## MIID-OKLAHOMA REPEATOR NEWSLETTER FOR SEPTEMBER 1974

Regular Meeting scheduled Tuesday, September 3 at 8:00 p.m.-Program on 555 MID-OKLAHOMA REPEATOR INC.

Serving Central Oklahoma Amateur Radio Operators

MORI MEETING SCHEDULED-Our regular meeting will be held this Tuesday, September 3 at the City Emergency Operating Center at 4600 North Eastern in Oklahoma City. Remember to calculate the date of the meetings, MORI meets on the first Tuesday of the first full week of the month (taking Sunday as the first day of the week). Our program will be on the "Mighty NE555," a most versitile chip from Signetics which can be used for everything from a timer to a CW keyer to a digital filter. And understanding its operation is much easier than you think. A brief technical discussion will be presented by Roger Walton of Metrodata Systems of Norman who will outline the operation and present a few basic industrial applications for your perusal. In addition, several members of the club have agreed to bring their own NE555 projects for show and tell to give you a wide range of the uses of this chip. A brief program outline will be presented (including copies of some of the circuits for your very own). As always, coffee and doughnuts will be provided after the business meeting and before the program.

THE GREAT AMERICAN DREAM MACHINE- The following section from the By-laws is self-explanatory and required notice for club members.

ARTICLE IV-ELECTION OF OFFICERS

SECTION 1. On or about September 1st of each year, the secretary shall notify all members of the club that the annual election of Officers will be held at the regular meeting of the club in October.

SECTION 2. The term of office of any Officer of the club shall be one calendar year, beginning January 1st and ending December 31st.

SECTION 3. Any Officer may succeed himself in office, if elected.

SECTION 4. At the first regular meeting in October, the presiding Officer will accept nominations from the floor. An election will be held and the candidate for each office who receives the majority of the vote of the members present is elected. Secret ballot will be used.

SECTION 5. Nominees for office shall give their approval before becoming candidates for office.

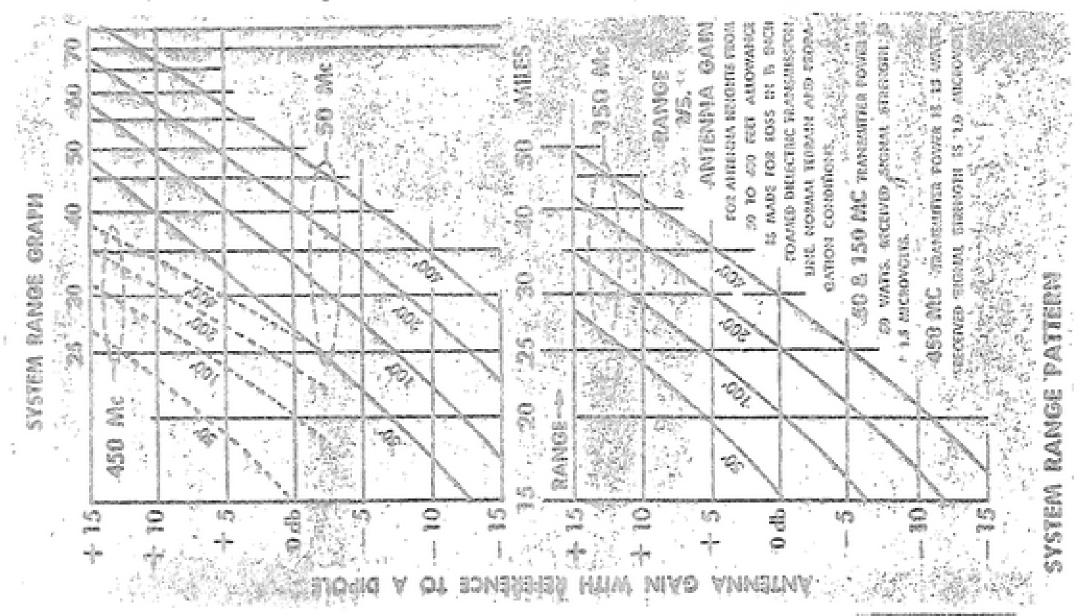
Elections are always important. The officers that you select set the tone for the club operation for an entire year. The provide policy direction and guidance for the club and approve necessary expenditures when a club meeting is impossible to arrange. Round up your favortie candidate and head on out to the October meeting.

WR5ADE - OKLAHOMA CITY'S FIRST REPEATER- (or how to move a repeater in ?? easy steps). Well actually, there is nothing easy about it, but a stalwart crew picked the Saturday of August 24th to do just that, and as a result, our 34/94 system is now operating from its new home at the First National Center in downtown Oklahoma City. Although action was initially scheduled to get underway at 8:00 a.m. (my goodness), the dust didn't really start flying until about 9:00 or so. Tower climbers WB5ISN, WA5TWA, and WA5EPK started up the tower with safety belts in hand (or rather in waist). WA5AOB disassembled the repeater, K5VRL, K5VVZ, K5PER, K2GKK constituted the ground crew. First came down the transmitter coaxial cable, then the transmitting DB-224. Moving up to the 200 foot level, the receiver heliax was stripped off the tower and the top DB-224 came off shortly thereafter. All the antenna work was completed and the last climber on the ground at 11:30 a.m. Short work indeed. At this point, dinner was in order, and the entire crew retired to a local cafe

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for dinner. Then on to the First National Center. A short snag developed when it was discovered that the DB antennas wouldn't fit in the elevators. My God, that's 32 flights of stairs. Well anyway, here goes with K5VRL, K5VVZ, and WA5EPK doing the honors. The sections were carried to the 26th floor and then taken out on the fire escape where the climb continued to the 32nd floor outside. Then they were hauled up the side of the building. Dennis, Don, and Mike then placed the antenna on the mounting pole provided by the First National. Unfortunately, it is located on a very hot exhaust vent from the bank. Oh well, at least we'll never worry about the antenna icing up, but in the meantime, the roof is fairly flat with nothing to really clamp the safety belts to except a couple of U-bolts. After a few burnt fingers, and a couple of scalded hands, the antenna was up. Coax was quickly routed and other niceties were placed in service, the repeater reassembled and back on the air with the duplexer and a quick check showed no intermod from the 100 KW FM transmitter on the building. Listening showed that the coverage area had definately changed and some areas are lacking. We hope to bring the repeater up to its maximum potential use by replacing the preliminary run of RG214 with 1/2" heliax. In addition, the new solid state receiver should be ready soon. WA5AOB and WB5ISN climbed the bank sunday night and turned the antenna catecornered to the beacon in order to attempt to minimize the effects of the beacon. It appeared to be relatively successful in the south direction. What about 07/67? Final arrangements have been made and all that is needed is a weekend to climb the tower. It will be a more complex jub, requiring stringing cable down the 700 foot tower for control lines and placing the antennas on the outside of the tower at the appropriate levels. There is no doubt that this job will be accomplished within a month and hopefully this full coverage repeater will be on the air from its licensed location by then. It depends upon a few factors such as the availability of tower climbers and other workers. Plans will probably be finalized at the next meeting.

450 MHZ REPEATER, ANYONE? - You interested? If so, then contact WA5AOB. Wayne has a deal going that may get us a 450 MHZ repeater for our use. Plans are being made now. To those of you who might scoff at 450 Mhz, I direct your attention to the following graph:



By analyzing the graph, it can be seen that 450 has a greater path loss than 146, but this can easily be made up by the super increase in the gain of antennas at this frequency Range could be greater and there would be less effect from fade and multipath than on 2 M. The band is also not subject to skip like 2 and in general, more reliable and uncrowded.

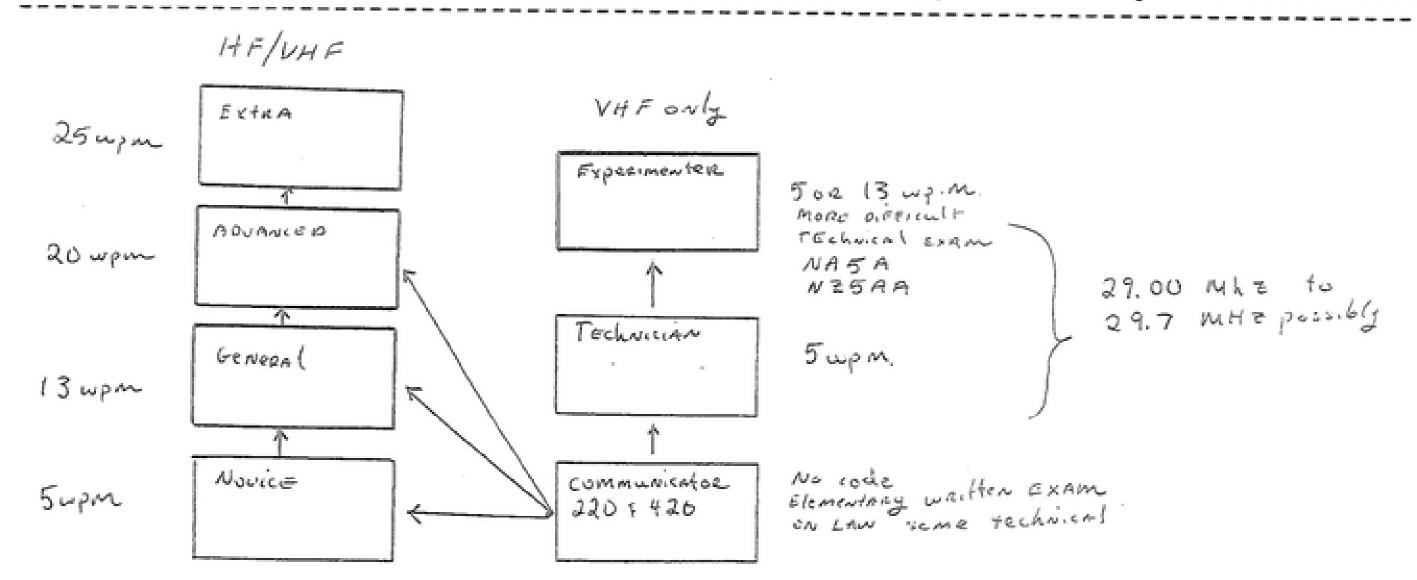
Wayne says that the opportunity to have a repeater is real, if we just want to take it. So those of you who have a hankering for 450 give him a call at 732-1870. Compare equal gains and systems on the graph and you will see that it does make a difference.

# N'D-OKLAHOMA REPEATOR NEWSLETTER FOR SEPTEMBER-Page 3.

HAM HOLIDAY SMASH SUCCESS-WA4AQW reports that OKC's first attempt at a hamfest in many years turned out to be an unqualified success. Over 370 attendees registered for the action which took place August 3rd and 4th at the Midwest City Holiday Inn. The programs were well attended and the Solardome of the Holiday Inn was almost itself worth the price of admission. Several commercial vendors were present and many got to see working models of both the VHF Engineering Walkiel Talkie and the new Wilson H-T. Several vendors came from Tulsa and other areas and of course several of the local companies also were there. The flea market kicked off quite well on Saturday and prices on some of the equipment took a real nosedive the next morning enabling many to gobble up some great buys. So many banquet tickets were sold that plans were made to try to speed up the feedline process for next year. Next year you say? That's right. Plans were laid during the activities for another version of the Ham Holiday next year (Son of Ham Holiday). It was a real enjoyable experience and the many helpers and members of CORA are to be congratulated on this successful venture. Carl says that the cooperation from members of all the clubs was superb.

TURN YOUR RADIO ON DEPARTMENT- Hey there peapickers, bet you haven't heard about a new country song just out by one of them many unknown artists called "Smokey, Trucks, and CB Radio." Ought to be a favorite on all the juke boxes at all the local truck stops. I jest saw it in this here advertisement in Billboard Magazine. You see cousin, this here musical artist (that's a joke, son) figures that since the 55 mph speed limit has been imposed, sales on CB radios have soared because them there truckers (that's half a word) have been using them to keep track of Smokey the Bear (highway patrol troopers, son. They got that name because of them there funny hats). Well anyway pard, you might soon hear about this here exciting story on your local C & W station. Should be quite a heart stomper and will certainly provide some unneeded publicity for some of the unsavory uses of radio by an irresponsible group. A one. A two. A three...

NICE WORK IF YOU CAN GET IT--WA5TRS and WA5JGU report that the Red Cross will be kicking off classes for amateur licenses on September 12 beginning at 7 p.m. that evening and every thursday after that. Charlie says that the kind of classes that will be conducted will depend on the enrollment and those of you who would like to upgrade to any amateur license are invited to attend. A determination on how to divide the classes will be made after the initial enrollment. This is a good opportunity to provide prospective amateurs with expert instruction in order to obtain a license or for a present amateur to upgrade. Tell your friends about it.



HERE WE GO AGAIN - Our program plans at the August meeting took a sudden change when Bill Smith W5TVB brought back news from the A. (for Ashbury) Prose Walker speech that was presented at the Texas VHF FM meeting last month. Walker laid out a totally new addition to our present licensing structure which left the mouths of several hundred amateurs agape. Bill said that the docket could be released in early october or late september, but many final details are still being worked on by the Commission. The mechanism of the licensing structure (at least at the time of Walker's speech) is that as presented on the previous page. There will be different call letters for the various classes and various privileges for each class. And so the pendulum swings from the upgrading and incentive licensing atmosphere of the 1960's (many of whom think was artificially created by the League) to a new era of the 70's to swell the ranks of the amateur population to one million. Look at it and study it well. Many details have been left out and there is not enough space in this newsletter to present all those that Bill talked about. But a few facts for the basis of the Commission's intended actions are in order. First, a study by the Commission indicated that eight years ago the average age of the amateur was 33. It is now 43. The indication is that there is no new amateur population coming into the amateur service. It is much too easier to obtain equipment for other services and have at it (especially CBer's). Other Commission figures were that only 7% of those who took the Novice test failed it. 58% of those who took the General failed it and only 7% of those who took the Extra failed it. This indicates that many amateurs are satisfied with an amateur license of a certain level and figure that the additional effort to make Extra is not worth it to them personally. It is not necessary for every amateur to have an Extra Class license. There are many other licenses that can be used by amateurs (such as Technician's and Ceneral's) that may be ends unto themselves. Amateurs are discovering that there are niches in between Novice and Extra that they can be satisfied with. Oh, many may talk of upgrading, but seriously given the boom in some of the more popular amateur arts (the Commission estimates that there are more than 65,000 amateurs on FM), many usually don't go to the trouble. It appears that the previous Commission policy of incentive licensing is having an adverse effect on the total number of the amateur population, yet there is a ready and quite large pool of interested persons who want to get into radio, but can't. The licensing examination, the code test, and other items stop them cold So why not create licenses in between Novice (and no code requirement) and Extra that can be terminal licenses that can be used to get these people into amateur radio. CBer's are outlaws because of the laws. If you change the law (and the law should periodically change to reflect social needs), then they are no longer outlaws. I am not proposing legalizing the sickening mess on 27 Mhz, but rather provide some mechanism for these people to get an amateur licenso An example of what can be done was demonstrated in California when the California medical association eliminated the differences between Physicians and Osteopaths by just absorbing ther and declaring that from henceforth, osteopaths could be MD's. They tore down artificially created barriers between two groups of like aim. Not all CBer's should be allowed on the amateur bands, but the amateur population should reflect the makeup of society. Amateur radi is a rich man's hobby. Minority representation in amateur radio is far below what those minor. ities represent as a part of the total population. And then there is the CBer. A person of odvious radio interest, yet who has no mechanism to enjoy it legally. But giving them a license and calling them amateurs won't also qualify them as responsible operators. It is at this point that we must draw upon the heritage of amateur radio to provide guidance to these new amateur Bill proposed some interesting questions. "Do we need one million operators.?" We certainly have the VHF and UHF frequencies to accomadate them. And imagine what our EOC report would look like if we had up to five times the number of amateur licensees with mobiles in their car. The point is that amateur radio can tolerate a shot in the arm. The question is how much Walker indicated that this docket would be given an extremely long time (about 6 months or so for comments to be filed. We must set out to determine how and what needs to be done to amateur radio. And also how to keep the high standards of operating techniques of past.



# MID-OKLAHOMA REPEATOR INC.

Serving Central Oklahoma Amateur Radio Operators

Dear Oklahoma Amateur: .

Welcome to the world of VHF Repeater operation. We hope that you are enjoying repeater operation in Central Oklahoma and solicit your use of our repeater for emergency and necessary high priority traffic. At the same time, we would like to briefly describe the operation of Mid-Oklahoma Repeator Inc.

Mid-Oklahoma Repeator Inc. currently operates two VHF repeater systems in the Oklahoma City area. Prominent in the construction of our systems is a completely solid-state control panel built entirely by members of MORI. Many man-hours of labor have gone into the construction and maintenance of our system and the club is justifiably proud of its accomplishments. For additional information concerning club meetings and officers, please consult the enclosed fact sheet. MORI operates both its repeater systems on an "open" basis and neither system requires any type of tone coded or other restrictive entry system. Our repeaters are directed primarily toward providing reliable communications to any amateur.

All this information is directed to you for the purpose of soliciting your membership in MORI. The cost and construction of a repeater is not inexpensive. The club expended some \$1200 last year for the maintenance of our present system and the construction of our new repeater station. The club policy of keeping the repeater open will persist as long as we can meet the necessary expenses for we feel that the public service aspects and usefulness of the system far outweigh the costs. While transients and short term visitors are encouraged to use the system without the necessity of being asked to contribute to the club, we ask amateurs using the system while residing within the vicinity for periods of time exceeding several months to contribute to the maintenance of the system by joining Mid-Oklahoma Repeator Inc. Our membership dues are \$12.00 a year and can be paid by the month. Won't you join us and aid our society in the maintenance of this public service? Please address your letter to the Secretary-Treasurer.

### TNX ES 73.

The club members voted at the last meeting of MORI that this letter, which is used by the membership committee to solicit members be published in the newsletter. This, along with the factual sheet which was published last month as a part of the special Ham Holiday Edition, is sent to prospective members. Recently a member of the club who had recently changed his call letters to conform to his move to this call district reported that he was harassed by midnight phone calls threatening him with bodily harm unless he paid his dues. This type of cretin behavior is not only illegal, but definitely not in the best interests of Amateur Radio and MORI. There is no doubt that a real need exists for the support of the club. Expenses for the maintenance of our systems will double or triple as a result of the relocation and the construction of a new repeater system. However, we have a membership committee and they take care of obtaining new members from the users of the system. Club members can help by recommending names and calls of prospective members to either the executive committee or the membership committee for their action, and not engage in solicitation of their own. Although there is no precedent for it, I would suggest that any member caught engaging in this type of activity should be subject to the disciplinary rules provided in the By-Laws of the Club under Article XII. There is no reason for this type of behavior.

### BARGAIN BILLBOARD

FOR SALE--Model V-5 Five band vertical (80-10 Meters) with manuals. Handles 1 KW AM - CW and 2000 Watts PEP. Weatherproof trap assemblies. \$30. Also National NCX-3 xcver with solid state AC power supply, mobile mount, mike (PTT), manuals, and extra pair of finals. \$150. Call Richard Gilliland K4JWZ Monday-Friday 8 A.M. to 5 P.M. at 682-1611, evenings and weekends at 364-9679.

FOR SALE--GE Progress line Mobile 12 V transistor power on 449.1 Mhz purchased new \$110. Motorola T51C 12 Volt Vibrator supply mobile on 52.525 Mhz, \$45. Heathkit counter IB-101 for \$200. Hickok Model 788X Signal generator \$175. Telex Lab 40-80 Meter Balum fed model DBBFD/48 Antenna \$25. National NC-155, 80 - 6 Meter receiver, \$40.00. Gonset Communicator II two meter AM transceiver \$20.00. Eico 730 Modulator \$20.00. OS-8A/U Oscilloscope, \$30.00, New tubes, 811A, 4-65A, 4-125A, 4-250A, Chimneys. IB's with most items. Am interested in 2 meter FM small japanese make for car. All items must go. Contact Bill Brodie K3TGY. 794-0406.

FOR SALE -- Knight novice station including T-60 transmitter and Knight receiver. Complete with Coax, ground plane antenna, manuals. Everything included and will throw in a lighted touchtone dial pad. Contact Mark. 321-0924.

Got something to buy, sell, or trade? Let us know. Write or call the Editor before the 15th of the month preceding the mailing of the newsletter. News items and technical articles are also welcome. Equal time (within space limitations) will be offered to any member sufficiently offended to write in about it. The MID-OKLAHOMA REPEATOR NEWSLETTER is published by Mid-Oklahoma Repeator Inc. as a sovice to its members. Members may request additional or back issues of the Newsletter, if available. Mid-Oklahoma Repeator Inc. would like to exchange newsletters with other amateur radio organizations and will mail a monthly copy free to any club that will do the same. Bulk rate mailing privileges paid at Norman, Oklahoma. For information about the club, contact any officer or member of Mid-Oklahoma Repeator Inc.

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MID-OKLAHOMA REPEATOR NEWSLETTER 1324 Lincoln Norman, Oklahoma 73069

> MERE IS YOUR SEPTEMBER MORI NEWSLETTER!!