



HAM HUM



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February 1971

Vol. XXI
No. 2

NEXT MEETING

WHEN: FRIDAY, FEBRUARY 12, 1971

TIME: 8:00 P.M.

WHERE: RED CROSS CHAPTER HOUSE
432 South 39th Street, Omaha

WHAT: GADGETRY and FILMS

You have a gadget in your ham shack that we want to know about. Bring it with you to the meeting. It could be something you have built from scratch, a kit you have adapted to your own situation, a special way to handle your antenna switching problems, or even a special holder on top the chimney of your final tube to keep your coffee hot.

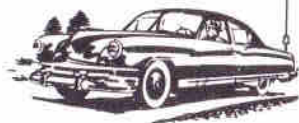
If you can demonstrate it, bring it. If you can only show it, bring it. If you can only display the schematic, bring it. One of the members is waiting patiently to find out how you solved your problem.

In addition, from Northwestern Bell we will have "Worldwide Communication" and "ESS—A Touch Of Tomorrow."

What is ESS? Is it "extra sensory suppression"? Is it "everyone says something"? Is it "electronic safety service"? Come to the meeting and find out!

EYEBALL QSOs — REFRESHMENTS

HAM HUM is the official organ of the Ak-Sar-Ben Radio Club, Inc., of Omaha, Nebraska, mailed monthly to all members and to others upon request.



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NOW HEAR THIS!

The Ak-Sar-Ben Radio Club has been the recipient of a limited number of low and high band mobile radio units from a commercial user.

The Board of Trustees of the Club has elected to dispose of these units by an impartial and random drawing of names from any parties who are sincerely interested in acquiring one of these G.E. units. The requirements for eligibility are that you must send in your request immediately by using one of the free mailing postcards. Also, you will need to be a paid-up member of the Club and must agree to get the unit on the air in a reasonable time. One other important condition is that the recipient must agree that these units must never be sold.

Presumably all that would be necessary to get the units on the air would be the purchase of at least 3 xtals at a cost of approx. \$15. from any firm having xtal correlation data for the units e.g. International Crystal, P.R., P.E.I. or Sentry. The low band units can be modified to work in the 6 meter band and a nationally used frequency would be 52.525 Mhz for example. It is hoped that some 6 meter FM interest can thus be created in this area.

The high band units can of course be put on the Omaha repeater frequency if desired. Additional information may be secured from Harold McClenahan, WAØDGA.

For the Board of Trustees,

by John D. Snyder, Secretary

John D. Snyder, WØWRT

Hi John, Erv, and the rest of ya:

Thought I would finally put a little news in Ham Hum, not that there is much to put. Just wanted to let everyone know I am back on the air - CW of course.

I am putting in for a modification of my license to change my address. My new QTH is 2235 St. Mary's Avenue, Apt. 414, Covert Avenue Apartments.

I am on the 4th floor. It sure makes for trying to figure out an antenna. Right now I have a piece of coax danglin' out the window, shorted at one end. It loads too, but not much signal gets out. Any ideas on how to get it away from the building?

73,

Tom, WAØEXQ

THE PRESIDENT'S CORNER

Well the first meeting of the new year got off to a good start. There was some loud noise at the start of the meeting, but that was just my knees creaking together because they were shaking so hard. Oh well, I guess I have only 11 more meetings to go!

We had a very enjoyable meeting at Omaha Police Headquarters. We thank Dick Eilers for lining up the meeting and also salute the two fine Police Officers who conducted our tour and the question and answer session afterwards. I would also like to mention that if anyone has ideas for future meetings, please mention them to any of the Board members, as finding things for our future meetings is a job for the whole Club.

I have been informed that we have had fine attendance at our code and theory classes. I was delighted to hear this, as I think it is one of the most important things the Club can undertake to further and expand amateur radio.

Information concerning a busy month for our repeater can be found in another article in this issue of Ham Hum. See you at the next meeting!

James C. Droege, WØYCP

HOW CREATIVE ARE YOU?

A psychology quiz in FAMILY WEEKLY, a Sunday supplement magazine, contained this statement which the reader was to label True or False: "Creative people are highly sensitive to disorder, and find it difficult to work except in neat and orderly surroundings." The official answer: "FALSE. A long-term University of California study of highly creative men and women showed that in most cases the creative individual's work place is likely to be a 'cheerfully haphazard conglomeration of complete disorder.'"

I'll bet there are darned few hams more creative than W5KR if we stay with that as the criterion!

de Texas Southmost A.R.C.

WANTED

Looking for a few type 955 tubes.

John Snyder, WØWRT

Home: 556-1538 or

Work: 536-4460

NEW MEMBERS ADDITIONS TO ROSTER

M. J. (Jack) Prall, WNØZWJ
623 South 50th Avenue
Omaha, Nebraska 68106
Phone: 558-9921

Randy Thomas Curtis, WNØDDZ
3203 South 39th Street
Omaha, Nebraska 68105
Phone: 556-8278



REPORT OF JANUARY MEETING

By Erv Heinz, WAØEEM

The January tour of Omaha's new Central Police Facility, including the new communication system, will undoubtedly prove to be a highlight for the program committee this year.

Club members and guests met at the 5th floor auditorium area for a short business meeting and a briefing by the Police Department. Picture 1 shows Bob Lockwood, WAØDHU, announcing the Code and Theory Classes which began January 11th.

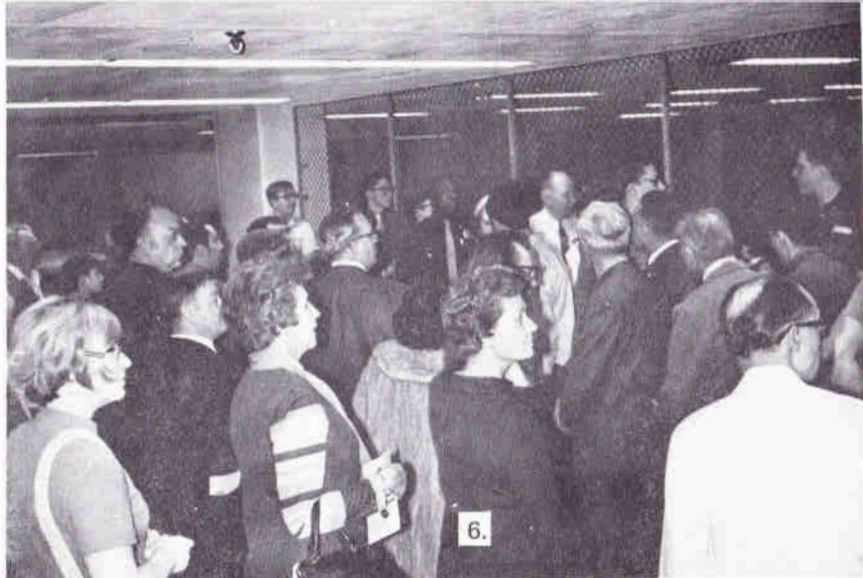
Officers Jack Bober and Bassie Johnson then proceeded to conduct the tour. Pictures 2 and 3 are of training classrooms and illustrate the officers doing a fine





job. Pictures 4 and 5 show the Communications Control Center. Here is the beginning point of the Police Department communications. All emergency calls as the result of dialing 911 arrive here and are forwarded to the dispatchers. These dispatchers control the seven repeaters and assign the calls to the cars as needed. The 911 operators also have complete communications with the Fire Department, the Sheriff's Office, and outlying communities who are under the 911 system.



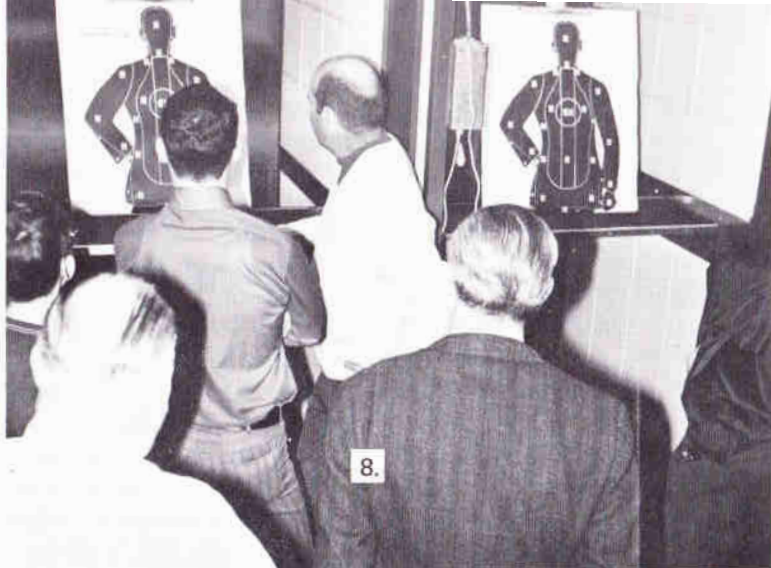


Broadcast messages can originate from here or any Police radio as any or all of the repeaters can be tied together so as to transmit simultaneously. Each repeater carries its own type of communication. They are assigned as follows: Citywide, North, South, Information, Command, C.I.B., and Traffic. Each dispatcher has a map on which is shown the location of the cars and a light indication showing whether that car is on assignment or available for assignment.

Picture 6 shows the "caged" area to which law violators are brought and unloaded from police cars or paddy wagons. A lot of suspicious looking "hombres" are fenced in here.

Picture 7 is of a few of the boys "hooping it up" at the target practice area.





Picture 8 shows them examining the targets but what is this no holes in the targets. Here I thought all hams were "sharpshooters"!

Picture 9 is of Officer Bober showing us "where to go" next. The Officers spent the next hour in the auditorium answering our questions and comments. We are certainly indebted to Officers Bober and Johnson for a presentation well done and to Chief of Police Richard R. Andersen for granting us permission to tour the facility.

An eyeball QSO followed with refreshments. Everyone present thoroughly enjoyed the evening.



1971 CODE AND THEORY CLASS

The staff of instructors for the 1971 Code and Theory Class have their work cut out for them. The staff includes: Cecil D. DeWitt, WØRMB; Joseph I. Eisenberg, WAØWRI; Raymond F. Kydney, WAØWOT; Robert C. Lockwood, WAØDHU; Robert G. Serlet, WAØZPW; William C. Terwilliger, WAØFPB; and Marion (Mike) Wilczynski, WBØBMV.

Because of the 1971 blizzard on January 3rd, the opening session scheduled for January 4th was cancelled. However, at the first session on January 11th the staff found themselves with a total class of over 80 students with 50 going for their novice privilege. Normally the class starts out with about 30 students, so the instructors were swamped. They rose to the challenge and with the help of the Red Cross, accommodations were made and no one had to be turned down. Also, additional chairs were provided by World Insurance.

The classes had to be reorganized. Originally a combined theory class was organized, but it became obvious that with such a large beginners' class it would be an advantage to have two separate theory classes. In this manner each group would get more out of the 15-week course.

The staff is happy to report that two theory classes have been organized and things are going smoothly now. It looks like it will settle down to an estimate of 30 advanced and 25 beginners to follow through. It is the latter group which needs special help because amateur radio is entirely new to most of these students and it is

necessary to start from scratch with them.

The reason we started out with such a large class is because of the publicity we received. Many parts houses plastered their windows and display areas with notice of the class. Also, Hugh Tinley, KØGHK, persuaded KFAB Radio Station to give us mass publicity with announcements of the classes at prime time, such as the noon news, 5:00 P.M. news and 5:30 P.M. news time as well as several times during the afternoon of January 11th. With such fine publicity it is no wonder we had such a good turnout. Our thanks to members of the instructor staff, to Hugh Tinley, to KFAB, and to others who helped with the publicity. Also thanks to the Red Cross for the accommodations and to World Insurance Company for the chairs.

Yes, it looks like a bumper year for the Ak-Sar-Ben Radio Club 1971 Code and Theory Class. We will submit monthly reports of the progress of these classes and pictures for subsequent issues of Ham Hum.

If anyone wishes to take advantage of these classes, it isn't too late. Come to the Red Cross Chapter House on Monday evenings at 7:30 P.M. We will be glad to see you there.

Bob Lockwood, WAØDHU
Committee Chairman

Some of our new problems need old solutions — like Soap and Water
* * * *

Progress involves risk. You can't steal Second while keeping your foot on First. (Fearl)

Here is a Chart that appeared in *Ama-chewer* several years ago. It was always a lil trouble to me to convert mfd to mmfd, or pfd and I keep one tacked over the work bench. It has been "up-dated" to pfd instead of mmfd. How 'bout that.

HANDY DANDY CONDENSER CONVERSION CHART

| <u>FARAD</u> | <u>MICRO-FARAD</u> | <u>PICOFARAD</u> |
|--------------|--------------------|------------------|
| 1. | | |
| .1 | | |
| .01 | | |
| .001 | | |
| .0001 | 100. | |
| .00001 | 10. | |
| .000001 | 1. | |
| | .1 | |
| | .01 | |
| | .001 | 1000. |
| | .0001 | 100. |
| | .00001 | 10. |
| | .000001 | 1. |
| | | .1 |
| | | .01 |
| | | .001 |
| | | .0001 |
| | | .00001 |
| | | .000001 |

EXAMPLE: .0025 mfd (equals) 2500 PFD
 150 PFD (equals) .00015 mfd

Developed by the "Now You Can Be As Smart As I Am" Committee of the Indianapolis Radio Club, Inc.



"You'd think they'd issue one that honors the taxpayers."

REPEATER PROGRESS REPORT (I GUESS?)

Well the good news finally came. The new antenna site on top of the Woodmen Tower was secure, and now the frantic effort to get all the equipment ready for installation. We had been holding off on getting the equipment ready because we felt there was still a possibility the whole thing might fall through.

Stanley, WBØBTL, and I started to work on the equipment about 5:15 P.M. one evening and I told my wife that I would be home about 7:00 P.M. Welllllll, at about 7:30 P.M. I called my wife and told her it would be more like 10:00 P.M. when I would get home and she informed me that I should get a hamburger as I don't work well on an empty stomach.

After a quick stop at the hamburger joint, Stan and I headed over to Ray's WBØCUT, place to pick up the transistor amplifier he had been working on. Back to the work table with the new amp and the receiver working, now all that was left was to get the changeover chassis finished that I had been working on. After getting the whole mess all together, we decided that the best possible way to go was to take it all up to the repeater and install it and try it out so that when the Phone Company got the line we would be ready to go. Well, back up to the Red Cross site, and all the equipment installed, the actual new receiver hooked up to the standby antenna at the side of the Tower, and much to our surprise WAØHBX in Savannah, Missouri gave us a call and we were able to switch from one receiver to the other and the whole

thing actually worked. By the way, it was midnite!

Saturday came along and Ra WAØWOT, Leo, KØJIU, Harold, WAØDGA, and I headed up to the top of the Woodmen Tower to install the antenna and line. After much grunting and puffing we got the bracket, which was built by the boys at Quaker Oats, up on the roof and started the installation; but, as usual, there were several trips back to Mobile Communications for a few tidbits that we forgot.

With the antenna and line and receiver all working, now it was the usual waiting game for Telephone Company to get the line in. Monday went by, no word; Tuesday went by, no word! Oh well, the Phone Company only promised completion by Wednesday. Wednesday noon, no word! Oh well, I guess they are going to be busy this afternoon. Wednesday at 3:00 P.M. I received a call from Marty, WAØGEH, who works for the Telephone Company, who said some paper work got fouled up and the line would not be in until Friday. On Friday I received a call from Marty again and the Telephone man couldn't find where we wanted the line terminated at the Red Cross, so Marty promised that he would personally get the line in Saturday morning. Hark, the line in and nothing works! A quick trip up to the Woodmen Tower found a filter condensor in the receiver power supply shorted and a fuse blown. Another hurried trip to Mobile Communications, condensor and fuse replaced, and back to the Woodmen

Tower, by now with a frown on the people in charge as to why so many trips were necessary. Oh well, win a few and lose a few.

Now the final test; another blank. The receiver appeared to be off frequency. Another hurried trip to the Tower, reset the receiver frequency, and back to the mobile for another try. Another blank - no coverage at all to the east. On Friday morning Leo, KØJIU and I went back up to the Woodmen Tower, took the antenna down and completely inspected all the connections on the antenna and all the coax fittings on the line were replaced. Back to the mobile; another blank. Saturday back up to the Woodmen Tower with another antenna and Ray, WAØWOT, and Bob, KØIXY, and change out the antenna, and with a little thinking ahead, Leo, KØJIU, gave us a weak signal from his Handie Talkie, and antenna was OK.

Welllllll, with the knowledge that the site was no good to the east the brainstorm came up, why not use the Red Cross receiver for the east coverage and the Woodmen Tower for the west coverage, with automatic changeover so each receiver would repeat a worthwhile signal. Sunday morning I went to the Red Cross site and hooked the squelch relay into the changeover chassis so that a signal in the Red Cross receiver would repeat and when it dropped out, the Woodmen Tower receiver would take over. And guess who - WAØHBX in Hannan, Missouri, called us. He was alternating from one receiver to another and it was perfect transition with only a slight change in the base response from one receiver to the other. Welllllll, like the alcoholic I am

so far as ham radio is concerned; Sunday afternoon with a borrowed antenna in the convertible and some help from Dave, WAØGED, the antenna was changed at the Red Cross site with 9DB of gain to the east.

The new directional antenna at the Red Cross worked out quite well, as I was able to get back to the repeater from Shelby, Iowa, about 45 miles to the east, running 10 watts to the gain antenna on the trunk of my car. Sometime during this week I plan to get back up to the Woodmen Tower and change the antenna to have maximum gain to the west, which will give the repeater an egg-shaped pattern with the strongest lobes to the east-by-north and the south-by-west. The plan now calls for raising the power at the transmitter and then a couple months of tests to see how the whole mess works.

WOW, the end!

Jim, WØYCP

Repeater Chairman

January 25, 1971



"Mom, want me to run and get the first-aid kit again?"

(Editor's Note: The following article, as stated, is a follow-up on the Antenna Insurance article reprinted from Florida Skip in the November 1970 issue of Ham Hum.

We reprint this article as requested by Florida Skip. Again we call your attention to the Editor's Note in our November issue of Ham Hum and further state that you must still check with your own insurance man concerning the coverage of the policy you have on the property you have, as there can still be variation from state to state or company to company. So, if you neglected to find out about it after the November issue, do find out about it as the result of reading this issue. Do it tomorrow!)

ANTENNA INSURANCE

(Florida Skip printed an item about Antenna Insurance in the June issue, Vol. 14, No. 1 on page 4. We would like everyone to read the following and pass it on to your friends. Editors, please print the item below as a follow-up if you used the June article. The letter below is from Mr. Ray H. Bowen, Agency Manager for State Farm Insurance in Miami Springs. Editor)

When I was interviewed by reporter WA4ABY, I told him that I did not have a policy immediately available but my opinion was that antenna was not covered, but asked him not to quote that until I could obtain a policy for review or an agent could confirm from a policy. Reporter checked with an agent who could not confirm, and advised reporter to wait until we could definitely confirm.

I was surprised to read article quoting me.

Actually, antennas are covered by the State Farm Homeowners policy and you may quote me. Attached to the building they are covered as part of the dwelling and when not attached to the building, they are covered as appurtenant structures. Antennas are subject to the deductible clauses in the policy, including windstorm deductible. Most policies have \$100.00 windstorm deductible and may have larger deductible, such as \$250.00 etc., if desired by the insured to reduce premium.

Please see that your readers are advised of the inaccuracy of this June, 1970 article. I'm sure this will be good news for most of them.

Very truly yours,

Roy H. Bowen
de Florida Skip

SIMPLE GRID BLOCK KEYING

By Dick Blasco, WA4DHU

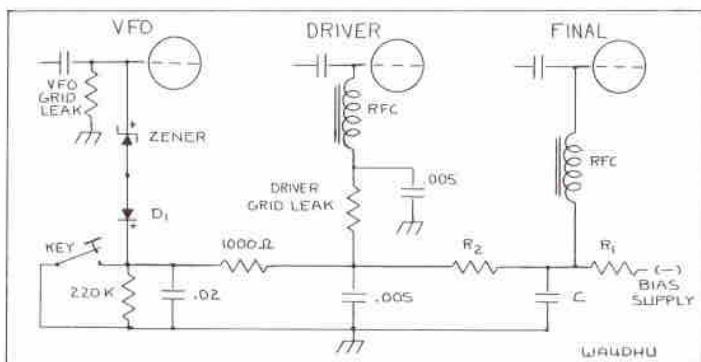
With the advent of newer gear with beautiful CW keying characteristics on the market, the old home-brewer or ham with a more vintage rig may find that his present keying system leaves much to be desired. The merits of a differential grid-block keying system are discussed at length in many of the standard handbooks. However, most of the circuits described in the literature involve one or more vacuum tubes, many parts, and in general cause the builder to shy away from all that hardware and stick to a simpler, poorer, system.

The system shown below is very simple, involves no active elements, and does a nice job of providing true differential keying at minimum cost. It is simply a voltage divider, with a Zener diode providing the differential function normally provided with a VR tube.

The system is designed as follows: from a tube manual, obtain the proper operating grid voltage and current to place your final amplifier tube in class-C operation. Let B-neg. supply volts, I- final grid current in milliamperes, and G- final neg. bias in volts, then:

The voltage of the zener is chosen by subtracting the VFO bias (in key down operation) from the supply bias, and choosing a diode having a zener voltage smaller than its value. Several values might be tried to get optimum keying. Capacitor C is chosen by trial and error to get the proper wave form, according to your particular taste. D1 is any general purpose diode.

In operation, final tube bias falls exponentially as the key is closed. However, at a trigger point well before the driver and final conduct, the zener stops conducting and the VFO is turned full on, while the other stages



become operative at a later time depending on capacitor C. When the key is raised, the final and driver will gradually turn off, and VFO will remain fully on until the bias is nearly full value, at which time the zener conducts to stop oscillation and places a bias on the VFO to keep it from oscillating.

The circuit provides a minimum

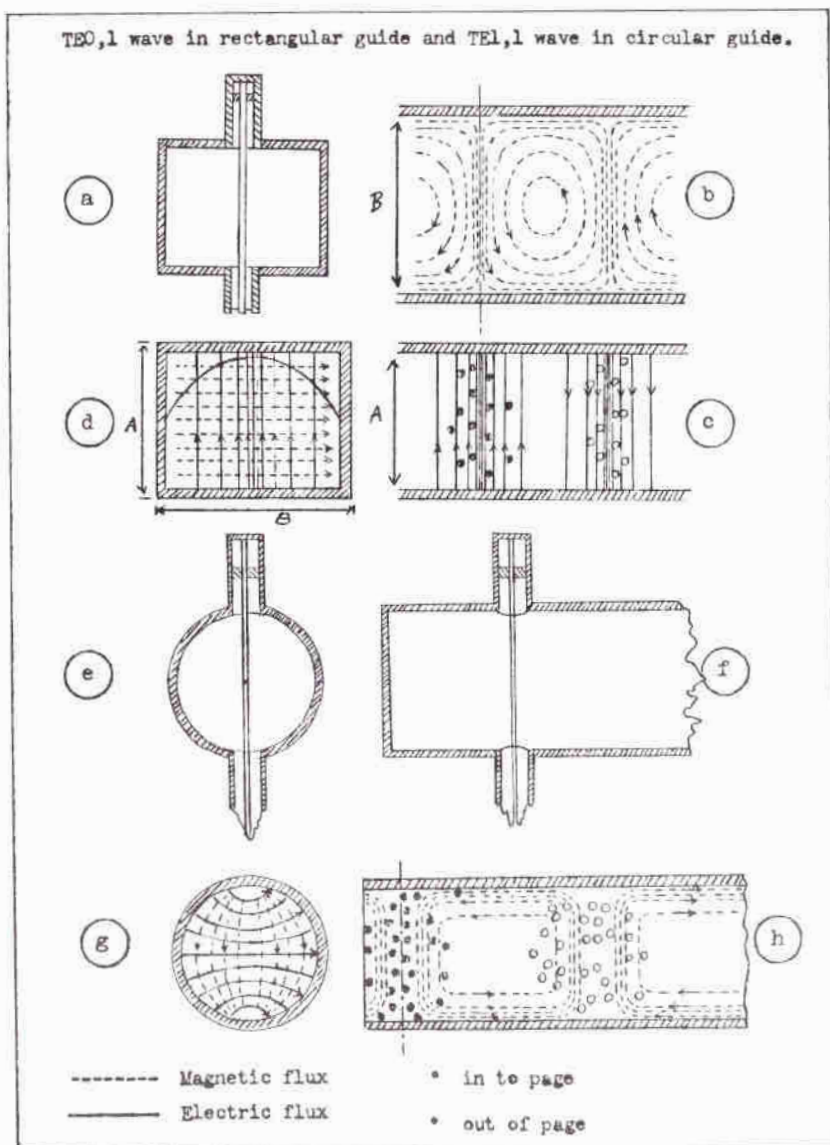
bias of G/2 on the final to protect it in case of excitation failure. Be sure that the VFO grid leak is at least 47 K or larger. This circuit is a variation on the basic design used in the Heath HW-16 transceiver. Existing grid block systems can be made differential by simply adding the two diodes to the VFO grid circuit.

de Florida Skip

(Assoc. Ed. Note: This is the second part of an article on microwave RF propagation in wave guides written by Don Griffin, WØEWO, of North Platte, Nebraska.

TEO,1 WAVE RECTANGULAR GUIDE

The TEO,1 wave will exist at a lower frequency than any other type



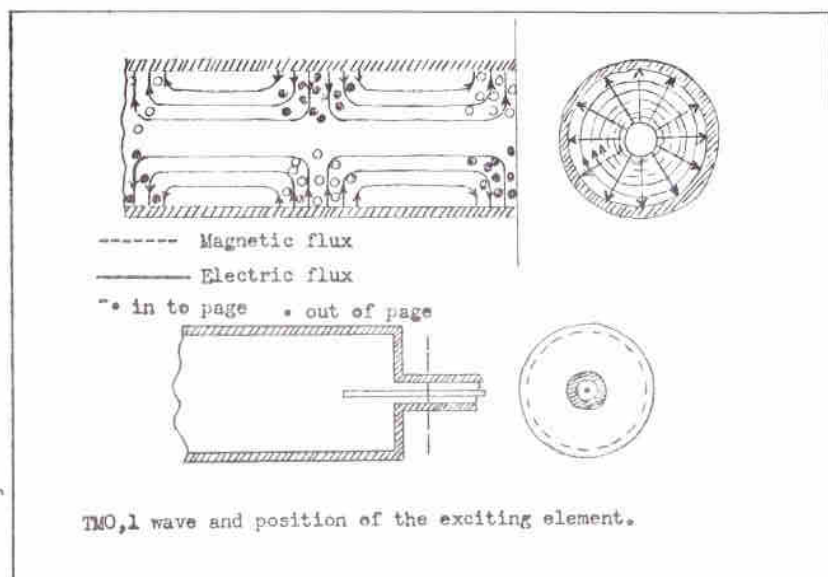
in a rectangular guide. The energy is fed into the guide by means of a small antenna perpendicular to the axis of the guide. This antenna is fed by means of a coaxial line; the outer conductor is grounded to the guide; the inner conductor is attached to the antenna. In order for the coaxial line to work into its characteristic impedance, the antenna is tuned by changing the ground point at the end as shown in fig. a. In order to assure maximum power down the guide, the end is closed a quarter wave back from the antenna. The wave sees a high impedance in that direction and will go only in the desired direction. The exciting antenna is about a half-wave long with high current on either end.

Fig. d shows the electric and magnetic lines looking at the end of

the guide; the electric stress is along the A dimension maximum at the center. Fig. b shows the magnetic lines looking down on the B dimension; the electric lines would be perpendicular to the page. Fig. c shows the electric lines along the A dimension, which is the direction of propagation; the magnetic lines are perpendicular to the page.

The cut-off wavelength for this wave is $2B$; the cut-off frequency is equal to velocity divided by $2B$. The characteristic impedance of the rectangular guide is dependent upon its physical dimensions and the ratio between the operating frequency and the cut-off frequency.

$$Z_0 = \frac{465A}{BV\sqrt{1-n^2}} \quad n = \frac{W_c}{W}$$

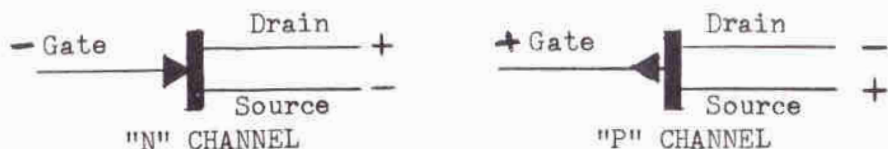


UNDERSTANDING TRANSISTORS

by Jim White, Associate Member, M.E.M.E. (WB6RAG)

JUNCTION FIELD EFFECT TRANSISTOR (JFET)

The "N" channel FET is very similar to a vacuum tube with the exception of no heater. The junction FET construction is similar to the uni-junction transistor and its schematic diagram is also similar. A bar of semi-conductor material is formed; this bar acts as a resistance. The material may be N type or P type and this of course determines whether it is an N channel or P channel FET. The resistance of



this material is usually several hundred ohms. In respect to the uni-junction resistance, which is usually in thousands of ohms, therefore, during testing, we can determine which is which. During the construction of the FET a diode junction is formed which is similar to the uni-junction transistor construction. However, similarity ends here, for the FET diode is a continuous circular structure which circles the resistive semi-conductor bar. This diode is always reverse biased during actual circuit operation (like the grid of a vacuum tube.)

Leads are attached to the opposite ends of the resistive bar of semi-conductor material and these connections are called the source and drain terminals. The negative of the power supply is connected to the source when the FET is an N channel type device. If it is a P channel device the drain terminal is connected to the negative of the power supply. The lead attached to the encircling diode junction is called the gate terminal.

Applying a voltage across the source and drain terminals, current will flow, the amount of which will be proportional to the voltage applied and the resistance of the semi-conductor bar. The bias voltage on the gate is called the pinch-off voltage or reverse bias voltage and will stop conduction.

OHMMETER TESTING. Conduction between source and drain will measure approximately several hundred ohms in either direction. The resistance from the gate to source or gate to drain will be practically infinity in the reverse direction and tens of ohms in the forward direction.

de Fresno, Ca. SKIP

EMPLOYER: "I'm sorry, young man, I can't hire you, as I just can't find enough work to keep you busy."

APPLICANT: "You'd really be surprised at just how little it really takes."
Ham Monitor

HAM HINTS

If you are concerned about maximum efficiency in a VHF antenna, take a close look at your balun. Is it made of coax cable? If so, its effectiveness decreases with increased frequency and the method of mounting. Coax cable type baluns are commonly used for VHF beams when the driven element is a balanced-feed affair (radio dipole, T-match, etc.). The problem is that this type of balun is unpredictable. The step-up ratio may or may not be what you desire, depending on construction methods, aged coax, etc. Also, and most surprising is that impedance "humps" develop wherever the coax has been squeezed (such as by coiling the cable and taping it to the boom). The impedance humps cause losses in efficiency. In fact, at 2 meters and up, coax cable baluns can become so lossy as to cause 6 db, or more attenuation. A simple answer to this problem is to use a linear or "beer-can" type of balun. These baluns exhibit very little loss well up to and above 432 mcs. They are relatively easy to build and when made of aluminum are quite light. They're also cheap! Details of construction can be found in the ARRL "VHF Handbook"; Bill Orr's "VHF Handbook"; QST, Feb. 1965. A couple of important points should be mentioned. The decoupling sleeve can be any diameter. The "inner" tubing can be aluminum, which is available at most hardware stores. The teflon needed is available from local plastics firms. The teflon and aluminum end discs can be cut from a larger piece of material with a "fly-cutter." The pieces can be "press-fitted" together

precluding the need for soldering. All joints should be sealed to keep water out. Be sure you use "N" connectors for frequencies above 2 meters. SO-239 or "UHF" type fittings are not a constant impedance (usually around 60 ohms - not 50 ohms!)

Remember, these baluns can be built to give you almost any impedance ratio - 1:1, 2:1, 4:1, 6:1. The coax cable type can only give you a 1:1 or 4:1 ratio. This means a dipole of 300 ohms impedance cannot be matched with coax cable baluns. With this situation, the best SWR you could have is 1.5:1. The linear balun will give you a near perfect 1:1 SWR in this situation. Just remember to empty those beer cans before you start building!

de RF Carrier, Dayton Ohio

Think
safety belts
are confining?

Not half as
confining as
wheelchairs.

What's your excuse?

Advertising contributed
for the public good.



HELPING THE NEWCOMER

For a system to function properly, it must be supplied with fuel. It takes this fuel and changes it into a different more usable form. So it is with Ham Radio. The fuel is in the form of someone with an interest in the hobby. He is helped in becoming licensed by another, more experienced Ham, and the end result is a new Ham with all sorts of possibilities. A moment's thought will show that without the fuel, the system (in this case, Ham Radio) would soon die.

Why, then, do so few Hams take an interest in helping newcomers into the hobby? I was in a local radio store the other day, looking at a receiver, and two people came up to me and asked me if, by any chance, I happened to be a Ham. Yes, I said, and we ended up talking about the hobby for quite awhile. This probably wouldn't have stuck so in my mind, but during the conversation one of them remarked that he had tried, repeatedly, to find a Ham that could give him some idea as to what it would take to get on the air. But he had had no luck, and he had even met someone who had told him that he didn't have time to help him!

Now this is pretty bad. When your schedule gets so tight that you can't give at least a little time to helping a newcomer to the hobby, it is time that you got off of 75 (or 15, or turn off the TV as the case may be) and looked to see what you can do to promote interest and get these aspirants started in the right direction.

Many of us don't really realize the true value of such things as the code and theory classes that Nick has been leading. They are like money in the

bank, but the dividends are fantastic. Sure, it takes a little time, but think where you might be if there hadn't been someone helping you when you first got your license. It is really something to see a new Ham, someone that you helped to get on the air, progress through the ranks of Ham Radio and become a skilled operator. Take some time and invest it in the future of the hobby. It's like money in the bank!

WB4JXO, From "THE ATLANTA HAM"

ARRL AFFILIATED CLUB
BULLETIN

de Sparc Gap

In the days of radio, we frequently wondered what the audience was laughing at. Now we can see....but we wonder why?

Ham Monitor

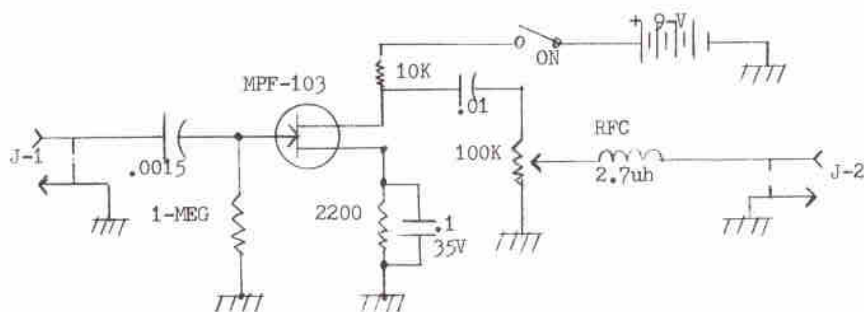


GENERAL MANAGERS COLUMN

Department stores back up the products they sell. Try it at Radio Row and see where it gets you.

A tip if you go to Radio Row (Aki), watch out where you park. If it's posted, no parking or stopping, Brother they mean just that these days (unless you are Gyomo). It's 9,000 Yen to get out from under a ticket. Don't learn the hard way.

We are asked on occasion about the local Mikes. You don't always get what you ask for or what you pay for. Tread easy when selecting a Mike. For SSB, we have tried many and they don't always do what they say they will do. "O"-Scope one and see for yourself. It's the only way to go. We are using the TRIO MC-50 at present and it does a good job. Some of the others leave a lot to be desired. It comes as close to the Electro-Voice (Spec's) for SSB. Some of the other makes don't do as indicated. Of course, it's always the antenna first, the rig, then the properly selected Mike. Fit yourself as it were. Some have used the same Mike for years. Like the style, you know how it goes. Well, if you have an old one, and want to add new life to it, try this and be surprised.



Try a Motorola MPF 103-104 or a 105 (FET). Build it in a Mini-box; parts are not critical – a little testing may be needed for best performance – and you got yourself a new Mike. You will think so and so will others. It's a gem – adds new life to an old Mike and voice.

You may just as well start playing around with solid state devices now. You will sooner or later anyway, if you are the progressive type. Tubes are slowly going out of the picture, with a few exceptions. We will see some progress on RF types the early part of 1971. The Japanese are not sleeping at the wheel in the solid state field. Lots of changes are expected as well in the stateside gear from here on in.

73 & DX

Ed. – KA2EB

de FEARL News, Japan

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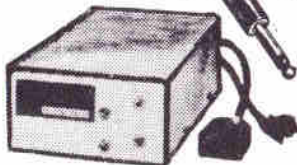
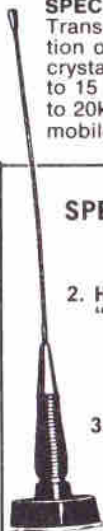
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