5CBX	REX PROCTOR	9105 E RENO	MIDWEST CITY OK	732-2387
W5CCV	JOE MCDONALD	P O BOX 416	MANGUM	782-3454
W5CDG	PAUL KOVAR	ROUTE 1 BOX 108	CHOCTAW OK	769-2828
W5CEP	CARL STEPHENSON	9 RED ROCK ROAD	SHAWNEE OK	273-1336
K5CFM	ANTHONY MERRITT	11417 GREYSTONE	OKLA CITY OK	755-0820
W5CG	HAROLD GOULD	2208 SW 57	OKC	685-4805
W5CHE	H C FORD	P O BOX 296	GRANITE OK	539-4710
WA5CJG	ROBERT L PACE	1726 WEST ROSE OAK	MUSTANG	
K5CKQ	C D HAGLER	1831 CACHE RD	LAWTON	
WB5CLC	KIM ELMORE	1141 W WALKER TWR	NORMAN	325-6217
K5CLS	DEWITT ROLAND	3420 PARADISE	SPENCER	771-3145
WB5CNM	RANDALL M WILLIAMS	PO BOX 74	OKC	-
WD5CNW	E L BIDDY	1317 ASH ST	ALTUS	482-1161
WB5CPA	CLYDE WARD	BOX 117	WASHINGTON OK	527-6180
W5CPI	JACK HARKINS	2204 W COLLEGE	BETHANY	789-9398
WB5CPR	CHUCK WILHITE	7144 COMMANCHE	OKC	721-6225
WB5CRX	DAVID GIBSON	103 W VIDA WAY	NORMAN OK	321-3985
WD5CST	JEFF FARRIS	1124 SW 61	OKLA CITY	632-1206
WB5CTR	LORETTA WORTHY	5935 NW 43	OKC	789-6954
WA5CWB	LARRY DILLARD	2624 S W 69	OKLA CITY OK	685-4065
WA5CZN	DOC GOODHEAD	5004 N BEAVER	BETHANY OK	787-6013

LIC.	NAME	ADDRESS	CITY/ST.	PHONE
W5DDI	GEORGE HOLT	4420 NW 19	OKLA CITY	
WA5DGL	P K READ	1401 N TUCKER	SHAWNEE OK	273-1598
WB5DJQ	CARL LESLEY	BOX 202 RT 2	HARRAH OK	-
W5DNG	JULIUS BURTSCHI	1628 CHICKASHA AVE	CHICKASHA OK	224-2450
K5DNL	KEN ROBERSON	RT 6 BX 248B	SHAWNEE	
WB5DPQ	RICHARD PERRY	2605 NW 14	OKC	524-0400
WA5DTL	KEN GODDARD	1021 N TABOR DRIVE	OKLA CITY OK	946-4973
WB5DUC	LARRY MARKS	2008 MILL CREEK ROAD	EDMOND OK	341-8100
W5DVY	JAMES HARMON	3224 N RIDGEWOOD	MIDWEST CITY OK	732-6303
WD5DYI	MARK NORTHCUTT	420 NW 95	OKC	842-1086
WD5DYJ	KAY NORTHCUTT	420 NW 95	OKC	842-1086
K5DZV	TRAVIS HARRIS	3840 N W 31 ST	OKLA CITY OK	942-3797
K5EA	BILL TUCK	3201 S WESTERN	OKC	634-6628
WA5EAI	RON CRON	2428 S W 46	OKLA CITY OK	681-0896
WA5EBG	JEFF JEFFRIES	928 WINDERMERE	MOORE	799-3284
WB5EBX	FRANKLIN CARTER	RT 2 BOX 338	CHOCTAW OK	627-3394
WB5ECJ	KEN KENDRICK	BOX 20567	OKLA CITY OK	751-4917
WB5EEY	PAUL THOMPSON	701 CHAUTAUGUA	NORMAN OK	364-8993
WA5EEZ	ROBERT L ROGERS	RT 2 BOX 366	TUTTLE OK	392-5562
W9EGQ	HERB BRIER	409 S 14	CHESTERTON IN	-
WB6EGU	WALTER HART	956 PEBBLESHIRE ROAD	GLENDALE CA	-
W5EHR	N P JESSUP	RT 1 BOX L50	PIEDMONT OK	373-2408
WB5ELG	DOROTHY DIRIKSEN	2201 S W 49TH	OKLA CITY OK	685-0725

LIC.	NAME	ADDRESS	CITY/ST.	PHONE
K5ELL	MERWIN ADLER	314 SUNNYSIDE	EDMOND OK	341-5605
W5EMB	JOHN WHITEN	6716 DREXEL	OKC	681-3240
WB5EMI	JIM TRUELOVE	2345 W KATHLEEN	PHOENIX AZ	-
W5EMP	JOSEPH CARTER	7021 N W 48	BETHANY OK	789-5512
W5EOD	HUGH REYNOLDS	RT 2 BOX 103H	NORMAN OK	329-3861
WB5EOL	JIMMY DENMAN	7705 S CHARLOTTE DR	OKLA CITY OK	681-6048
WA5EPK	MICHAEL C SALEM	1324 LINCOLN	NORMAN OK	321-5453
WB5ERN	RANDY MULLINAX	111 LARRY ROAD	SHAWNEE OK	275-2994
WD5ETB	W W NORTHCUTT	PO BOX 38	CEMENT	
WA5ETV	GARY L MCCORMICK	5012 N W 25	OKLA CITY OK	946-2898
K5EUT	NATHAN PARSONS	1101 N NORMAN	MOORE	794-6135
WA5EYZ	LEROY SCHULTZ	4509 S E 20TH	DEL CITY OK	677-2216
WA5FFG	CHARLES YORK	3700 N W 64TH	OKLA CITY OK	842-3918
WA5FFK	DON MOORE	6602 N W 30TH TERRACE	BETHANY OK	787-5189
WB5FJI	JAY REID	RFD 10 BOX 248	MOORE OK	794-4733
WA5FLT	JOE GARLAND	BOX 204	CALUMET OK	354-8286
W5FMX	T VAN WOODY	3301 VENICE BLVD	OKLA CITY OK	942-2831
KL7FNC	CHARLES PLEMMONS	12828 SW 15	YUKON	354-1452
WA5FSN	LEONARD HOLLAR	710 S 10	KINGFISHER OK	375-4411
WB5FTE	TOMMY KESSLER	2632 BUTLER DRIVE	NORMAN OK	364-9308
W5FUD	RALPH W BRADLEY	105 N 4TH ST	PARIS AR	
WA5FVW	GARY STOKES	8800 BOB WHITE RD	YUKON	354-7685
WA5FWD	BILL NOLAND	608 KINGSTON PLACE	YUKON OK	354-5018

LIC.	NAME	ADDRESS	CITY/ST.	PHONE
WB6FYL	RICHARD ZANNI	9151 S SHARTEL 201	OKC	691-1809
WB5FZD	JOHN FAGEN	2329 BLUE CREEK	NORMAN OK	364-3447
K5GBF	HAROLD PLUNK	2801 CAMELOT DR	OKLA CITY OK	751-4677
K5GBN	JOHN FISH	BOX 131	CALUMET OK	895-2227
W5GC	GENE TAYLOR	2520 S W 68	OKLA CITY OK	685-1118
WB5GCX	O K STAUDT JR	1414 N OAK	GUTHRIE OK	282-6508
W5GDL	CHESTER HAZELWOOD	4900 COLTRANE ROAD	OKLA CITY OK	427-1439
W5GEZ	GUY F STRATTON	6404 STERLING DRIVE N	OKLA CITY OK	721-3521
WA5GHK	JOE HYATT	914 S MAIN	KINGFISHER OK	375-3783
K2GKK	D C MACDONALD	5120 S E 49	OKLA CITY OK	672-4947
K5GL	GUY LIEBMANN	3128 LAKEVIEW MNR	BETHANY	787-9547
W5GM	JACK GANT	521 MONROE N W	ARDMORE OK	-
CP1GM	RAFAEL J ELIAS	7513 N W 29TH	BETHANY OK	787-3421
W5GNU	G K KNAPPLE	308 W JARMAN	MWC	737-2962
WA5GOF	BILL SHARP	510 E BOEING	MIDWEST CITY OK	737-1352
WA5GOI	AL BOORD	316 REYNOLDS	EDMOND	341-6698
WB5GSZ	JIM STEMEN	P O BOX 8777	CORP CHRITI TX	-
WB5GVK	STAN WIGH	517 LAKESIDE	MUSTANG	-
K5GWA	LAWRENCE REDING	STAR RT A BX 43	KINGSTON	-
WB5GWB	JEF CASEY	4612 N W 32ND PLACE	OKLA CITY OK	943-0672
WA5GWH	JAMES WHITE	7900 S LINN AVE	OKLA CITY OK	681-5894
WB5GZU	CHARLIE SOWERS	2313 MARKWELL	OKC	787-1980
K5HAK	EUGENE CROSBY	5805 STERLING	OKC	721-5430

LIC.	NAME	ADDRESS	CITY/ST.	PHONE
W5HAZ	SAM PERRY	2605 N W 14TH	OKLA CITY OK	524-0400
W5HDG	MAURICE WOODS	6420 N HILLCREST	OKLA CITY OK	842-1436
W5HF	FRED SPIES	400 W MARKHAM	LITTLE ROCK AR	-
K5HFN	FRED WRIGHT	8822 S E 25TH	MIDWEST CITY OK	737-8784
W5HFU	IVAN MILLER	4513 N W 31ST	OKLA CITY OK	942-4160
W5HHJ	BILL ROBBINS	RT 6 BX 436	OKC	691-2879
W5HLB	HARRY B SMITH	4323 RANCHO DRIVE	OKLA CITY	
W5HLZ	LEE FORREST JR	6208 S E 8TH	MIDWEST CITY OK	737-2316
K5HMD	JOE CHRISTIAN	339 WOODCREST DRIVE	NORMAN OK	360-2128
K5HMI	JOHN C MCGINTY	P O BOX 332	OKLA CITY OK	-
W5HMT	EARL SHAFFER	308 ENCOUPE	MIDWEST CITY OK	732-1667
W5HQM	CHARLES MAUPIN	2124 S W 68	OKLA CITY OK	685-6768
K5HQP	MARVIN WHITE	2108 S POST ROAD	MIDWEST CITY OK	732-8133
K5HGU	DON WILLIAMS	1815 PETER PAN	NORMAN	364-6475
W5HRC	CLYDE NELSON	1104 S W 65	OKLA CITY OK	634-6079
W5HST	RON BRAGG	11104 W 115	YUKON OK	373-2824
W5HTL	PAUL ASPLIN	2440 S W 54	OKLA CITY OK	685-6590
W5HUP	LLOYD KIRK	4021 S W 28	OKLA CITY OK	685-4873
K5H XK	JAMES RUSSELL	222 S MUSTANG ROAD	MUSTANG OK	376-3479
W5HXL	ROBERT ASHBY	2837 N W 19	OKLA CITY OK	942-5375
W5HXR	BILL HUBBARD	3300 N E 36	OKLA CITY OK	427-2537
W5HZD	SAM STEPHENS	BOX 550	EL RENO OK	262-4872
W5HZO	JOHN WORTHAM	813 HUNTERS HILL ROAD	OKLA CITY OK	789-6123

LIC.	NAME	ADDRESS	CITY/ST.	PHONE
WB5IBW	TONY PRYOR	2641 SW 54 PLACE	OKLA CITY OK	681-1222
K5IBX	RON GORDON	4135 N W 19TH	OKLA CITY OK	942-0797
WB5IEK	DON BRUNER	6604 NW 30TH TERR	BETHANY	789-1910
W5IFA	JOHNNIE R BURNS	2224 N ANN ARBOR	OKC	947-2118
WA5IFN	JIM KEARNS	14421 WILSON ROAD	EDMOND OK	751-6035
WB5IMF	STAN LISMAN	1213 MARY LEE LANE	EDMOND	341-8166
WB5IMT	DAVID NELSON	RT 2 BOX 160	TUTTLE OK	381-3057
WB5IPE	VAN EVANS	216 W BYRD DRIVE	MIDWEST CITY OK	737-6052
W5IO	RAY BRYAN	P O BOX 246	KINGSTON OK	564-2177
WA5IQH	BILL BLAKELY	RT 1 BX 109	BYARS OK	
K5IRO	BEN ALLEN	RT 8 BX 259	EDMOND	348-4264
WB5ISN	DENNIS ORCUTT	3201 S RANKIN	EDMOND OK	341-4200
WB5ISO	WENDALL COCHRAN	4308 N W 26TH	OKLA CITY OK	943-4308
WB5IXJ	LLOYD HARGROVE	6112 S E 10TH	MIDWEST CITY OK	732-3841
K5JB	JOE BUSWELL	PO BX 10674	MWC	732-0676
KG6JBH	NORMAN CRAWFORD JR	7320 KINGS RIDGE ROAD	OKLA CITY OK	721-8895
WB5JBK	GARY SHIDELL	328 MOHR LANE	MUSTANG OK	376-2832
WB5JBL	FRANK MCCOLLOM	2421 N W 118	OKLA CITY OK	751-3577
W5JCB	ELMO BLACK	413 N E 38 TERRACE	OKLA CITY OK	528-6467
W5JCO	RALPH WOOD	4740 ELM VIEW DRIVE	DEL CITY OK	672-2747
WB5JDZ	BERNARD MCCARTY	8719 N E 47TH	SPENCER OK	771-3625
K5JEA	KERMIT KRUGER	4328 N W 43RD	OKLA CITY OK	946-3417
WA5JES	ALTON R SMITH	2610 RIDGECREST DRIVE	EL RENO OK	262-1250

LIC.	NAME	ADDRESS	CITY/ST.	PHONE
W5JES	ROBERT RUNYON	6013 TIPI RD	YUKON	373-1818
K5JFE	WILLIAM WORTHAM	2733 ABBEY ROAD	OKLA CITY OK	751-8643
WB5JGO	MARTIN VOSS	6225 NORMAN ROAD	OKLA CITY OK	721-4526
WA5JGU	CHARLES GREEN	3028 N W 33	OKLA CITY OK	943-5631
WA5JHB	MARVIN STOKES	RT 1 BOX 3	CALUMET OK	-
W5JJ	CARL DRUMELLER	5824 N W 58TH ST	OKLA CITY OK	789-3788
K5JL	JAY LIEBMANN	3801 MACARTHUR	OKC	787-9545
WB5JML	HOWARD W DINGES	11204 N VICTORIA PLACE	OKLA CITY OK	751-0148
WBOJQC	GARY SCHILLING	BOX 1	TONGANOXIE KS	-
K5JGH	STEWARD C KENNEDY	1109 S 1 ST	CHICKASHA OK	224-4362
WBOJRE	FRANK CORNETT	2301 W MULBERRY	FT COLLINS CO	-
W7JTG	VIRGIL RIDGWAY	6449 N PENIEL	OKLA CITY OK	721-8411
WA5JUJ	BART WORTHAM	BOX 14305	OKLA CITY OK	751-9536
K4JWZ	RICHARD GILLILAND	6512 LOS ALPOS	EL PASO TX	
W4JXI	WALTER E TODD	435 BACARDI DRIVE	MERRIT ISLE FL	-
WA5JXX	ROGER RYAN	BOX 97	LINDSAY OK	364-6848
W5JZN	DAVID STUART	3133 STONYBROOK DRIVE	OKLA CITY OK	751-4410
WB5KAK	DOUG BROWN	5813 N W 31 ST	OKLA CITY OK	947-2836
W5KBB	DR SAM COLLINS	1211 N SHARTEL	OKLA CITY OK	272-0703
W5KCG	VESTAL NICHOLS	5002 N BEAVER	BETHANY	789-2319
K5KCJ	FRANK MARTIN	800 ASA LEE	ALTUS	482-1439
WB5KCU	ALFRED PRINCE	5950 N W 43	OKLA CITY OK	789-1160
WB5KDC	ROYDEN FREELAND	8044 BROOKSHIRE	OKLA CITY OK	721-5447

LIC.	NAME	ADDRESS	CITY/ST.	PHONE
K5KDR	BILL OLIVER	2210 IOWA	NORMAN OK	329-6333
WA5KDZ	MEL PERKINS	6716 FAWN CANYON	OKC	722-2056
W5KE	ELLARD FOSTER	5905 N W 42ND ST	OKLA CITY OK	789-6702
WB5KFL	MIKE LEATHERS	2229 MAPLE DRIVE	MIDWEST CITY OK	732-7909
WA5KFT	J W WORD	3700 N SHANNON	BETHANY OK	789-1865
W7KFU	MARION NEARY	R R 2	NEW PHYMOUTH ID	
WB5KGP	KEVIN JOHANNES	1201 DEVONSHIRE	EDMOND	341-5042
WA7KGU	ROBERT SHAW	908 ELMWOOD	EDMOND	341-4763
WA5KGV	ED PECK	2616 CLERMONT PLACE	OKLA CITY OK	842-6863
WB5KHC	TOM OWENS	8508 S KENTUCKY	OKC	
WB5KHU	KEN FORD	1918 N W 22ND	OKLA CITY OK	528-8770
WA5KHW	MIKE WHALEN	1434 S W 52ND	OKLA CITY OK	681-3755
WOKKX	ROBERT HAYES	P O BOX 144	RANDOLPH MN	-
WA5KLB	LYNN WAGONER	2720 MANCHESTER	OKC	751-6694
W5KOZ	SID GERBER	829 EAST BOUSE	MIDWEST CITY OK	737-1050
WB5KQA	JESSE KIRKHAM	110 BROWN	WARNER ROBINS GA	-
WA5KQB	HERMAN DAVIS	P O BOX 101	LEXINGTON OK	527-6344
WB5KRD	FRED MORTON	305 WADSACK APT G		321-2440
WB5KRH	DWIGHT DENNIS	709 E SOUTHLAND	ALTUS	482-2498
WB6KRZ	GARY WARD	1900 HUNTINGTON LN	REDONDO BEACH CA	-
WOKUJ	CLARENCE HERRON JR	3417 BELT AVE	ST LOUIS MO	-
K5KZV	TOM GARDNER	RT 5 BX 358	GUTHRIE	-
WB5LAF	JOE CARLTON	716 E COMMERCE	ALTUS	482-4489

LIC.	NAME	ADDRESS	CITY/ST.	PHONE
WA5LBK	ROBERT GREENE	2711 JEWELL DRIVE	ARLINGTON TX	
WB5LCM	PHIL SIMMS	900 N WILLARD	ALTUS	482-2761
K5LDL	GLEN FRANKLIN	512 S MACOMB	EL RENO	-
WB5LER	JOHN SNEED	4017 LEONHARDT	DEL CITY	-
WB5LGJ	EDWARD WILLIAMS	4005 BISMARC DRIVE	DEL CITY OK	-
WB5LHO	DOUGLAS MAGERS	3101 NW 62	OKC	842-8571
WB5LHR	BOB WILLIAMS	7613 N W 29TH	BETHANY OK	789-0987
W5LIL	VIRGIL L KERR	4601 N MACARTHUR	OKLA CITY	787-7321
K5LIL	EDWARD MURTA	4408 N W 47	OKLA CITY OK	946-9200
WB5LJO	MIKE MCCRARY	BOX 460	SHREVEPORT LA	
WA5LKS	JIM KELLY	4748 SE 27	DEL CITY	672-2272
WB5LLT	MIKE PADBURY	BOX 604	ADAMS OK	-
K5LLX	RAY SELBY	420 S 8	KINGFISHER	-
WB5LNX	ODIS WILSON	1600 N MOORE	MOORE OK	794-7815
KOLOT	LEO NEYER	9912 LYDIA	KANSAS CITY MO	-
WB5LPT	JACK SMITH	3028 CHETWOOD	DEL CITY OK	677-1816
W5LPV	HAROLD HANSON	937 NW 104	OKLA CITY	
WB5LTI	LARRY KEUN	7700 NW 27TH	BETHANY	789-6097
WA5LTM	TIM MAULDIN	3033 S W 60	OKLA CITY OK	681-0660
WB5LTU	JERRY BRYAN	BOX 98	TIPTON	667-5341
WA5LVG	DIANA STOKES	RT 1 BOX 3	CALUMET OK	-
WA5LWZ	RAYMOND ROTON	1521 CAROL	EDMOND	341-6123
WB5LYI	ART ENGLISH	9604 NE 10	MWC	732-8401

LIC.	NAME	ADDRESS	CITY/ST.	PHONE
K5LYM	ROBERT PARKS	P O BOX 593	ALTUS	482-4208
WA5LZD	ROSALIE STOKES	RT 1 BOX 3	CALUMET	
K5LZF	ROBERT ALMAND	711 N 1ST STREET	TECUMSEH OK	589-5148
K5MB	MARSHALL WILLIAMS	7724 NW 12	OKC	787-9292
WA4MBM	WILLIS CASEY	2750 RAINBOW FOREST DR	DECATUR GA	
W5MCJ	JEROME G BROUDY	1920 WESTBROOKE TERRACE	NORMAN OK	329-0262
W5MCM	BOB SINGLETARY	2830 N W 22	OKLA CITY OK	946-6840
W5MCN	LELAND E BLACK	726 WOODS	NORMAN OK	329-3222
WB5MEA	BRUCE STAFFORD	615 MORNINGSIDE	NORMAN	329-2159
W5MGP	DICK STROUHAL	3308 N RIDGEWOOD	MWC	732-6029
W5MIP	ROBERT STRAMP	10121 OAKPARK	MWC	737-3158
WB5MJS	CHARLES SMITH	BOX 491	ALTUS	477-1098
WB5MLN	HOBE BURGAN	2504 N W 119	OKLA CITY OK	751-8388
WA5MLT	H O TOWNSEND	2346 LOUISE LANE	NORMAN OK	329-4426
WB5MLX	GLEN COCHRAN	1925 STERLING DRIVE	OKLA CITY OK	942-7148
W5MMG	TED NEWCOMB	11216 N BRAUER	OKC	751-2801
WB5MMM	JERRY ROCHELLE	513 SATURN	ALTUS	482-6636
WB5MPS	TOM JENSEN	5505 NW 12TH RT 5	NORMAN OK	364-9193
WB5MSB	DAVID IHLE	1619 CAMELOT	NORMAN	321-5774
K5MTC	TED NICEWARMER	421 E KEE	WEATHERFORD OK	-
WB5MWO	SUE KINNEY	1332 DORCHESTER	NORMAN	329-7572
WB5MXD	ETHAN TURLEY	1301 N SPRING	AMARILLO TX	
WB5MXP	TOM NARLOCK	1692 MANDIGO	KALAMAZOO MI	

LIC.	NAME	ADDRESS	CITY/ST.	PHONE
WASMYF	CECIL BROWNLOW	RT 1 BOX 31A	ELDORADO OK	633-2321
K5MYS	FLORIAN SMITH	100 E MAIN	ADA OK	-
W5MZH	JOHN GUNDERSON	3000 NW 12	OKC	942-5208
WASMWZ	BILL RIDDLES	2647 NW 55 PL	OKC	842-0092
WBSMZX	ROBERT SCHERTLER	P O BOX 624	GRAND ISLE LA	-
K5NC	DAVID LANGLEY	5712 NW 112	OKC	722-0462
WBSNCU	TOM RHODES	5017 N W 62 ST	OKLA CITY OK	721-3557
WBSNER	ALAN PERKINS	100 SPRUCE DRIVE	YUKON	
WBONEV	RALPH MCHENRY	806 N PINE	BELOIT KS	
WBSNHZ	HENRY BALL	927 WOODS	NORMAN OK	321-5852
W5NI	WILLIAM HULSE	447 E CARSON RD	MUSTANG	376-2125
WBSNIY	D L TEMPLEMAN	10305 PAISLEY	OKC	354-6271
NSNJB	WALTER SCHNIEDER JR	925 W SILVER MEADOW DR	MIDWEST CITY OK	-
WBSNKC	ARLEY GARVIN	3409 SW 20	OKC	681-0534
W5NL	FRED BOARDMAN	2900 BIRD DRIVE	OKLA CITY OK	427-2505
WBSNMK	GEORGE LEE	2410 NW 34	OKC	946-2754
W5NQF	WILHELM WESENICK	3204 N W 16	OKLA CITY OK	942-3101
WBSNRQ	DON HAYES	508 MOCKINGBIRD N	ALTUS	482-4366
WBSNSV	ROBERT E GRAHAM JR	3317 S E 24 ST	DEL CITY OK	677-8685
W5NTL	GEORGE LAGALY	7920 N W 18	OKLA CITY OK	789-4073
WBSNTQ	STERLING ALLEN	6717 S HARVEY PL	OKLA CITY OK	634-6590
WBSNVF	MELVIN LYNN	BOX 430	LEXINGTON OK	-
WBSNWX	WAYNE HANKINS	P O BOX 668	ALTUS	482-0743

LIC.	NAME	ADDRESS	CITY/ST.	PHONE
WB5NXO	BILL PETERSON	545 NW 36 TERR	OKC	524-7415
WB5NYA	JOHN PENDLETON	205 W JARMAN	MWC	737-6963
WB5NYG	GENE GUNKEL	BOX 130	ELDORADO OK	633-2217
WB5NYR	BOB MAY	1208 N W 122ND	OKLA CITY OK	751-2048
WB5NYX	LARRY GRIFFIN	RT 1 BOX 114A	MEEKER OK	-
W5NZS	LARRY HAZELWOOD	700 N W 48TH	OKLA CITY OK	848-6400
WB5OBV	BOB VOTAW	7213 GALAHAD CIRCLE	OKLA CITY OK	721-8983
WB00CA	MILES HEAD	4305 SUNRISE	SPRINGFIELD MO	
W50EC	EDWARD DUCLOS	8025 N W 27TH ST	BETHANY OK	495-2797
WA50GC	OLIVER MEEKS	BOX 236	SNYDER OK	569-2709
WB50HK	AL BRUNING	RT 4 BX 100K	CHOCTAW	390-2983
K50HU	JIM CALDWELL	3120 N W 61ST TERRACE	OKLA CITY OK	842-7280
WB50HY	LYLE HOHENSTEIN	204 N EASTERN	SHAWNEE	
WB50IL	D L COLBURN	RT 4 BOX 377-1	CHOCTAW OK	390-8440
WB50JH	BRUCE WHEELER	2400 MACARTHUR	OKLA CITY OK	685-1402
K50K	CECIL SHELTON	1212 SW 92	OKC	691-3632
N50K	COY DAY	2321 SW 92	OKC	691-1194
WB5OLO	PAUL ABLE	2005 N MCKINLEY	SHAWNEE	
W50LX	LEE SCHILLER	908 N MARSHAL DRIVE	MIDWEST CITY OK	-
K50MM	LARRY REUSSER	1832 CEDAR RIDGE	MUSTANG	376-3085
WA50PP	MELVIN ZUCK	BOX 562	HARRAH OK	454-2125
WB5OQB	GAIL BROWNLOW	BOX 266	ELDORADO OK	633-2724
K50QD	CARL BOWER	107 E PULASKI	SHAWNEE OK	273-8653

LIC.	NAME	ADDRESS	CITY/ST.	PHONE
WB5ORW	BRADY M PAMPLIN	7847 EL PENSADOR	DALLAS TX	-
WB5ORY	KENNETH BURDICK	1419 SW 78 TERRACE	OKLA CITY OK	681-0281
W5OU	GORDON JONES	BOX 18	NORMAN	329-6075
WB5OUF	STEVE ROBINSON	7901 N E 28TH	SPENCER OK	427-9869
WA5OUO	DR E A ABERNATHY	409 E CHEROKEE	ENID OK	-
WA5OUU	DICK WOKATY	3709 N SHANNON AVE	BETHANY OK	495-3131
W5OUZ	RICHARD KERNS	313 NW 80	OKC	842-7209
W5OXJ	EVERETT COX	9624 CASTLE ROAD	OKLA CITY OK	721-4617
W5OYW	ED MURAR	3100 N W GRAND BLVD	OKLA CITY OK	842-5444
WA5OYY	LEON JOHNSON	2400 S MACARTHUR LOT 239	OKLA CITY OK	681-4366
W5OZE	TOMMY STINSON	2721 LYONS BLVD	OKLA CITY OK	942-3714
WBOPCG	J E ACREE	228 W COLLEGE	AURORA MO	
W5PDH	FRANK ARNOLD	608 HOLLOWAY DRIVE	MIDWEST CITY OK	737-2582
K5PER	JAMES L JONES	1021 S W 61	OKLA CITY OK	634-5235
WB5PFW	RALPH WATKINS	1414 W SHUTTEE	EL RENO	
WA5PHJ	JAMES DAWSON	1005 PINE OAK DRIVE	EDMOND OK	341-6287
W5PHL	CECIL CASH	1802 SMITH AVE	LAWTON OK	355-6337
K5PJU	BOB WILLIAMS	13 SOUTH EASY STREET	EDMOND OK	341-5529
WB9PJV	HAL INGRAM	3729 S SYCAMORE	SANTA ANNA CA	-
WA4PLG	CHARLES KENNAMER	6613 S MILLER	OKC	682-2696
WB5PMG	BETTY GILLIAM	1400 ADAMS	ALTUS	
WB5PNH	TONY HOLZMAN	RT 2 BOX 326	CHOCTAW OK	-
W5POJ	AL KOUNOVSKY	411 E ROSE	MWC	732-5649

LIC.	NAME	ADDRESS	CITY/ST.	PHONE
WB5POW	LARRY STEWART	4138 NW 62	OKC	946-1961
K5POX	MARGARET JACKSON	RT 1 BX 2148	LEXINGTON	527-5994
WA5PPA	LLOYD WILLIAMS	P O BOX 266	WASHINGTON OK	-
N5PS	PAT SHERRILL	3721 NW 27TH	OKC	943-3219
WB5PTJ	ROGER RYLOTT	9105 SALISBURY LANE	OKC	721-7790
WB5PTQ	MERRILL SCOTT	4410 N WHEELER	BETHANY OK	789-6331
WB5PUF	RICHARD SPENCER	WALLACE TRAIL CT LOT 91	ALTUS	477-1946
WB5PWO	FRED SWOPE	1316 S W 71	OKLA CITY OK	685-6045
WA5PWX	EDWIN RANSON	210 E GATEHOUSE	METAIRIE LA	
WB5PWZ	ROBERT WHITE	RT 2 BOX 165	NEWCASTLE OK	387-5105
W5PYH	JIM BROOKS	6604 S VILLA	OKC	685-5478
WB5PYN	KEN NEWBERRY	2824 S W 55	OKLA CITY OK	-
WB5PZG	JOHN L OLTMANNS	7508 NW 12TH PL	OKC	525-6066
W5PZW	TOM SIRILO	6500 W WILSHIRE	OKC	
W5QAC	CECIL BORIN	3244 S KLEIN	OKC	634-1960
K5QDR	JOHN HUCKABY	4344 SUNTANE ROAD	DEL CITY OK	672-4706
W5QFH	ROBT L MCCLAIN	1815 NW 27	OKC	528-6461
WB5QGE	TOM CHILDERS	717 SW 24	OKC	
W5QIL	WM HUFFMAN	1920 NW 34	OKC	528-6511
W5QLL	CHARLES TUCKER	5020 NW 27TH	OKC	942-6766
WB5QMB	CURTIS P MCGRATH	9020 S E 25 ST APT #14	MIDWEST CITY OK	-
W5QMJ	KEN ISBELL	306 KESTERFIELD RD	ENID OK	233-2327
W5QMP	BILL GARTHOEFFNER	1520 N W 3RD	OKLA CITY OK	239-2791

LIC.	NAME	ADDRESS	CITY/ST.	PHONE
WB5QNK	CARL HORWITZ	1801 LOGAN DRIVE	NORMAN OK	360-1819
WB5QNP	CHUCK HAST	2616 S ROBINSON	OKLA CITY	
WB5QOJ	MIKE CARTWRIGHT	1712 QUEENSBURY	MOORE	794-2091
WB5QPI	H B ZACHRY	3505 ROLLING LN	MWC	732-7255
WA6QWQ	CHUCK DEJOHN	5005 RYAN DRIVE	OKLA CITY OK	670-3276
WA4QXB	MARVIN MOORE	1121 KINGS COURT	MOORE	794-6731
WB5QXU	JAMES CURRY	3133 S MADOLE	OKLA CITY OK	681-2668
WB5RAG	JOE SATTERWHITE	4336 S E 43	DEL CITY OK	672-0409
WB5RAP	FRED L BECK	508 TAYLOR ST	PURCELL OK	527-3032
WA5RAQ	WILLIAM ROGERS	1121 S W 53RD ST	OKLA CITY OK	632-4375
W5RB	HAROLD GILBERTSON	4515 S SANTA FE #4	OKLA CITY OK	634-4822
W5REY	RAY JANKA	2708 WINDSOR BLVD	OKLA CITY OK	942-4146
WB5RKA	GLENN SHARPE	3000 GLEN OAKS	MWC	737-4594
WB5RKQ	JAMES JONES	123 N 2	MOORE OK	794-7601
WB5RLG	FRANK SPANN	RT 3 BX 112A	EL RENO	
WA5RPP	SAM BARRATT	1619 WINDHILL RD	NORMAN OK	364-5915
WB5RRZ	JOHN W BEATTY	8404 NW 101	OKC	721-5395
WA5RSC	BILL MORRIS	4419 77TH ST	LUBBOCK TX	-
WB5RUN	DARRYL WELCH	418 S LEWIS LANE	MUSTANG OK	376-2766
WB5RXZ	KEN HUTCHISON	2010 CRESTMONT	NORMAN	364-3001
WA5RZL	TOM RHYMES	403 E BROOK	NORMAN	
WB5SBC	BOB NEMAN	4208 KELLY	VERNON TX	
WB5SBD	JUNE HANKINS	1328 N BENSON	ALTUS	477-0002

LIC.	NAME	ADDRESS	CITY/ST.	PHONE
WA5SBP	MARTHA SHAVER	443 N W 44TH	OKLA CITY OK	528-6429
K5SCY	WARREN DIMICK	8 BURK WAY	DEL CITY OK	677-2511
W5SEX	DWAYNE RICE	3216 CHETWOOD	DEL CITY	677-6472
W5SIH	MARVIN JOHNSON	3409 PRESTON DRIVE	OKLA CITY OK	946-4367
WB5SIK	JAMES KERR JR	4109 N W 31 ST	OKLA CITY OK	947-7098
WB5SIP	RUBY ZUCK	BX 562	HARRAH	454-2125
K5SKA	BILL DEMAND	2317 N W 121 ST	OKLA CITY OK	751-5137
K5SKB	WILLARD HOLT	313 CARDINAL C	ALTUS	482-4530
WB5SKB	DONALD FISHER	RT 1 BX 140	NORMAN	-
WB5SKE	CHUCK GUSCHKE	5320 NW 114	OKC	722-3190
WB5SLA	MARK NEWTON	BOX 74934	OKC	-
WB5SQC	GENE HALLEY	RT 2 BX W-31	TUTTLE	381-2228
K5SQJ	WILLIAM O COOK	4808 TATE DRIVE	DEL CITY OK	672-9964
W5SQJ	JESS W SPEER	1400 MELROSE	NORMAN	-
WB5SQU	DON DEGRAAF	PO BX 3618	ARLINGTON TX	-
WB5SRX	O J WATKINS	816 JUNIPER	MWC	732-1868
WB5SSS	RICKY WALKUP	321 N 6TH	HOLLIS	
WB5SST	BRENT HAUGHT	616 W HOLLIS	HOLLIS	
WB5SSX	BOB J WALL	1804 S HIGH	OKC	677-3920
W5STN	RALPH OHLER	8316 PICNIC LN	OKC	789-6255
K5SUD	H E HUTCHINS	3721 SE 26	DEL CITY	677-5272
WB5SVD	WILLIAM WALKER	3025 SE 20	DEL CITY	672-2501
WB5SVH	DEE COLLINS	4329 SE 17	DEL CITY	677-7478

LIC.	NAME	ADDRESS	CITY/ST.	PHONE
WB5SVJ	JOHNNIE HAM	812 JUNIPER	MWC	737-9356
WB5SVN	JACK O IMAN	9813 S BLACKWELDER	OKC	691-2447
WB5SVU	CHRIS MOSLEY	111 KELLY DR	MOORE	794-2163
WB5SYM	HUGH COLEMAN	1701 S AIR DEPOT	MWC	737-3317
K5SZH	C D VAUGHT	928 NW 6TH	MOORE	794-5745
WA5TAR	SIDNEY ROSE	3812 N W 27TH	OKLA CITY OK	946-5719
WA5TAW	DON GRAHAM	1208 ALAN LANE	MIDWEST CITY OK	733-3044
WA5TDJ	DON BADGETT	2200 MAPLE DRIVE	MIDWEST CITY OK	737-6521
WB5TDW	JOE RAMAGE	4401 S AGNEW	OKC	685-4814
WB5TEC	ROBERT HARTMAN	8324 S LINN	OKC	681-9662
WB5TEL	ALLEN MOSLEY	111 E KELLY	MOORE	794-2163
WB5TFM	CLIF DAY	2321 SW 92	OKC	691-1194
K3TGY	BILL BRODIE	2537 EDGEWOOD	MOORE OK	794-0406
WA5THS	JOHN PRATHER	6721 NW 30	BETHANY	789-0565
WB5TIJ	GEORGE EARP	1064 DILL	ALTUS	482-7150
K3TJD	JOE NELSON	2269 DOWNING	OKLA CITY OK	755-0544
W5TJL	A L HOGUE	4145 NW 61ST TERRACE	OKC	946-4299
W5TKC	MAJ C C DRUMELLER	2947 A SUMMERAL CT	HAMPTON VA	
WB5TKF	BOB JAMES	729 CHISOLM	OKC	
WB5TKG	C Y CHANDLER	1833 1/2 NW 7	OKC	232-9005
WB5TMW	RICHARD BAKER	2400 S MACARTHUR	OKC	685-2867
WB5TNO	BOB L WALL	601 SE 82	OKC	631-7261
WA5TOO	DARRYL LEDDEN	3013 DELVIEW DRIVE	DEL CITY OK	677-0195

LIC.	NAME	ADDRESS	CITY/ST.	PHONE
W5TPJ	W T CRONENWETT	2566 CYPRESS	NORMAN OK	329-0095
W5TOB	PETE HOWARD	1521 LESLIE LANE	NORMAN OK	321-7634
W5TQG	PAUL NEAD	1515 NW 45	OKC	842-2132
WB5TRF	LEE FRANKLIN	BX 338	TUTTLE	381-3528
W5TSJ	TOMMY TODD	1300 S W 62	OKLA CITY OK	685-3685
W5TSL	MONTIE FISHER	2520 SW 6TH	OKLA CITY OK	685-8334
WB5TTU	RON HENSON	910 ALBERT	HUGO	
WD5TUB	GARY STEVENSON	276 A BIRCH	ALTUS AFB	482-7830
W5TXG	SHERWOOD HARRIS	1216 N LEE	ALTUS	482-0402
W5TY	RAY E LONG	3207 NW 47	OKC	942-4314
W5TZG	JERRY PRESLEY	612 VICTORIA DRIVE	YUKON OK	354-6854
K5TZS	JIM STANBERRY	234 BOLLING	HAMILTON AFB CA	
WB5TZZ	JACK BICKHAM	2603 BEAURUE	NORMAN	329-1311
WB5UAP	DONALD DUCK	3913 SW 24	OKC	
W5UCH	WILLIE KENNEDY	RT 1 BX 454	NOBLE	
W5UCJ	GORDON SHORT	7436 E 29	TULSA	
W5UCJ	MARY GRIMES	2707 GRIMES	EL RENO	
W5UCK	LEROY GRIMES	2707 GRIMES AVE	EL RENO OK	-
W5UDY	JIM KENNEDY	5808 N W 87TH ST	OKLA CITY OK	721-5803
W5UEG	BILL SOUTHERLAND	7216 KINGS RIDGE	OKC	721-3872
W5UGM	JERRY RADER	3121 NW 68	OKC	843-9236
K5UHZ	GEORGE MOORE	1219 COLORADO	CHICKASHA OK	224-3861
WB5UIY	STAN VAN NORT	2688 N REEVES	OKC	

LIC.	NAME	ADDRESS	CITY/ST.	PHONE
WA5UKK	WALTER DAVIS	P O BOX 689	WARNER ROBIN GA	-
K5UKP	DON JONES	3444 SW 39	OKC	685-2380
WB5UMH	DEANNA MCENDREE	812 N WILLARD	ALTUS	482-6777
WB5UMK	CHARLES STACEY	1308 VAL GENE	EDMOND	348-3156
W5UNF	H C MCDONALD	1048 NW 8	MOORE	794-8672
K5URJ	PERRY MCWHORTER	3418 N W 29	OKLA CITY OK	946-1532
WB5URW	JACK PERRY	3108 NW GRAND	OKC	842-5606
W5USW	K L MCCULLOUGH	1529 HOLLYWOOD	NORMAN OK	329-3907
K4UTK	CARROLL AYRES	808 BRIARLANE	DEL CITY	
W5UVI	W H THOMPSON	2505 STILL MEADOW ROAD	EDMOND OK	348-1475
WB5UVW	TOM HAWKINS	116 SW 11	MOORE	794-6144
WB5VAE	JACK LOVEGROVE	4432 NW 11 TERR	OKC	946-2966
WA5VAQ	HAROLD TODD	1300 S W 62	OKLA CITY OK	685-3685
W5VAU	WOODY EMBRY	812 E EUFALA	NORMAN	364-3233
WB5VBE	ROBERT MOORE	2712 LANCASTER LN	OKC	848-0948
WB5VCA	EUGENE PERRY	5220 N MILLER	OKC	942-1238
WB5VCB	JIM TOWNSEND	6610 S SHIELDS	OKC	632-5445
W5VCJ	STEVE STEVENS	BOX 976	EDMOND OK	341-8486
W5VCL	NEAL MYERS	707 S 3	YUKON	354-3233
W5VEZ	JESSE C HAYES	PO BX 7405	FT WORTH TX	
WA5VHN	LESTER ROBERTS	CEDAR HILL RT BOX 249	NEWALLA OK	391-2664
WA5VIL	CLYDE JOHNSON	9 E JANICE	YUKON OK	354-1657
WBOVKF	DAVID HORN	917 VENUS	ALTUS	482-5071

LIC.	NAME	ADDRESS	CITY/ST.	PHONE
W2VQS	FRED HOWELL	3901 ROSEWOOD DRIVE	MIDWEST CITY OK	733-1341
WA5VRE	TED GOULDEN	RT 2 BOX 276	YUKON OK	
K5VRL	JIM WILLIAMS	6400 N W 30 TERRACE	OKLA CITY OK	789-0769
WB5VSX	TOMMY T RAY	RT 2 BX 17	TUTTLE	381-3587
K5VVZ	KENNETH EASON	7132 N W 21	BETHANY OK	789-2200
K5VWQ	MELVIN HOOD	5512 N DONALD	OKLA CITY OK	789-3156
WB5VXL	ROBBIE REID	700 N FRANKLIN	NORMAN	321-0077
W5VZU	ROBERT KELLEY	3400 BROCK DRIVE	OKLA CITY OK	632-8433
W5VZY	LEE LASH	1403 N PURDUE	OKLA CITY OK	942-0177
WB5WBJ	THELMA WOOD	4740 ELM VIEW	DEL CITY	672-2747
WB0WCB	RALPH SHOCKLEY	912 S CAIN	LIBERAL KS	
WB5WCL	RAY KLOTZ	707 VENTURA	OKC	631-3100
WA5WEU	JAMES JAMESON	3113 ORLANDO ROAD	OKLA CITY OK	751-3962
K3WGF	CLARKE DIEKMANN	10014 BROADWAY APT 1810	SAN ANTONIO TX	-
WA5WHO	SAM GOVER	5400 S LEE	OKLA CITY OK	634-2510
WA5WIC	BUTCH PINSON	ROUTE 1	TIPTON	667-4122
K9WIC	JOHN ZIETLOW	4708 WOODVIEW DRIVE	DEL CITY OK	672-2425
W5WL	CHARLES SCHEAFFER	2336 N W 46TH STREET	OKLA CITY OK	848-5062
WB5WLS	FRED MILLER	5500 S POST	OKC	737-5387
WA5WNV	EUGENE WOKATY	220 GAYLE DRIVE	MIDWEST CITY OK	732-6268
WB5WSV	WAYNE ELEAZER	517 HARR APT H	MWC	732-5502
W5WSW	HOWARD RIDGWAY	2400 N W 33	OKLA CITY OK	946-7610
K5WUF	DALE DIEHL	3912 N W 59TH	OKLA CITY OK	943-5438

LIC.	NAME	ADDRESS	CITY/ST.	PHONE
WB5WVB	GAYLENE MOOREHEAD	528 SW 63 TERR	OKC	634-9601
WB5WVD	ELIZABETH DONNELLY	7228 S LAND	OKC	685-0842
WB5WVG	TERRI MILLER	221 N IOWA	CHANDLER	258-1542
WABWXF	DONN STORCH	5543 RAWLINGS	TINKER AFB	732-3208
WA5WYO	BOB LEINAU	303 PARK AVE	PRESCOTT AZ	-
WSWZM	O G MCCLURG	309 WEST STREET	HARRAH OK	769-3178
WB5YCA	ARGGLE HOFFMAN	2936 SW 50	OKC	
WB5YEZ	JIMMY BLACKWELL	1941 TREAT DR	MWC	732-8355
WA5YFI	STAN BOLIN	812 S ST PAUL	MIDWEST CITY OK	733-2239
K5YGM	JOHN SPIVEY	1210 N W 39TH	OKLA CITY OK	528-1467
WB5YGT	DANNY WATSON	509 E SYCAMORE	HOLLIS	
WA5YGX	BILL H BEAMER	5813 CHEYENNE	OKLA CITY OK	721-9796
WB5YHG	EDIE DAY	2321 SW 92	OKC	691-1194
WA5YIJ	BILL MILLER	4408 WOODEDGE	DEL CITY OK	677-2053
WB5YJP	JOHN LEWIS	RT 10 BX 45	MOORE	
K5YKD	EARNEST WOLF	611 N W 94TH ST	OKLA CITY OK	848-3425
WB5YKD	JOE SCHILLING	1409 SW 66	OKC	681-5884
WB5YLZ	CHARLES G SULLIVAN	4817 NW 62	OKC	721-1078
K5YPK	AL JAKUBOWSKI	ROUTE 2	HARRAH OK	-
K5YTW	LLOYD BENTON	402 N MARSHALL	MIDWEST CITY OK	732-4987
K5YVL	PATRICIA GILLIAM	4040 SW 25	OKC	685-1125
K5YVN	ROBERT GILLIAM	4040 SW 25	OKC	685-1125
K5YXF	TOMMY BOND	RT 13 BOX 1368	OKLA CITY OK	721-5706

LIC.	NAME	ADDRESS	CITY/ST.	PHONE
K5YYI	ARCHIE LYNCH	RT 2 BOX 220	EL RENO OK	262-6303
WA5ZAJ	LEONARD AINSWORTH	9315 NE 46TH	SPENCER OK	771-4391
WA5ZAN	WALLACE MCRAE	P O BOX 151	SEMINOLE OK	382-3474
WA5ZAR	BUD SMITH	1609 LINCOLN	ALTUS	482-6268
WA5ZCB	RICHARD OGG	1500 S W 68	OKLA CITY OK	685-6440
WA5ZEC	AUSTIN BRUMMETT	869 N W 14	MOORE OK	794-1036
WA5ZFI	KEITH PINSON	ROUTE 1	TIPTON	667-5304
WA5ZGM	JOHN KEELING	300 N FRETZ	EDMOND OK	341-4496
K5ZHD	JAN COX	9624 CASTLE RD	OKC	721-4617
WA5ZJE	WAYNE HOPKINS	2933 S W 65 PLACE	OKLA CITY OK	681-3175
WA5ZKI	WOODY BELL	RT 2 BX 173A	MINCO	352-4112
W5ZKJ	HAROLD BRAY	1309 S W 67	OKLA CITY OK	685-0688
WB5ZKY	C K FITZGERALD	2530 NW 56	OKC	842-9608
WB5ZKZ	JACK MUSE	10100 S SHARTEL	OKC	691-1152
W5ZL	MERVIN HILL	1600 N W 43	OKLA CITY OK	524-3728
WB5ZLE	FOREST LAWSON	RT 2 BX 74	YUKON	354-3818
WB5ZLP	JAY T TREAT	2514 W GLENHAVEN	MWC	732-1598
WB5ZLO	EDWARD B HALE	8408 S VILLA	OKC	682-2472
WB5ZMC	DAVID MEDDERS	4224 WENDALL DR	EDMOND	341-9357
WB5ZMR	ROY W KLOTZ	105 PINWOOD	TUTTLE	381-3428
WB5ZND	JAMES WHITED	3224 N PEEBLY	MWC	732-4682
WA5ZNF	JOE K HARDING	1020 ARTHUR DRIVE	MIDWEST CITY OK	737-1044
WA5ZNG	JOE HUSTAK	6821 N W 27TH	BETHANY OK	789-8587

LIC.	NAME	ADDRESS	CITY/ST.	PHONE
WB5ZOI	LLOYD WRIGHT	3120 NW 63	OKC	843-6811
WB5ZQP	ART SCHMAUCH	P O BOX 12345	OKC	
WA5ZRU	GEORGE GLASS	2933 BERKSHIRE WAY	OKLA CITY OK	751-5063
W5ZUS	CAL HUNTER	DRAWER F	TIPTON	667-5508
W5ZVB	PAUL FREELAND	1604 MARKWELL	OKC	789-7534
WB5ZVK	LAWRENCE LANGER	4209 NW 22	OKC	942-3733
W5ZZG	CLINT GRIFFIN	2313 MICKEY ROAD	DEL CITY OK	677-1758





NOTABLE ISSUES FROM THE PRESIDENT

We had an excellent turnout for the September meeting, especially considering it was a holiday weekend! Thanks, George, for the fine run through of your counter. It should have given some of us a better incentive to get going on our own projects.

The October meeting should be of interest to many. Bill Brodie, K3TGY, will be out to tell us all he knows about the OSCAR and AMSAT type operations. Well, he may not have time to tell ALL he knows, but he will have time to put out a lot of usable information on it. He works the satellites and is pretty familiar with it, so the program should be very interesting and informative. This promises to be a fine program, so don't miss it!

There will be some discussion of AMSAT membership for the club and for individuals, so if you have an opinion, pro or con, I hope you're there to express it!

Charlie Greene, WA5JGU, has informed me of a licensing class starting September 14, 7 to 9:30pm, at the Red Cross building. By the time you read this, it will already be in session, but if you know of anyone interested, it is still not too late to start into it. Contact Charlie for all the details.

It appears at this time the December meeting of ACARC will be held at Val Genes' in Penn Square. This is a real fine place to eat, and should be very enjoyable. Details will appear in the November Collector and Emitter. Plan to attend!

The club has decided to replace the beam rotator, and raise the beam to a bit higher position above the tower. This should cure the limit switch problems and also give a little improvement in the directivity of the beam. Be thinking about volunteering for an antenna party soon.

That's all I can muster for now. Thanks to all the new members and visitors we had last time for their attendance, Please come back, often!!! Bring a friend if you wish. See you at the October meeting.

73, Bill, W5NI

MINUTES OF THE SEPTEMBER MEETING:

The meeting was called to order by President Bill with 51 members and guests in attendance, at 2001 hours.

NEW BUSINESS: Bob W5HXL reported on CORA matters, and a new slate of directors for CORA from ACARC was nominated. George, W5NTL, Carl, W5JJ and Bill K5KDR will be our directors for next year. We regret the departure of Gene, WB5SQC who is transferring to Houston.

Bob, W5HXL also talked about the future of Ham Holiday, and a lively discussion followed. It is the consensus of the club that Ham Holiday should be expanded to meet future growth, and the new slate of directors has been so advised.



Plans for the Christmas meeting were discussed. Traditionally this meeting has been a dinner party at one of the local cafeterias. Charlie, WA5JGU and George W5NTL are a committee to locate a place for the meeting and report prior to the next C&E publication date.

(The meeting will be held at Val Genes in Penn Square)

Charlie WA5JGU reported on the VHF/ACARC watermellon feed at Will Rogers Park, and the joint school at the Red Cross.

(The school is now in progress and looking good)

OLD BUSINESS: None

George W5NTL delivered a most interesting program on the 650 MHz counter he has designed. Six original counters were planned, and three have been completed at this writing. This is one project that was designed from the ground up....even the case was custom built locally. Thanks George for a good and informative program.

The meeting was adjourned for coffee and eyeballs at 2130.

Robby W5JES

TECHNICAL REVIEW

-W5JJ-

QST. Sep, as usual, presents a number of good articles. Perhaps the one on an 80-m vertical antenna is best, with one on a Maritime Mobile trip around S. America the most pleasurable reading.

IEEE SPECTRUM, Aug, has an update on power semiconductors.

IEEE VTG NEWSLETTER, Aug, courtesy of W5KE, centers on mobile operation, with a wealth of information.

HAM RADIO, Sep, gets deeply into pi-network design; it is very good, even daring to admit that most feedlines present a complex load, not the resistive one presumed by other authors! Double-balanced mixers get a tumble, and there is a method of modifying a frequency counter to serve also as a frequency synthesizer. An overly-complex method of designing low-voltage regulated power supplies is given.

73, Sep, devotes most of its pages to RTTY. It does tell how to build a 2-m synthesizer and passes a few tips on mobile antennas.

ELECTRONIC PRODUCTS, Aug, presents the case for switching-type voltage regulators.

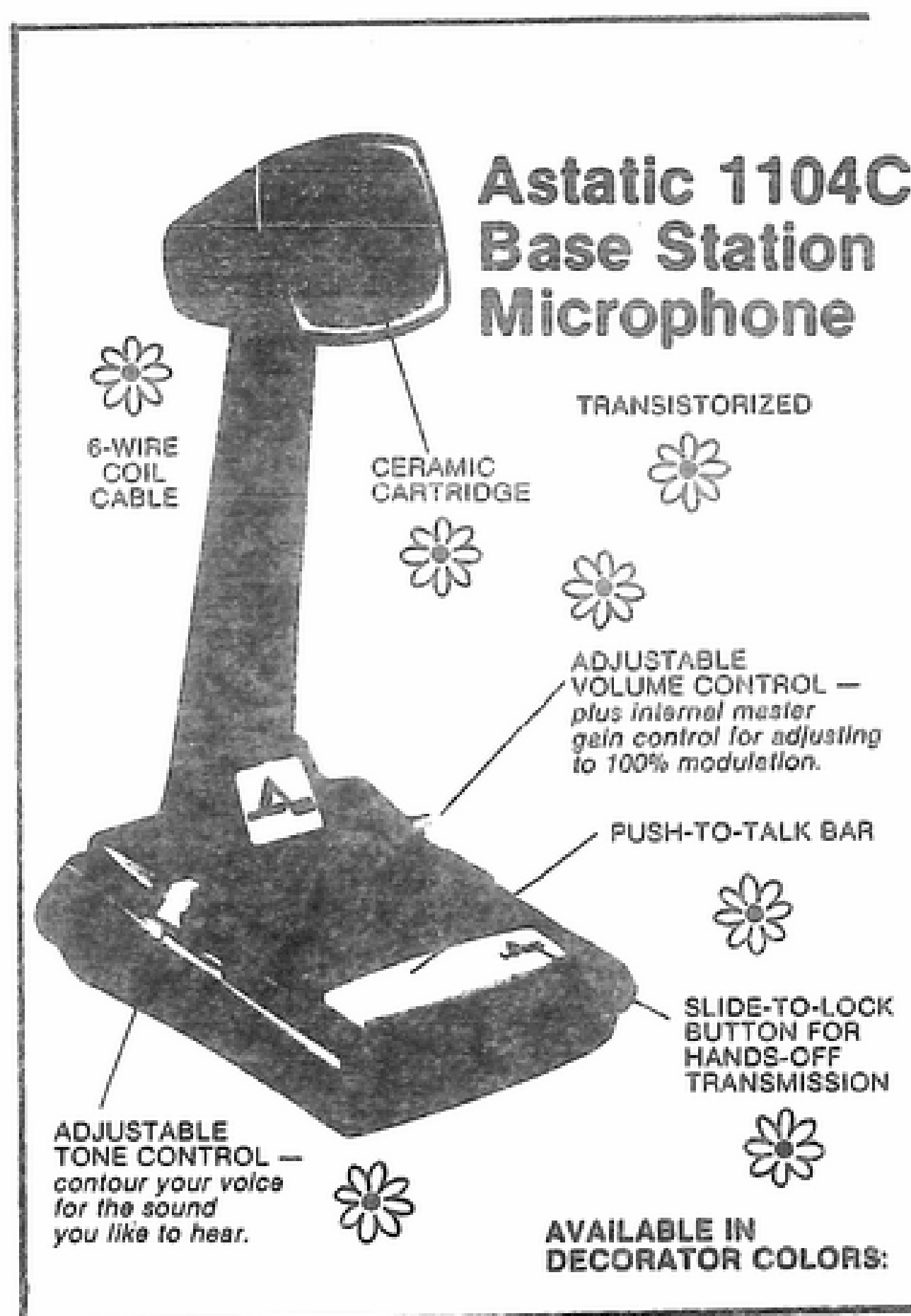
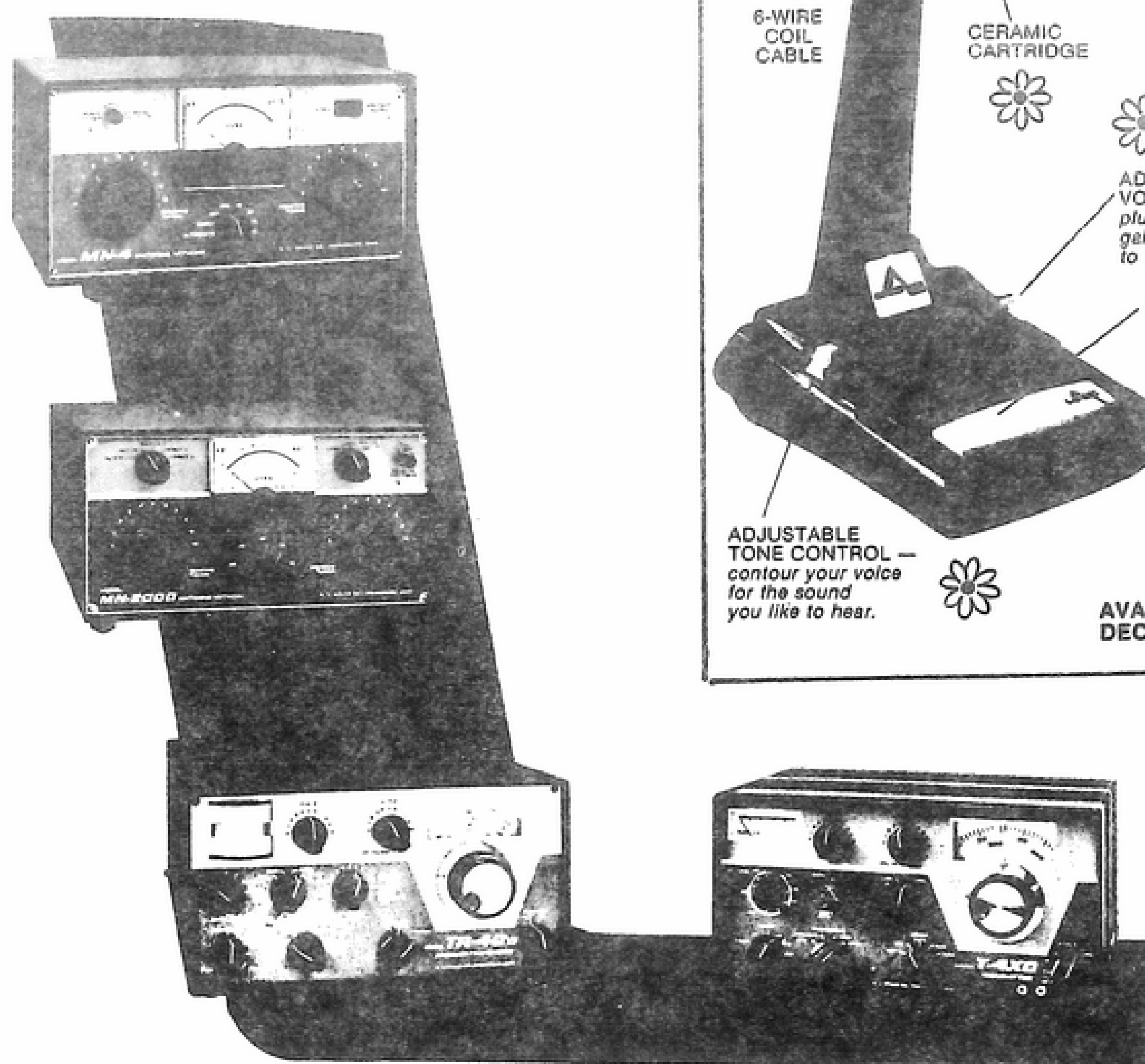
ELECTRONICS RETAILING, Aug, calls for support of the "Goldwater Bill", a pleasant change from the attitude of audio radio, and TV manufacturers who oppose spending a few cents to shield or filter their products!

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RADIO COMMUNICATION, Jul, attempts to revive home construction by describing a low-power, low-cost double-sideband suppressed-carrier transmitter for 1.8 and 3.5 MHz. The good and bad points of the SB-104 are fully explored. "Technical Topics" as usual, offers a variety of eye-grabbing snippets.

AMATEUR RADIO, Jul, describes a 144-MHz antenna, quadrature RF phaseshifting and a novel method of ascertaining the hFe of transistors.

ELECTRONIC COMPONENT NEWS, Sep, centers on how to select test equipment to get the best for your dollar.

CQ, Oct, has an interesting bit about the rare National SW-2 rcvr and a couple of equipment reviews. No W6SAI antenna article this time!

POPULAR ELECTRONICS, Oct, shows how to build a VSWR indicator suitable for low power. It has some luke-warm stuff on RTTY and on designing TTL systems.

IEEE SPECTRUM, Sept, describes Japans technology. Sure glad this isn't 1942.

WORLD RADIO, Sep, has very sound advice on certain voice operating practices. Another article shows how to build a 2-m quad beam for \$1.75.

HAM RADIO HORIZONS, Nov, has a code-practice oscillator, antennas for small yards, safety hints, station accessories, and sage advice about linear amplifiers.

MICROPHONE, anyone?? W5TKC and I have a bunch to sell. Many types, ranging from T-17s to modern dual-impedance dynamics. A price range that will tempt any pocketbook. W5JJ, 789-3788.

FOR SALE: Complete 2m mobile/portable station consisting of Kenwood TR2200A with all 12 channels on local freqs complete with rubber ducky and telescopic antennae, battery charger, padded carry case, Drake EM1525 touchtone microphone; and Drake AA-10 Amplifier. Including all manuals and interconnecting cables. All components less than one year old. New cost of the system \$375.00, sell in like new condition for 295.00 Robby W5JES 373-1818...

FOR SALE: Brand New Unused KW Kan Dummy Load. Less Oil. \$20.00. Robby W5JESS, 373-1818..

FOR SALE: Tempo CL-146 12 channel 2 meter Xceiver with autopatch \$150.00 Carl, WB5QNK 360-1819.

FOR SALE: Tempo VHF/ONE 2 Metter fully synthesized 144/148 MHz. 10 Watt mobile transceiver, 4 months old, \$290.00 Bill, K3TGY 794-0406.



DX Anyone?

Had a cup of coffee with Joe Schilling WB5YKD the other day, and he was telling me about some of his recent DX encounters and relating some of the commemorative calls, and DX-peditions he had run into. The more we talked, the more it became apparent that an exchange of DX-data via the C&E might be useful. Listed below are some notes provided by Joe as a starter for what might grow into an on-going service. If you are interested in exchanging DX-information via these pages, please contact Joe WB5YKD at 681-5884, or drop it in a note to ACARC, Postal Station 18, OKC 73169.

As an aside, there is now in operation on 146.52 an informal alert net from some of the DX operators. When a band opening, or a rare station shows up they try to get the word out on .52 so others can take advantage of it. I think this alert operation as an information exchange could grow if sufficient interest were to develop.

Robby
W5JES

DX--DX--DX--DX--DX--DX--DX--DX--DX--DX--DX--DX--DX--DX--DX--DX--

PREFIX NEWS - WHATS NEW IN DX-LAND????

The following information is provided for those looking for new countries/zones and for those who may have had a contact and need assistance getting QSL.

NP4 - NP4A was recently on for Amateur Radio Week in Puerto Rico. QSL to KP4BDL.

OF - From July 1 - Dec 31, 1977 OH stations are using OF prefix to celebrate the 60th anniversary of Finland independence.

VQ9- Tom, WA6EGL/VQ9, can be found on the low end of 20 CW. QSL via W4FLA.

XO1-XO2- Special prefixes were used by VO1 and VO2 during August. FK8KAA-New Caledonia is regular on 15m. Gill (wx F6KGU) will QSL on receipt of SASE.

VP8- Stations active in the VP8 islands are as follows:
FALKland Islands VP8HA, HZ, JC, LP, NL, OI, PC, PE, and PM.
South Orkney Islands VP8PL
South Georgia VP8OT, OX, and PF
Antartica VP8NW, OW, PJ.

VC9- VC9UM is very active. The special prefix is a commemorative for the 100th anniversary of the University of Manitoba. QSL via VE4VV.

T75AA- can be heard on weekends on the novice 15m band.

IK- This prefix is being used in Italy Sept 1 - Nov 30, 1977.

JY-25- Was used in Jordan to commemorate the Kings Jubilee. Still used some now.

A51- A51RG operated from Thimphu, Bhutan. Operated by Rinchen Gyelts Hem. Is still active, but not often.

CG1- CG1ICR operated from Cape Breton Island all bands (Sydney Radio Club). Special QSL from VEkAZM if you contacted them.

FRØ- Reunion Island was active in July by FM7WØ signing FRØDGP. If you contacted him, QSL via K5KEZ.

AP2TN- 1200-1500 Z 14,060/21,060 CW daily.

A4XFW- Oman (Arabia) RTTY 14mc - QSL to R. Mueller Box 981 Muscot Sultanat of Oman.



FB8WE - SSB daily from Crozet Islands 14mc.
 F08EI - Almost daily 0600Z 14 Mhz. QSL. Box 99 Papeete, Tahiti.
 HH2MC - Haiti albands including 3.5 QSL Stan Crann P.O. Box 501
 Port Au Pince Haiti.
 HV3SG - 7.075 MHz SSB after 0800 GMT Sunday only.
 WA7UVU/KW6 - 14 MHz 0200-0600Z SSB daily.
 P29AJ - Saturday 0800Z 14.286 SSB.
 PJ3BW - Aruba Island 14. MHz SSB
 S21AB - used by 2 operators- Main Contacts 14.148 at 1300Z and 14.198
 at 1100Z SSB. QSL via 9AØZG/1.
 ZL5DL - Cott Base Antartica 430Z 14.135 daily.
 GE - English stations used the special GE prefix from June 4-17 to
 celebrate the Queens jubilee.

I hope this information will be of some use in getting your QSL's
 returned. Let me know if you have any information to share in this
 column next month.

73 and happy DX.

Joe WB5YKD

FOR SALE: D-104 Desk Microphone. Sam Gover 634-2510.

FOR SALE: Cushcraft VHF Twist stacked Antennas A144-2ØT, A147-2ØT
 with coax phasing harness, all tuned and operating \$110.00 Also new
 cushcraft A147-11 FM beam \$24.00 Bill K3TGY 794-0406.

AMERICAN RADIO AMATEUR SAVES KOREAN BOY

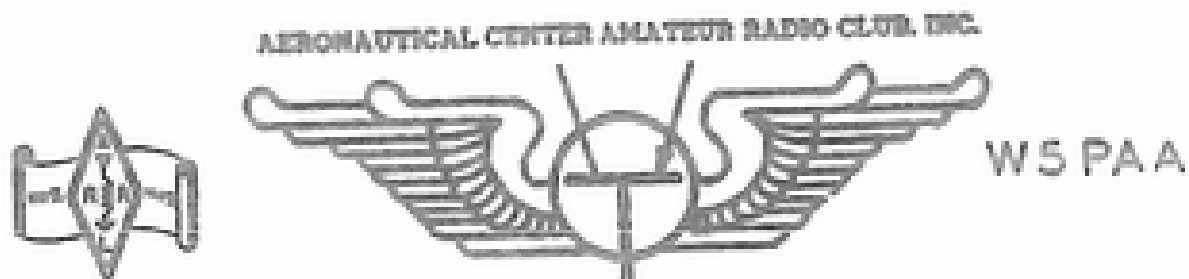
In a drama in which the life of a boy was at stake, an amateur radio
 operator provided the saving link. It happened in Korea, this past
 August. Chang Ki-hun, a boy suffering from a rare disease called
 cryptococcosis, desperately needed a certain medicine, "5 Fluoro-
 cytosine." His father asked members of the Korean Amateur Radio
 League to try to find a source. A member of the KARL made contact
 with W6ATC, who not only procured the drug but carried it all the
 way to Korea and delivered it to the hospital!

And who is W6ATC?? He is Harry S. Gartsman, a long-time member of
 the Aeronautical Center Amateur Radio Club, Inc. Also he is the
 President of the Quarter Century Wireless Association, Inc., which
 numbers among its members many readers of the CORA Collector and
 Emitter.

This is another in the many incidents in which amateurs of the
 radio communication have rendered public service. And public service
 is one of the important items in the justification of the contin-
 uance of the Amateur Radio Service.

Hats off to Harry S. Gartsman, W6ATC, who has so well demonstrated
 the spirit of radio amateurs and the continuing worth of the
 Amateur Radio Service! Harry, we are all proud of you!

(Harry is a member in good standing of the ACARC.-ed) -W5JJ-



WEST GULF DIVISION CONVENTION AT AUSTIN, TEXAS

Against the stiff competition of the lower-cost Lake Texoma Hamarama, the Austin Amateur Radio Club, sponsors of the Convention, has come up with what looks like a good program. No doubling of programs events; you don't have to be twins to see what you like to see, and they have included a map! A pleasant contrast to the average Convention, which goes to great lengths to conceal from out-of-towners just where it is being held!

WHAT AMATEUR RADIO IS

The following item was stolen from Radio Communication, who, in turn, lifted it from the program sheet of the Longeat Mobile Rally.

"Amateur radio offers an opportunity for free speech and unlimited communication. It is essentially a hobby of communication, and it should be encouraged more now than at any other time, for in this age of mass communication there is often little opportunity for man to communicate with his fellow man.

"Mankind has created many artificial barriers which turn man against man, woman against woman, and child against child. There are no barriers in amateur radio. Russians talk to Americans, Catholics talk to Protestants, man talks to man. Amateurs talk to amateurs, they talk radio, they talk, they communicate.

"There have been many changes since the early days, from crystal to tube and back again, and there are still many changes ahead. There is an exciting future, new bands, new techniques, a whole new era of communications. But do beware of anyone, any nation that tries to silence the talking, the communication, for it could be that once the talking stops the fighting begins."

It could not have been better stated!!!

CODE SENDING TEST NO LONGER REQUIRED

In a Public Notice dated 22 August 1977 the FCC announced that a test in sending International Morse Code no longer will be administered by the FCC to applicants for Amateur Radio Operator licenses. The reason: Practically no person who passed the receiving test ever flunked the sending test; therefore, why give it? Good reasoning!!!

The same notice stated there had been a five-fold increase in amateur examinations during the past three years.

Novices and applicants for commercial radio operator licenses still will be required to pass both receiving and sending tests.

* * * * * *

The October ACARC meeting will be quite interesting, along with an excellent program on AMSAT... we will discuss club membership in AMSAT and some of the aspects of the repeater project will be discussed.

So---y'all come...

October 1977

MORI

MID-OKLAHOMA REPEATOR, INC.

- - - - MORI BUSINESS - - - -

PRESIDENT CHET, W5GDL, is in the hospital in San Antonio.

FRANK, W5PDH, is home recovering from open heart surgery.

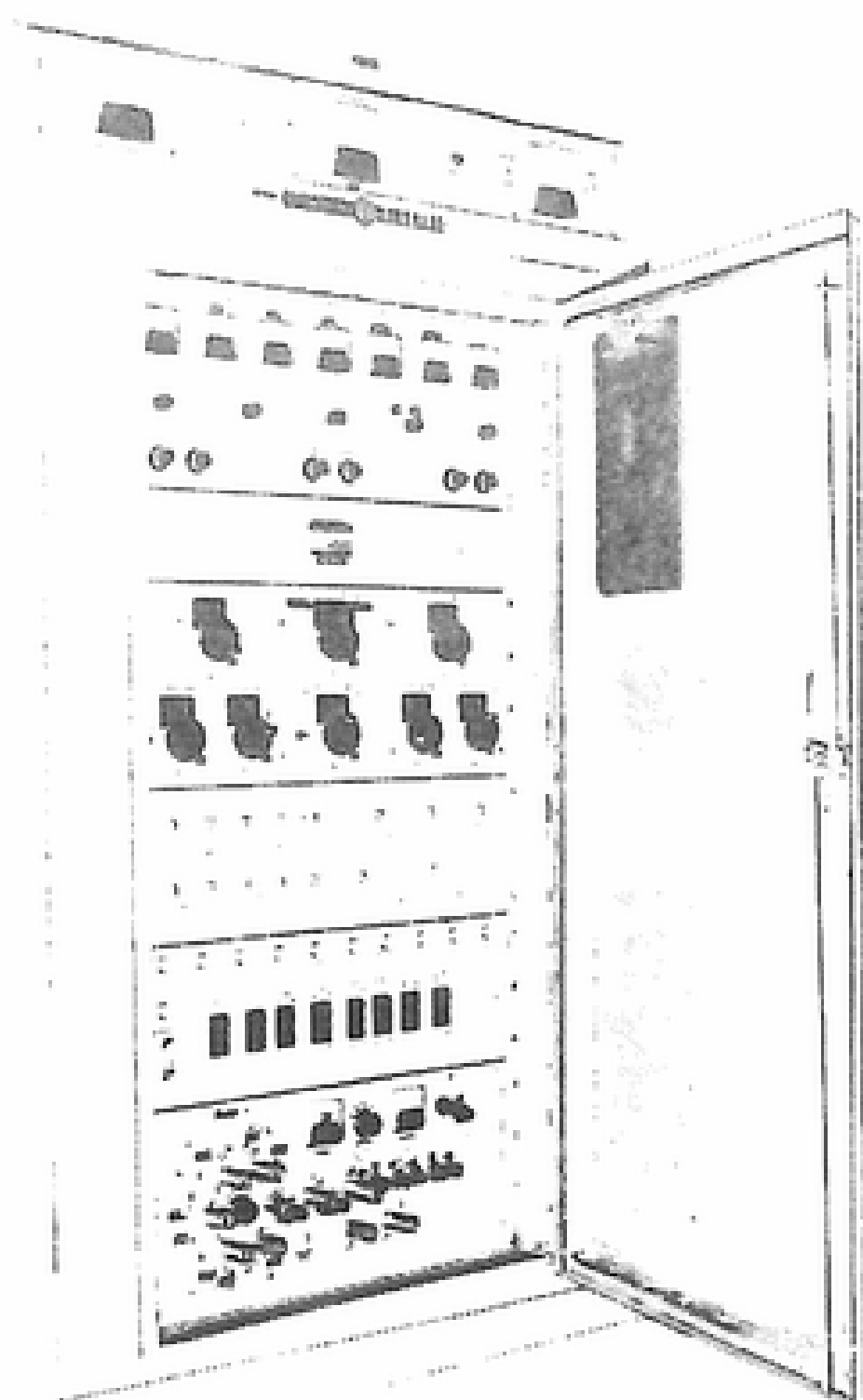
CORA WHO? Wayne, WA5AOB - Jim, K5VRL - Don, WA5TAW

OCTOBER PROGRAM. Jim Kearns, WA5LFM, will explain all about printed circuit techniques. Yall come. Find out all about circuit boards. VISITORS ARE WELCOME. Directions for getting to the EOC (October meeting place) are on page 10 of Sept. '77 Collector & Emitter. Meeting: OCTOBER 4, 8:00 PM.

NOVEMBER PROGRAM. looking ahead, we can anticipate a program on DF by Bill, WB5SXG, who has just come here from San Antonio. Their loss is our gain.

CHRISTMAS DINNER. And looking even farther ahead, the MORI Christmas dinner will be December 9th, 1977. Place to be announced later. We have coordinated with ACARC whose dinner will be December 2, 1977. Eat twice this year!!!!

FOR SALE



GENERAL ELECTRIC 4BT91A1, VHF
Satellite Interogation Transmitter

FEATURES:

- *120 to 150 MHz
- *CW, PCM, PCM/AM plate modulated or may be used as SSB or FM with exciter modification.
- *4CX250 buffer, 3CX2500A7 driver, 3CX10,000 final. Pair 3CX2500 in modulator
- *Driver and Final are box cavities
- *Includes 3.5KV @ 2amp power supply blowers, modulation xformer, 33H @ 2 amp choke.
- *7 foot relay rack, 24" rack panels
- *Gross weight 3000 lbs.

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Stan Wigh

WB5GVK

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Res. 745-3061

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USING PIN 5 ON THE 555

When using the NE 555 or RS 555 (or any other name for that super versatile timing chip) the control voltage pin (#5 in the 8 pin dual in-line package) is almost always bypassed to ground and that is the end of it. But by using this pin the chip becomes even more versatile. Just by adding a few parts to the plain astable circuit the 555 can become a F. M. signal source, or with a sawtooth generator, it can become a sweep generator. Pin 5 can be used to control the length of the delay in the monostable mode also.

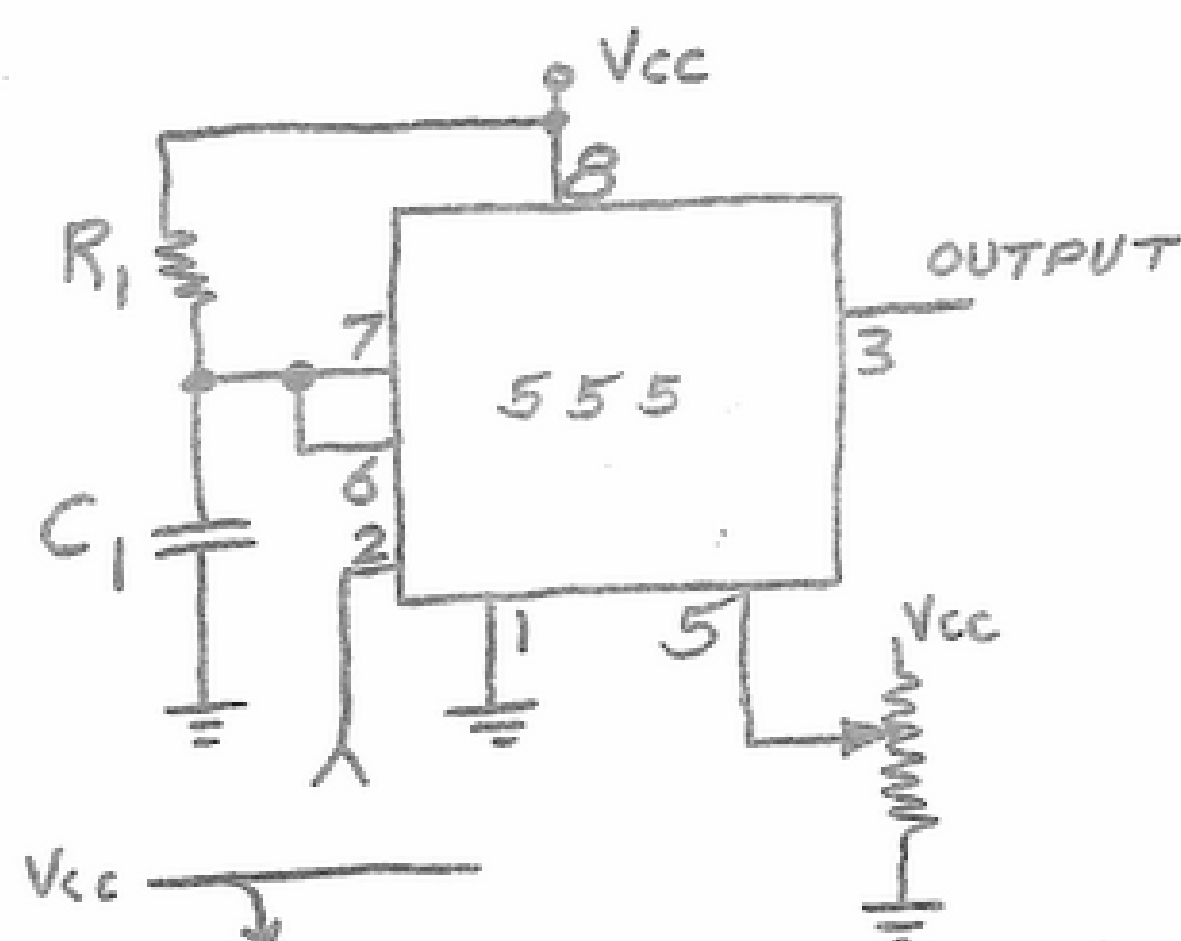


FIG. 1

MONOSTABLE

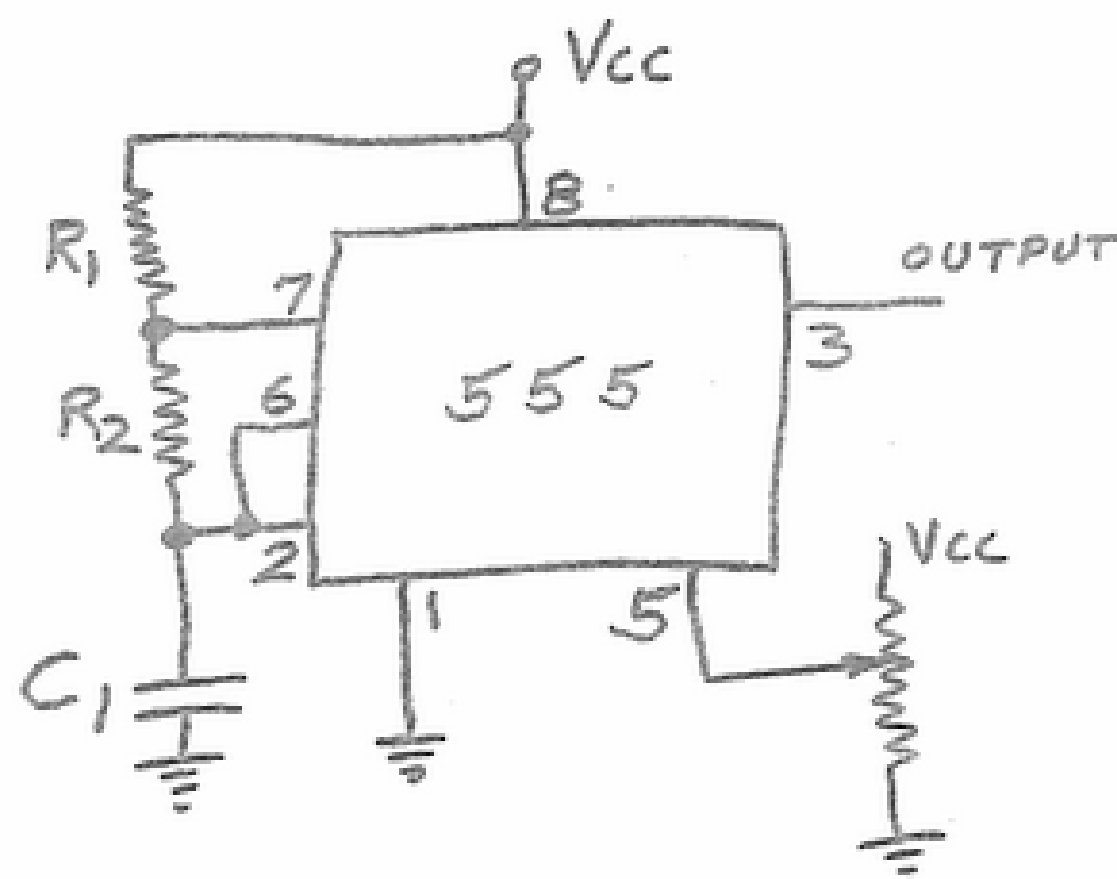


FIG. 2

ASTABLE

What Pin 5 Does Internally. Pin 5 is labeled the control voltage and justly so. The voltage on this pin determines the voltage at which the threshold comparator will reset the chip. Normally the voltage is roughly $2/3$ of the V_{cc} voltage. Just by putting a higher voltage on pin 5 the length of time the output stays high in the monostable mode can be increased. Conversely, lowering the voltage on this pin shortens the time. This can be done by adding a single pot. Of course the same result can be achieved by varying the resistance of the timing resistor R_1 . But you don't have to worry about turning the resistance down too low on the pin 5 voltage like you do on R_1 (pin 7 discharge current can become too high and overheat or destroy the chip). Also higher frequency capability may be achieved by using the control pin, because some poor quality capacitors have high leakage rates and will not charge up to $2/3 V_{cc}$. If you put a combination of R_1 and C_1 on the chip in the astable mode to get a certain frequency output you can always just lower the reference voltage on pin 5 and make the output frequency higher, at least until you reach the limit of switching speeds of the internal flip flop. I have had a 555 up to 2 MHz by varying the voltage on 5.

If you are familiar with how the 555 works you've probably followed this, but if not, you're probably lost. I'll try to explain how the 555 control pin determines the time delay.

The timing portion of the chip is usually made up of a resistor and capacitor. In the monostable mode, the chip can hold the voltage on the capacitor at near zero by an internal transistor. (See Fig. 1) When the chip is triggered by a negative going pulse whose voltage is below $1/3 V_{cc}$ the output (pin 3) goes high. The capacitor which was held at zero volts by the internal transistor is allowed to start charging. The speed at which the capacitor charges is determined by the size of R_1 and C_1 . The voltage increases until it reaches $2/3$

MORI

MID-OKLAHOMA REPEATOR, INC.

- - - (using pin 5 on the 555, continued).

Vcc then the threshold comparator causes the chip's internal flip flops to reset. When reset, the capacitor is held discharged by the internal transistor and the output goes to zero and the chip will remain in this state until it receives another negative pulse at pin 2. What we are concerned with is the timing portion R 1, C 1 and the threshold comparator. If R 1 and C 1 are fixed, the charging rate is fixed. The length of time it takes the capacitor to go from zero to $2/3$ Vcc is constant. But if the comparator is adjustable (and it is) the time can be varied. Instead of having to go to $2/3$ Vcc, the voltage can be adjusted anywhere from 0 to Vcc. The lower the reference voltage on the comparator, the faster the time.

In the astable mode the timing portion is made up of R 1, R 2 and C 1 (Fig. 2). The main difference is the addition of the other resistor R 2. The chip just cycles between a charging and discharging of the capacitor. The output of the chip is high when the 555 is charging the capacitor and low when it is being discharged. The length of time the output is high is determined by R 1 and R 2 as it charges through both. The output low time or discharge time is determined by R 2 only as pin 7 goes to ground and the capacitor discharges through R2 only. The astable mode is commonly used for audio oscillators, etc. Again by leaving R 1 and R 2 fixed we can vary the frequency of oscillation by the control voltage. Again, the lower the voltage on pin 5 the higher the frequency and vica versa.

If an audio voltage is fed into pin 5, a frequency modulated signal will result. I used a 555 to generate a 455 kHz signal and was FM'd and fed into the I. F. of an old receiver. Perfect ! The audio was good and just by controlling the peak-to-peak voltage the deviation was adjustable. If the 555 was set so it generated an audible tone and a sawtooth generator was used to provide the control voltage a sweep generator would be made ! Another 555 with an emitter follower could be used to generate this voltage.

I'm sure there are many uses of the 555 not yet discovered or not well known such as the pin 5 voltage control and just as many more uses of this great chip. BUT we'll never know until you start playing around with this two-for-a-dollar chip.

73, Lloyd WB5HUP

555 555 555 555 555 555 555 555 555 555 555 555 555 555 555 555 555

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OF RADIO AMATEURS DEDICATED TO PUBLIC SERVICE

METRIC, ANYONE ?

National Geographic Magazine for August, 1977 has an interesting article about the conversion to metric. We have summarized this article using some quotations.

"Each day in the United States an estimated 20 billion measurements are made. The scientist, for his measuring, uses the metric system--logical, simple, and unified. But for most of us, what an antiquated, crazy-quilt hodgepodge we customarily employ!" Three different sized quarts are listed, there are five sizes of the ounce and six different tons. When barrels of oil are numerated in energy crisis reports, is each barrel 31 gallons, 42 gallons, or somewhere between?

Quickly, now. If there are 80 chains in a mile, which mile do we mean: survey mile, international mile or nautical mile. The survey mile is roughly one-eighth of an inch longer than the international mile, but both are called statute miles. So, how long is that chain?

"We divide the gallon into four quarts, eight pints or 16 gills - to say nothing of five fifths. We split the mile into eight furlongs, 80 chains, 320 rods, 880 fathoms, 1,760 yards, and 5,280 feet. Then we divide the foot by 12 to get inches - - - all part of a gloriously illogical mangle-mangle of some 80 separate measures."

"How we got into this muddle is a story that goes back to the Babylonians and Egyptians, to the Romans and Vikings, and to assorted English monarchs of centuries ago."

The mile was 1,000 double steps by a Roman legionary. Queen Bess wanted the mile to relate to the furrow, so she added 280 feet to make the mile equal to eight furlongs. "Henry I established the yard as the distance from the tip of his royal nose to his fingertips." The inch was the span of the knuckles on King Edgar's thumb and the foot was the length of Charlemagne's own foot.

"Revolution and the upsurge of interest in science produced a system based on 10's -- the metric system. It was the most remarkable plan for measurement ever devised. Its keystone was the meter, from the Greek METRON, meaning 'a measure'. - - - The metre, as approved by the French National Convention in 1795, was to be one ten-millionth of the length of earth's meridian between the Equator and the North Pole." A liter was established by cubing a tenth of a meter. "And a liter of water produced a basic unit of mass, the kilogram. - - - the meter has been redefined - - - as 1,650,763.73 wavelengths of orange-red light emitted by the krypton-86 atom. - - - The pound, the foot, and other customary units were redefined as fractions of the metric units. - - - on December 23, 1975, President Gerald R. Ford signed the Metric Conversion Act of 1975, calling for voluntary conversion to the metric system and establishing a U.S. Metric Board to coordinate that conversion." The conversion is well under way. "Of the top 1,000 major manufacturing and industrial concerns in the United States, more than 60 percent are estimated to be metric or in transition." The conversion is considered to be not too big a problem. The younger generation is being taught metric in school, but those of us who grew up with customary units will be provided products having both metric and customary measurements.

" - - - the advice of other countries now successfully making the transition is to avoid translating as much as possible. 'Learn to think metric from the beginning,' they counsel. 'Then the change-over goes smoothly'."

After all the hassle about metric vs customary measurements they are now arguing about whether to spell it "meter" or "metre"!

====Bill, WA5RAQ



MEETING HIGHLIGHTS

There was no meeting scheduled for the month of September. Lest you forget, however, there will be one in October, same time, same day of the month, and the same place: October 18, 1977, at 7:30 PM. We have a real program treat lined up for you this time: A discussion and demonstration of microprocessors/ computers, with guest experts Dave Ballew - K5WMY, John Waldvogel - W5UNA and Bill Brodie - K3TGY.

These experts made a similar presentation at our HAM HOLIDAY and it was well received. The program will be divided into two parts. Part I, Introduction to the subject matter by Dave, with John explaining high-level computer language; and Part II, a demonstration of related equipment by Bill. A question and answer period will follow the demonstration.

This is one meeting you should not miss. We extend an invitation to members of other clubs who may have an interest in this subject to join with us on October 18.

NEWS FLASHES

SIX-METER MODE: We are now the proud owners of a new, commercially built solid-state receiver for our six-meter repeater system. Things are really happening in this mode. Keep alert for a surprise announcement of great interest to you six-meter enthusiasts.

Just in case you've misplaced the frequency designations for this repeater group, they are 52.680 MHz input and 52.525 MHz output. Join us on six!

UHF NEWS: The site has been selected for the 450 MHz repeater, and the gear, all commercially built, is in our possession, according to late word from our illustrious president, Jim - WB5EOL. It is expected that the system will be fully operational within the next 30 to 60 days. Frequencies for this repeater will include 449.3 MHz input and 444.3 MHz output.

TWO-METER TIDBITS: Quite possibly there is a soul or two who may have forgotten the frequencies designated in this area of communication for the AUTO-PATCH CLUB, so here they are:

WEATHER NET & OTHER ACTIVITIES

Input 146.22 MHz
Output 146.82 MHz

PHONE PATCH REPEATER

Input 147.81 MHz
Output 147.21 MHz

O, by the way, I'd like to direct your attention to the fact that an adjustable squelch-tail has been incorporated into both segments of our two-meter repeater system. (You've noticed, eh? Well, let's not all "kerchunk" at once!!!)

NOVICE CLASS REPORT

Frank McCollom - N5FM (ex-WB5JBL), together with Bob May - WB5NYR, began Novice code and theory classes September 9, 1977. Reportedly, a good turnout was experienced. The age group ranged from about 8 to 65. Frank handles the theory and Bob the code segments of the program.

Speaking of budding new amateur operators, HR Report No. 165, 9-9-77, reported that fewer (about 1000) received licenses in July 1977 than in July 1976. For August, just barely ahead by about 270 for 1977. Whether or not this indicates a peaking in Amateur Radio growth will be better answered with training course enrollments (such as that above) this fall and winter.

HAVE YOU CHECKED YOUR LICENSE EXPIRATION DATE???



PUBLIC RELATIONS PROGRAMS PLANNED

Our Secretary-treasurer, Hobe Burgan - WB5MLN, together with Frank McCollom - N5FM, are busily engaged in a special project. They are developing a program to promote amateur radio.....a most noteworthy undertaking, to say the least!

The format includes the use of slides, movies and factual commentary. Some of the preliminary reviews indicate that the program is enlightening, educational and entertaining. Incidentally, if you have pictures, slides or films which would aid in adding variety into this program, please send them to either Hobe or Frank as soon as possible. If you wish them returned, they'll do so as soon as they have the items reproduced.

These fine personalities plan to make presentations to radio clubs, civic groups, etc. If you know of any organizations which could benefit from this program, contact either of them via Ma Bell any evening. Hobe on 751-1646 and Frank on 751-3577.

In case you've forgotten, both Frank and Hobe serve as our club representatives to CORA. (What do you do in your spare time, fellas?)

FCC SENDING TEST (CW)

It was recently announced that the FCC was dropping the CW sending test for all Commission administered amateur examinations. Note that this applies only to the test administered by Commission examiners. Volunteer examiners administering tests to Novices will still be required to administer a sending test. Obviously, this will weed out the really bad fists.

TEST GEAR

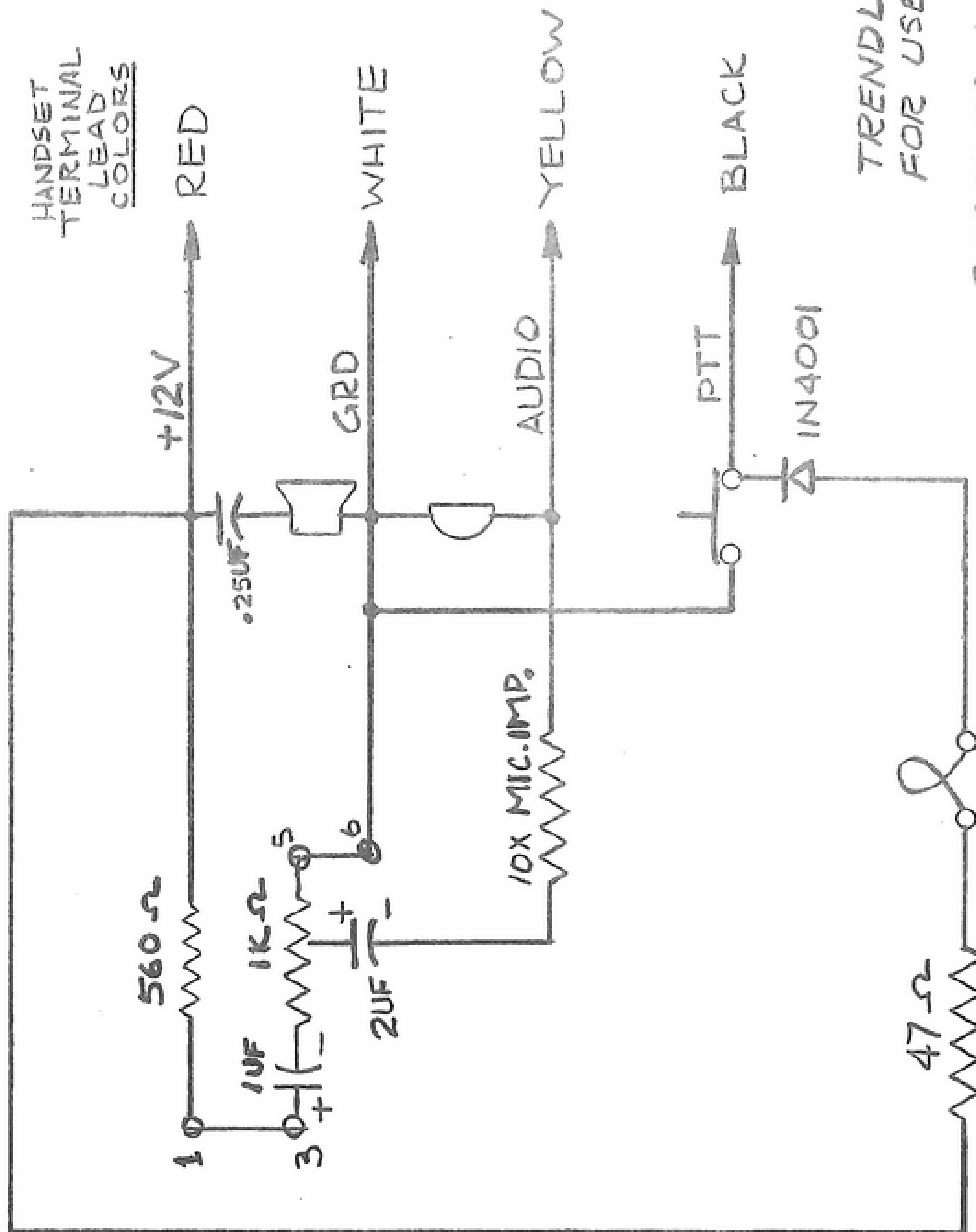
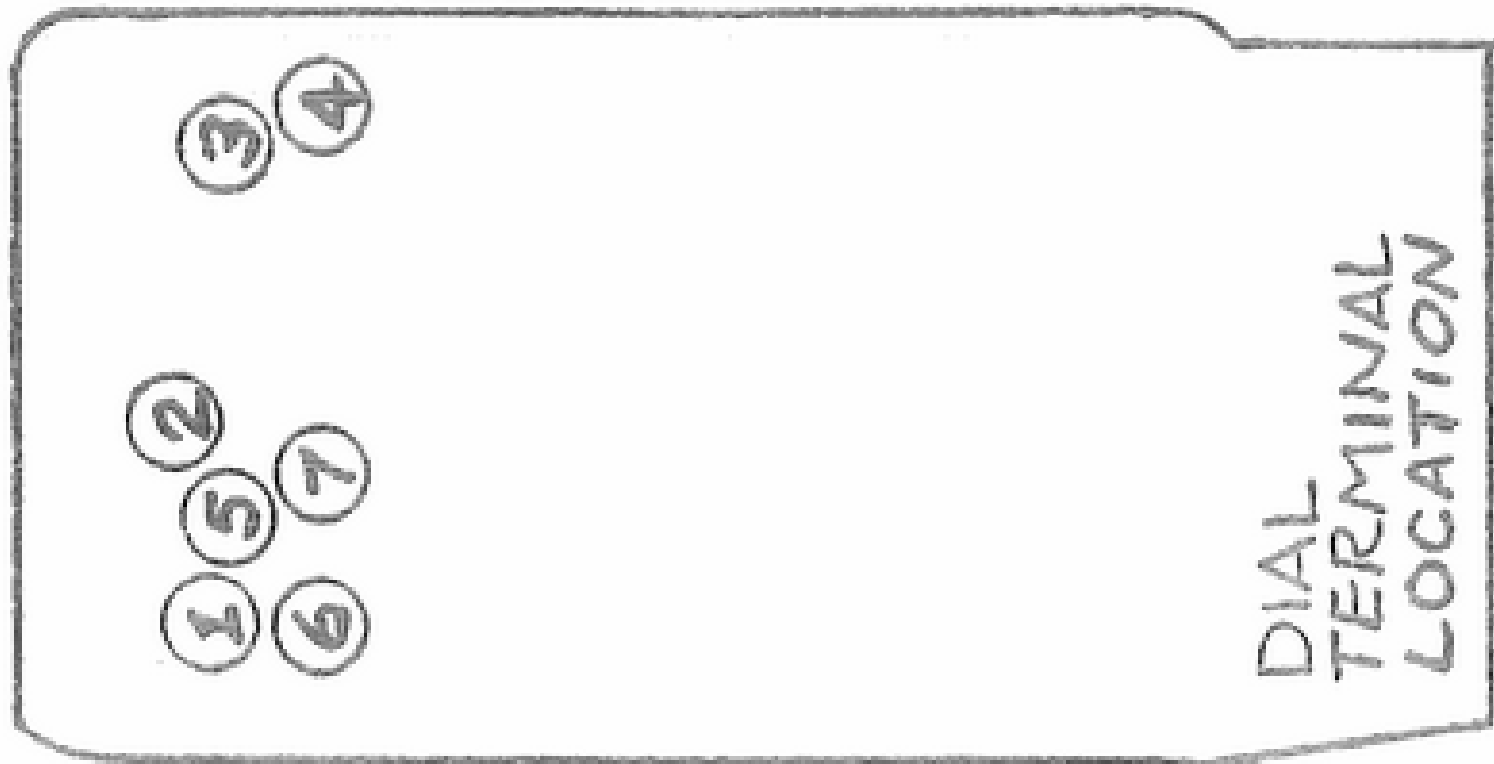
Recently, the club purchased one fine piece of test gear: an International FM-5000 Frequency Meter. This is a precision instrument designed to measure and radiate frequency signals between 25 and 470 MHz. It is completely portable and is used mainly to calibrate and test mobile and base station transmitters and receivers at predetermined frequencies. Its range of capabilities includes frequency measurement, receiver alignment (RF and IF), modulation, and much more. Check with Bob Williams - K5PJU, head of our Two-meter Technical Committee, for its use.

HR REPORT. . . NO. 167, 9-23-77

PROPAGATION SEPTEMBER 26 - OCTOBER 10. The solar fever has increased and activity on the sun has now surpassed the levels expected or even hoped for, in recent weeks. Several new active regions have given off potent Class-X flares along with lesser bursts of energy. 2800-MHz solar flux numbers continue well over the 100 level indicating excellent band conditions with high MUFs.

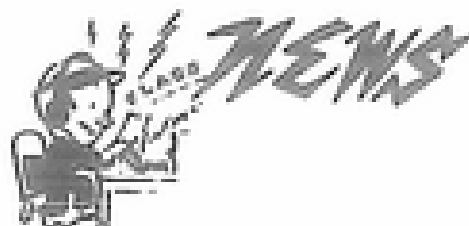
Harvesting This Solar Bumper Crop, comments Oak, may require our putting up with periods of disturbed conditions such as the one in progress at press time (September 19-22). However, the fine conditions on better days will amply compensate.

Present Activity Levels, coupled with approaching known active solar regions, should continue to enhance propagation through the end of the month and then resume about October 4, barring a further solar surprise. Continuing flare activity will require day-to-day observation to catch peak conditions. 21-MHz European and Asian openings will become a daily event while the period of high activity persists, and even 10 meters won't be dull. Lower bands will also be productive during the period.



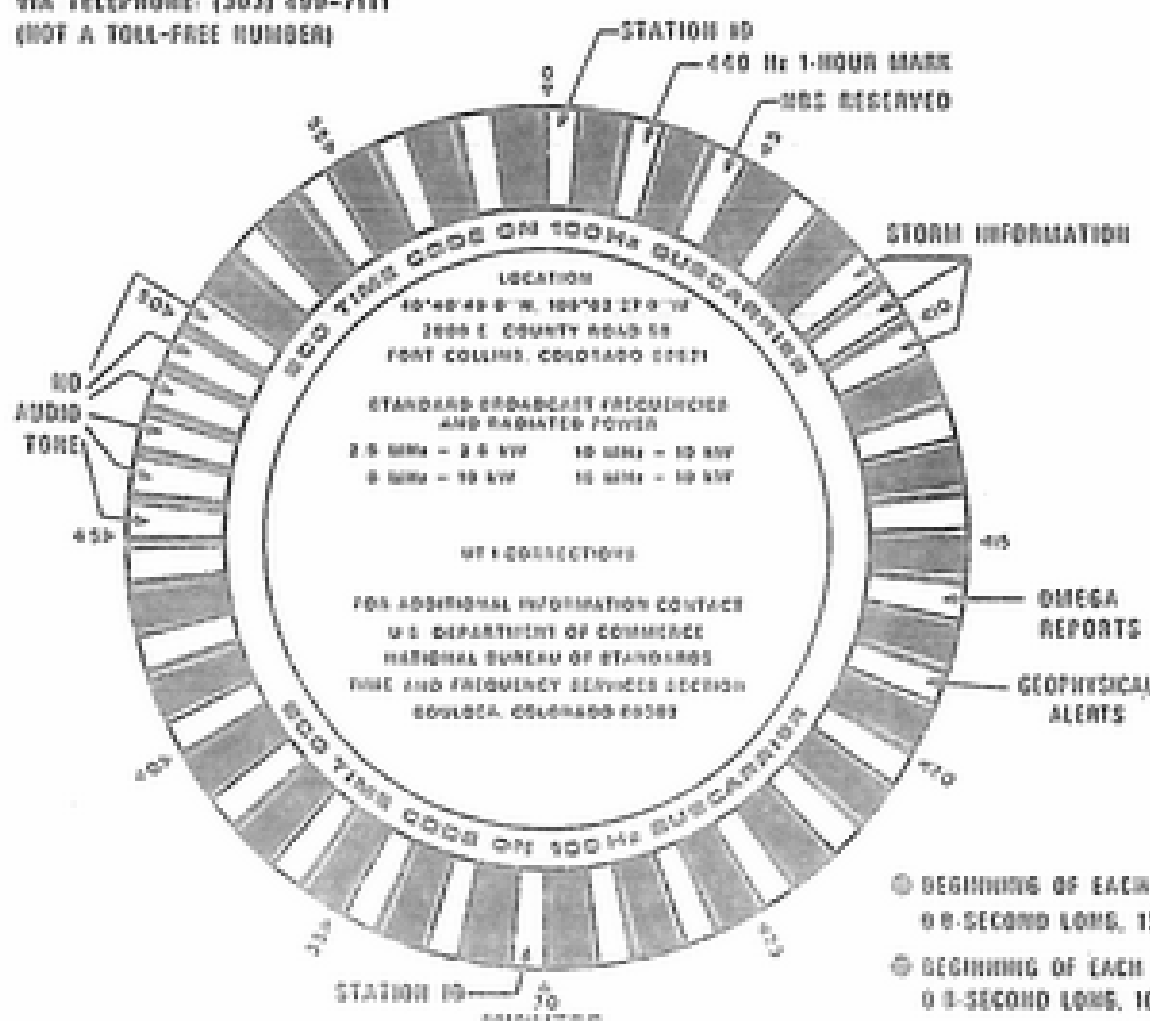
TRENDLINE DIAL CONVERSION
FOR USE WITH TRANSCEIVER
RECEIVER AUDIO MUST BE COUPLED
TO +12V WITH A .25μF CAPACITOR
INSIDE THE TRANSCEIVER

Drawn by JP for JDD
6-28-77

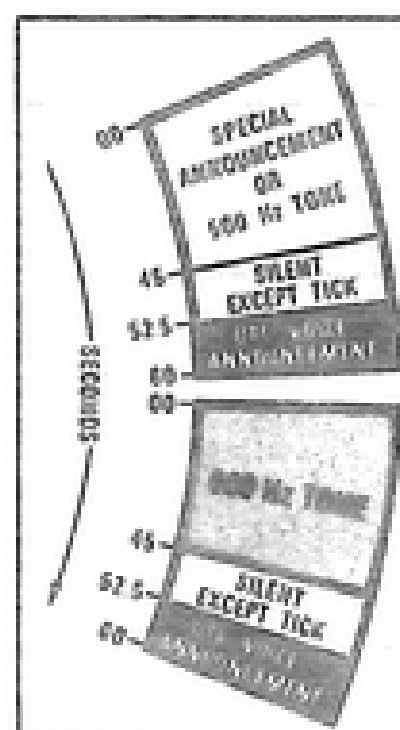


WWV BROADCAST FORMAT

VIA TELEPHONE: (303) 499-7111
(NOT A TOLL-FREE NUMBER)



U.S. DEPARTMENT OF COMMERCE
National Bureau of Standards



- BEGINNING OF EACH HOUR IS IDENTIFIED BY 00-SECOND LONG, 1500-Hz TONE
- BEGINNING OF EACH MINUTE IS IDENTIFIED BY 00-SECOND LONG, 1000-Hz TONE
- THE 20th & 50th SECOND PULSE OF EACH MINUTE IS OMITTED.

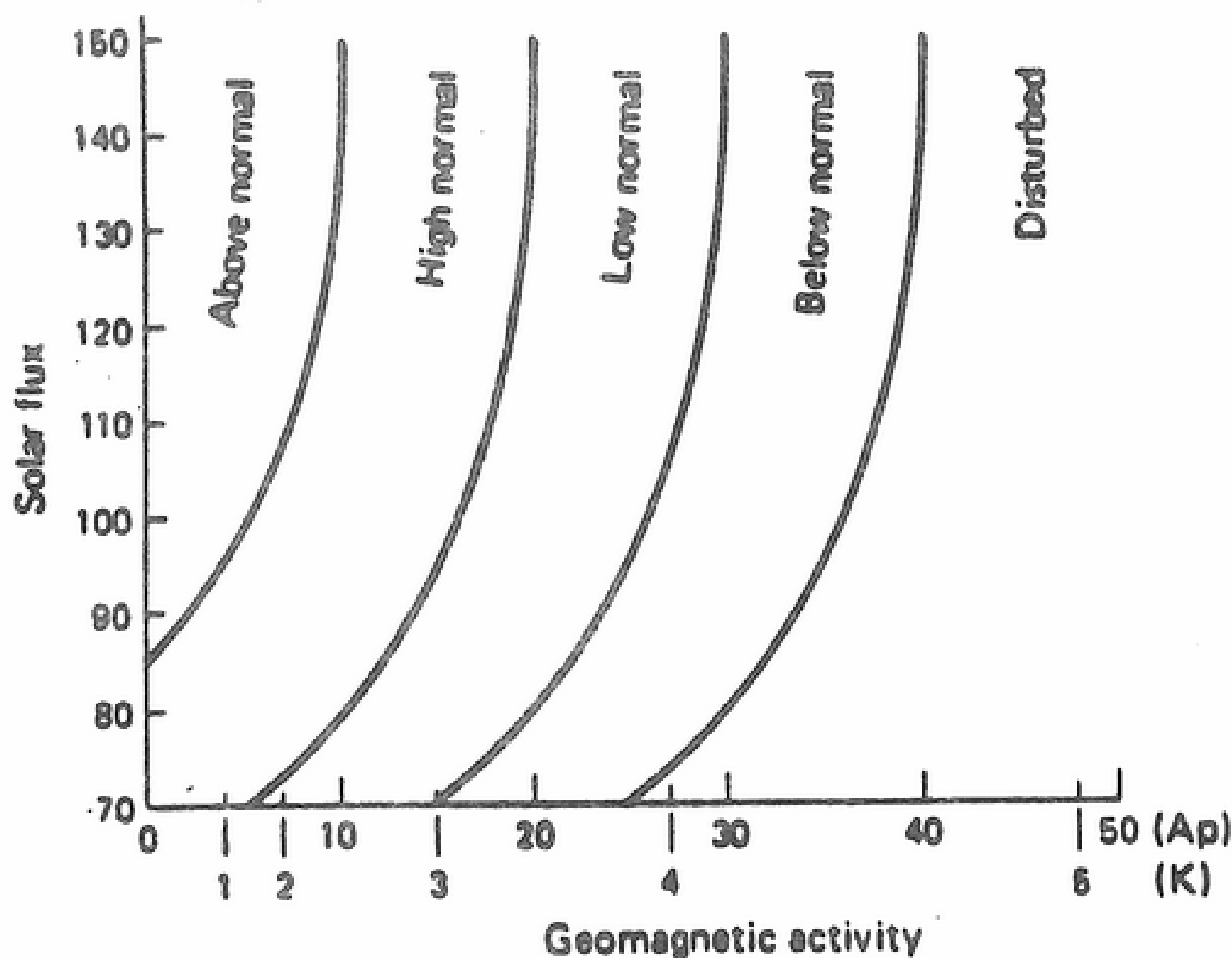
HOW TO FIGURE OUT WHAT WWV IS FORECASTING, Etc

All this provided you can read that a.m. signal.

Phil Ashcraft, WB5BFZ, down in the Dallas Country, ran these charts off a few years back. They help interpreting the WWV forecasts. If you came to the DX scene a bit late, all the talk of Solar Flux, AP and K Indices and things like that might be a bit hard to understand.

This chart from WB5BFZ may help lift the veil of mystery. Be a Believer!! There is a reason for most everything.....sometimes.

Chart for interpreting Quality of Propagation as predicted by Radio WWV, broadcasts. Every hour at 18 Minutes past 2½, 5, 10, 15 etc. MHz



—Intersection of given values of solar flux and geo-magnetic activity determine expected h.f. ionospheric propagation conditions. (Example: S.f. —80, Ap —25; expect Below Normal conditions.)

POSTMASTER: Send Form 3579 to:
CORA C&E Box 15013
Oklahoma City OK 73115

See page 2 and/or individual club sections for details

[illegible]

WE SUPPORT THE ARRL CODE OF ETHICS
FOR DEALERS OF AMATEUR RADIO EQUIPMENT

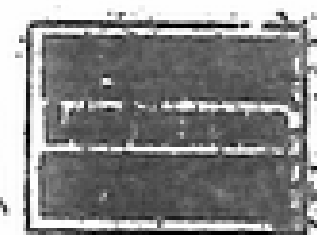
Radio Store, Inc. wholeheartedly endorses the new requirement for QST
advertisers. Advertisers will be required to sign and display a statement
that "the legal use of Amateur Radio equipment requires an Amateur license.
We support the Amateur Radio Service and its long tradition of public service."

We endeavor to sell amateur radio transmitting equipment only to licensed amateur operators or persons who in our judgment are seriously pursuing an amateur license, particularly thru local amateur radio classes. We seek to avoid selling equipment which is readily modifiable for illegal transmitting usage and to avoid selling equipment to persons who will likely seek to do so.

1 We appreciate the continued support area amateur radio operators have given
S to our business and these policies!



radio store, inc.
STORE HOURS:
MON. THRU FRI. 9:30-6:30; SAT. 9 TO 6
59th & S. Pennsylvania
CXC 682-2929



'rsi rsi rsi rsi rsi rsi rsi rsi rsi rsi rsi rsi rsi rsi rsi rsi rsi rsi