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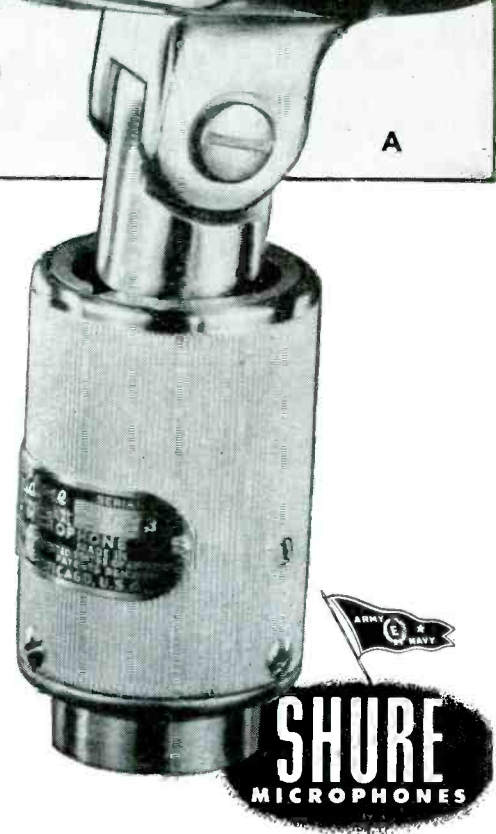
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Ed. Stolzenberger
Editor

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NATIONAL N.A.B.E.T. OFFICE
930 F Street, N.W., 415 Atlantic Bldg., Washington 4, D. C.
A. T. Powley, President

NABET National Office Report

By C. A. Allen

NABET National Secretary-Treasurer

MR. STOLZENBERGER suggested that the National office advise the membership of a blow-by-blow description of National office activities. He suggested a typical week be written and sent to the "Journal." Instead of doing that, I have generalized below. This, of course, omits the thousand and one details that go with each of the operations, but it may give you some idea of the amount of work required to operate your organization, under its expanded policy.

In January, your first full-time president took office under a deluge of work. The work has grown rather than diminished, and while progress has been made, we are far from being up to date. This has caused some impatience among the members who have not had all the information that it would have been desirable to give to them. I can assure you that this condition has not been due to a laxity in the National office, but it is entirely due to the size of the task that confronts us.

At the last National Council meeting, your president was charged with the responsibility of making certain Constitutional changes. This meant securing the vote of each member. He was charged with compiling a set of rules of ethics as a guide to the individual engineer and to the organization. We were confronted with the task of organizing new groups and securing contracts for them. This embodies a great deal of detail work such as correspondence preceding the organization, certification of the groups before the National Labor Relations Board, the writing of contracts, the subsequent negotiation of the contracts, which I might add are very often impeded by the action of the employer, whether deliberate or not. After contracts are negotiated, if there are any sections within them that are open to dispute, the dispute must be taken to the National Labor Relations Board, the Labor Conciliation Service, and from there to the War Labor Board for settlement. Even when a dispute is not involved, the chances are pretty good that a wage increase has been granted. In this case, the wage portion of the contract must be taken before the War Labor Board. This involves a certain amount of detail work.

In addition to that, we have in the National office the records of some 900 members to keep. You all know, especially those in large groups, how much work falls on the shoulders of your own Secretary, working on a part-time basis, in keeping the records of your own group. The National office has this same amount of work to do, plus the fact that we do not have personal contact with the members and must rely upon correspondence to settle any question that might arise. I might say here, that this job has not always been made easy by the local Chapters. We have had to wait long periods for information, and this, of course, has further slowed our work. I do not mean this in a critical sense since I realize that a great many Chapter Chairmen and Secretary-Treasurers are working

under difficulties, too. I merely cite it as an indication of some of our problems at the National office.

At the forthcoming National Council meeting, these problems will be placed before the Council and the National office will ask that they be solved. With the growth of the organization, it has become apparent that something must be done to speed the solution of problems as they arise. This will also be given consideration at the Council meeting. None of the difficulties confronting us are insurmountable. We in the National office are doing all we can to take care of the needs of the organization in the order of their importance. Of this you can be assured. With the patience, faith, and loyalty of the membership, we feel that in time, and with the proper expansion of our organization, we will emerge one of the strongest unions in the country.

* * * *

The technicians employed by Muzak are now members of NABET. We have won the election held recently in New York.

* * * *

The week of June 19-24 was spent by the writer in negotiating a contract at the Fort Industry's Station, WMMN in Fairmont, West Virginia. We secured advances in working conditions for the members of the Fairmont Chapter, but were unable to secure the company's agreement to a wage increase. However, the contract was signed with the proviso that we would both argue our point before a panel of the War Labor Board and would accept its findings after it hears the evidence on both sides. This has its advantages, inasmuch as the wage scale is left entirely open, and it will be possible for us to ask an increase which will probably be greater than that in our proposed contract.

* * * *

At the present time we have nothing new to report concerning the NBC-Petrillo decision. The National office is keeping in close touch with the Second Circuit Court of Appeals concerning this matter. To date, the decision of the court has not been rendered, but it is our understanding that the decision will be rendered during July.

* * * *

Mr. Powley spent a large part of the month of July in Detroit, Chicago, Rochester, Syracuse, and Schenectady. While in Syracuse, he concluded and signed the contract for Radio Station WOLF.

(Thank you, Mr. Allen, for what we hope is the first of an unending series of National Office Monthly Reports to the NABET Membership; as in the past, this page will be held for your official report on National Office activity and any other relevant news of interest to the NABET Membership.—Ed. Stolzenberger.)

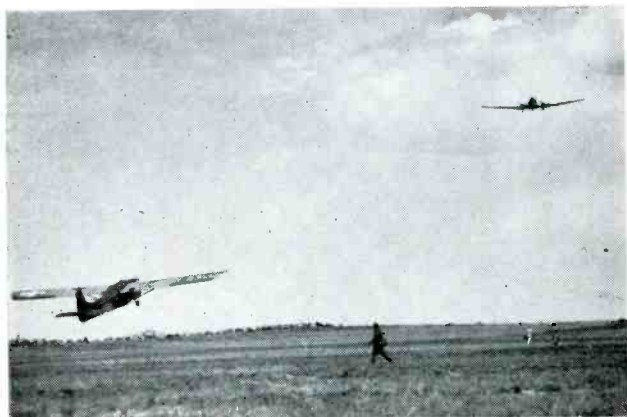
KOA Rides with the Troop Carrier Command—By Joe Rohrer

APPROXIMATELY 100,000 Denver spectators were thrilled by a demonstration of U. S. airborne might staged as part of the Seventh War Loan drive by the Troop Carrier Command. The scene was Denver's municipal airport and the CAP field May 26 and 27. The show consisted of an invasion by para-troopers with complete equipment including jeeps and light artillery landed by glider.

KOA participation in the event was equipping a troop carrying glider with a transmitter in order to broadcast first hand the reaction of passengers and crew. A public address feed was provided so that the many spectators as well as the radio audience could hear the remarks from the glider.

Most thrilling part of the demonstration was the "snatch" pickup of the two types of gliders supplied by the Troop Carrier Command. One of these, the CG 13 can carry 30 men plus crew or a jeep and light artillery piece plus crew. The type CG4A carries 15 men or a jeep, plus crew. It was in the latter type that KOA installed equipment.

The "snatch" is accomplished by a low flying C47 transport plane which zooms over the grounded craft and catches with a hook the end of a nylon towline



C-47 transport plane "snatching" a glider from the ground. Acceleration from 0 to over 100 mph is accomplished in 5 seconds.

stretched between two poles. The glider comes up to approximately 100 miles per hour in a few seconds, the gradually gained acceleration being accomplished with the aid of a retarding motor in the pickup plane which reels out the towline, easing the pull on both ships. Acceleration from 0 to 100 miles per hour is made in approximately five seconds. This method of glider recovery has been used under combat conditions to save the lives of thousands of isolated or wounded troops.

Equipping the glider with a transmitter was something of a problem because of the heavy take off and landing shock. On many plane broadcasts KOA has used the NBC type ND-31 2 watt pack transmitter with unusual success. It was chosen for this job since it is self contained and rugged. To obtain maximum radiation a doublet antenna for 31.22 MC was installed between a wing strut and the tail assembly. The feeder line came off at right angles into the glider. This antenna has been used on many types of planes and has flown at speeds up to 300 mph. It is made up of standard fittings for aircraft use, phosphor bronze stranded wire, streamlined strain type insulators and low friction connectors. The feeder consists of composition type concentric cable which has extra mechanical strength due to the shield and is better streamlined than twisted pair. The phosphor bronze wire on the leading side of the doublet is lashed to the shield for several inches and all strain taken off the inner lead which is looped and then connected to the rear section of the antenna.

Using the ND 31 or other types of transmitters in planes has always required some means of filtering the audio before it reaches the modulator. We have accomplished this most satisfactorily in the ND 31 by inserting compensation between the first and second audio stage. Circuit changes consist of reducing the grid resistor to 50,000 ohms, and replacing the coupling condenser with one of 100 micromicrofarads. The result is sharp cutoff at approximately 200 cycles. Most of the noise in a plane is below this frequency. Normal speech is then possible without objectionable background or poor quality due to over equalization.

Equally important is a means of controlling audio volume level into the transmitter. The ND 31 has no means of gain control since AAGC has been built in. The speech amplifier has sufficient gain for normal operation. It is necessary to reduce the input with high level input to reduce the "whooshing" effect noticed when there is a continuous background noise and the AAGC varies the volume. An auxiliary volume control consisting of a 200 ohm T pad may be inserted in the mike line. This must, of course, be carefully shielded from radio frequency. Gain must be considerably reduced with the announcer shouting in a noisy plane.

In the glider installation no compensation was necessary, but there was considerable racket produced by air rushing by the thin fabric covering the fuselage of the glider. This noise was particularly loud when the glider was in the slipstream of the towing plane. Towing speed averages about 125 miles per hour. When "cut loose" in free flight, speed averages about 90 mph.

For testing and cueing, the NBC type ND 14 twenty-five watt transmitter was used operating on 1606 KC. This was conveniently located at the pickup point. On a test flight the cueing signal was satisfactory at the maximum

(Continued on Page Twenty-nine)

A.T. & T. Company Plans to Extend Radiotelephone Service

PLANS for a general mobile radiotelephone service which would bring the advantages of two-way voice communication to drivers of motor vehicles, were announced recently by the American Telephone and Telegraph Company.

Applications have been filed with the Federal Communications Commission for authority to install radiotelephone stations in the following cities: Baltimore, Chicago, Cincinnati, Columbus, Denver, Houston, Milwaukee, New York, Philadelphia, Pittsburgh, St. Louis, Salt Lake City and Washington, D. C.

In addition, surveys are being made to determine the need for and the feasibility of mobile radiotelephone service in many other cities of the country, including, Akron, Atlanta, Beaumont, Birmingham, Boston, Cleveland, Dallas, Dayton, Des Moines, Detroit, Fort

Worth, Green Bay, Indianapolis, Kansas City, Little Rock, Los Angeles, Louisville, Memphis, Miami, Nashville, Newark, New Orleans, Oklahoma City, Portland, Ore., Providence, San Antonio, San Francisco, Seattle, Toledo, Tulsa and Wichita. The Bell System companies plan to make the new service available first in cities where public necessity is greatest.

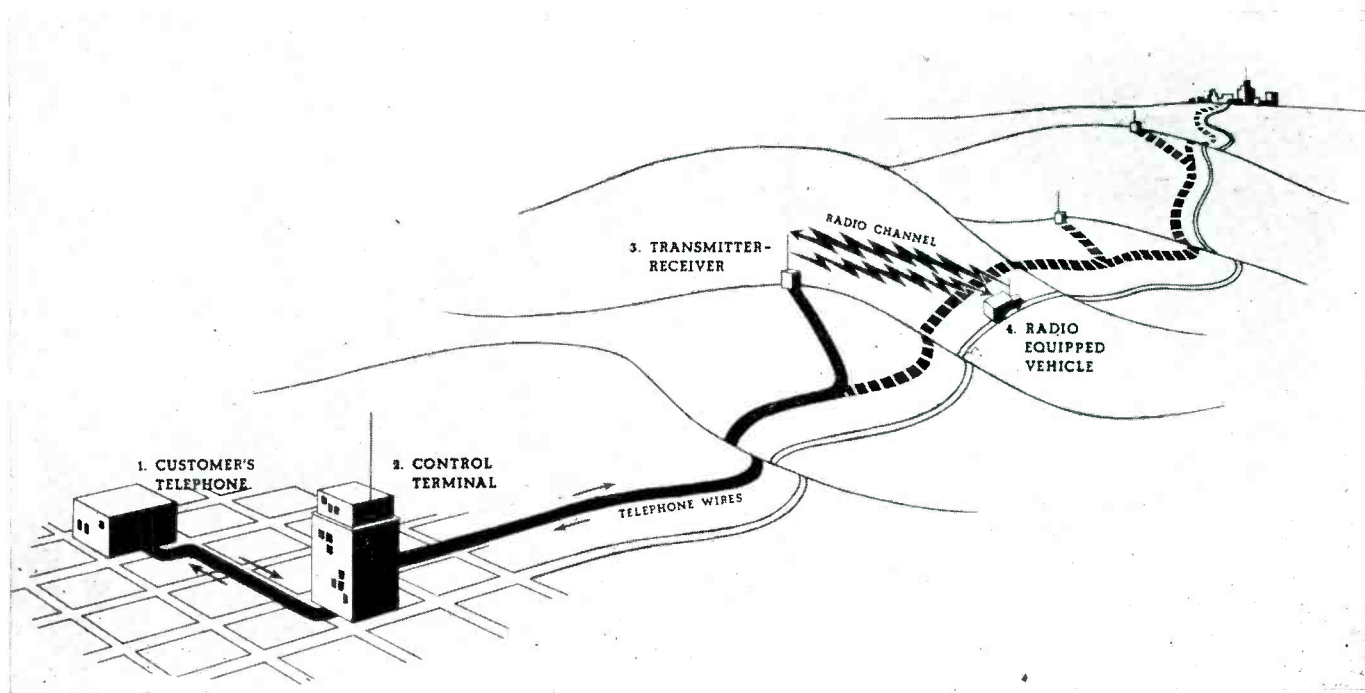
Telephones on automobiles, trucks or other mobile units such as boats and barges will be connected with the general telephone system, so that a subscriber to the general two-way mobile service can talk from an equipped vehicle to any one of the millions of telephones served directly by or connected with the Bell companies. Likewise, the occupant of an equipped vehicle can be called from any one of the millions of telephones.

In general, here's how mobile radio-

telephone service is expected to work in cities:

Calls to and from motor vehicles will be handled by special operators. The conversation will travel part of the way by telephone wire and part of the way by radio. If a caller at his desk wants to talk to the occupant of a certain automobile, he first dials or asks for the vehicular operator. He gives her the call number or designation of the vehicle. She sends out a signal on the proper radio channel by dialing the code number assigned to that particular vehicle. An audible or visual signal indicates to the car occupant that he is wanted. He picks up his dashboard telephone and the conversation starts. Under his fingers as he holds the telephone handset is a "push-to-talk" button which permits him to switch from receiving to sending.

The operator of a mobile unit can



An artist's conception of how the Bell System's proposed two-way vehicular telephone service may work on the more important inter-city highways in the post-war era. A customer (1) asks to be connected with mobile service. The special operator at the control terminal (2) routes the call over telephone wires to the transmitting-receiving station (3) which sends the signal on to the vehicle (4) by radio. A call originating at the vehicle would follow the same route in reverse. If the vehicle were beyond the range of the transmitter-receiver (3), the operator at the control terminal (2) would try the other transmitting-receiving stations farther down the highway until the driver answered the signal.

originate calls merely by picking up his telephone and pushing the "talk" button. This signals the vehicular operator and she "comes in on the line." He gives her the telephone number he wants and the call goes through.

In large metropolitan centers, it is probable that a number of fixed receiving stations will be employed, located throughout the area so that the relatively low-powered mobile radio sets will be within range at all times. The receiver nearest to the mobile unit will pick up the voice signals and send them on their way by telephone wire. It is planned also to have more than one transmitter in order to give full coverage.

For years, the Bell companies have furnished two-way radiotelephone service for coastal and harbor boats, ship-to-shore service for ocean-going ves-

sels and also shipping on the Great Lakes and inland waterways. A limited two-way vehicular service has for some time been provided in New York and Boston for emergency use by certain public utilities companies.

Urban mobile service will operate as separate radiotelephone systems for each metropolitan area served. A metropolitan system will be arranged to serve not only cars, trucks, buses and harbor and river craft operating within the area, but also other mobile units such as trolley cars, elevated trains and railway engines operating within the metropolitan area.

Preliminary surveys in a large number of cities indicate that mobile service will be used initially by business concerns or individuals operating vehicles or other mobile units within metropolitan areas where it is important that

headquarters keep in touch with their various drivers or vice versa. The list includes:

Ambulance services, armored car services, burglar and fire alarm services, construction contractors, doctors, express companies, food distributors (meat packers, dairies, bakeries, etc.), newspapers, oil companies, pick-up and delivery services serving department stores and other retail establishments, public service companies (electric light and power, gas, water, steam, transportation and communication), refrigerator services, taxicab companies, trucking companies, boats in adjacent rivers and harbors, and railroad switch engines.

Three classes of mobile service are contemplated:

1. A general two-way telephone service between any regular telephone and any mobile unit, with a three minute initial period and the usual one-minute overtime period.

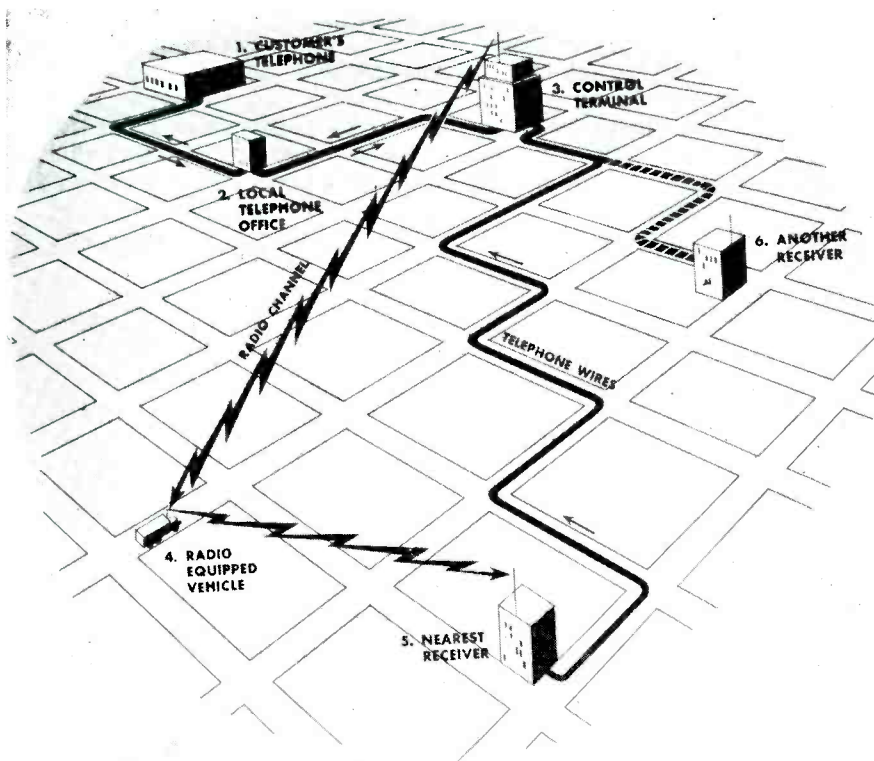
2. A special two-way dispatch service between a particular telephone at the dispatching office and specified mobile units. A direct line from the dispatcher to the telephone central office would be furnished as part of this service. A one-minute initial period and the usual one-minute overtime period would probably apply here.

3. A one-way signaling service to mobile units, to notify the operator of the unit that he should comply with some pre-arranged instruction, such as calling his office from the nearest public telephone.

Radio signals in the frequency range between 152 and 162 megacycles have been assigned for the urban mobile service. In general, transmission of these frequencies is greatly improved by mounting transmitting and receiving antennas on high buildings or on other commanding elevations.

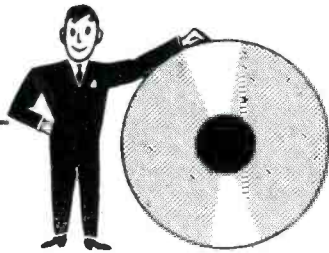
The Bell System plan is to use transmitters of about 250-watt power in the metropolitan centers. The mobile units will have power of about 15 watts. Each mobile unit will use a single antenna for both sending and receiving.

Another type of mobile radiotelephone service which will be tried would furnish two-way voice communications to motor vehicles operating on intercity highways and to boats on adjacent waterways. This service would require transmitting and receiving stations along the highways to be served. The mobile units would be equipped for receiving and sending, and with signaling equipment similar to that to be used for urban service.



PATH OF A TYPICAL CALL VIA THE BELL SYSTEM'S PROPOSED VEHICULAR TELEPHONE SERVICE IN CITIES

The customer (1) asks to be connected with mobile service. His call goes through the local telephone office (2) and on to the control terminal (3) where a special operator signals the vehicle he wants (4) by radio. The driver answers, his voice traveling by radio to the nearest receiver (5), thence by telephone wires, via the control terminal (3) and the local telephone office (2) to the customer's telephone (1). If the vehicle had been in the vicinity of another receiver (6) when called, the driver's answer would have traveled through the dotted telephone line to the control terminal (3). Large cities will be served by a number of these receivers to pick up the signals of the relatively low-powered sets on vehicles.



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Audio Amplifiers

Some Basic Considerations

By J. H. Platz*

(The material in this, and articles to follow, is taken from lecture notes developed by the author for use in a course in ultra-high frequency techniques and practices which was given at Illinois Institute of Technology to personnel engaged in testing of certain high and ultra high frequency devices. Subsequent articles will consider video amplifiers, square-wave testing, negative feedback, phase inverters and cathode followers.)

AMPLIFIER TYPES

AMPLIFIERS are classified in a variety of ways descriptive of their character and properties. One basis is in accordance with the frequency range covered, and leads to the classifications as audio-frequency amplifiers, video-frequency amplifiers and radio-frequency amplifiers. This discussion applies to audio frequency amplifiers.

Amplifiers are also classed according to the conditions of operation. From this the Class A, Class B, Class C, etc., are derived. The following material applies to Class A operation. A Class A amplifier is an amplifier in which the grid bias, alternating grid voltage and plate voltage are such that plate current flows in the tube at all times. Class A amplification produces less distortion than any other class.

Finally, amplifiers are also classified as voltage, current or power amplifiers. The following conditions apply:

1. **Voltage Amplifiers**—used for the amplification of voltages when little or no current (and consequently little power) is drawn from the output. Voltage amplifiers are our principal concern in this paper.

2. **Current Amplifiers**—which might

also be referred to as zero frequency amplifiers—used for amplification of small currents for the operation of some device such as a relay. An amplifier designed for this use may include several stages of voltage amplification.

3. **Power Amplifiers**—used for the definite generation of power output and working into a load that will absorb power and convert it to some useful purpose. Most power amplifiers are preceded by one or more stages of voltage amplification.

In truth, it is debatable whether or not a vacuum tube should be referred to as an amplifier. Actually the vacuum tube merely converts power supplied to its plate circuit into useful output of greater amplitude than the signal applied to its grid circuit.

DISTORTION

The "perfect" amplifier would be one which would provide the desired amplification and an output signal that would be an exact replica of the input signal—except for the greater amplitude. Unfortunately there are no truly perfect amplifiers and perfection in one respect is often attained at a sacrifice in some other respect. There are three general types of distortion. They are,

1. **Amplitude Distortion**—which exists when the output wave form contains harmonic energy which was not present in the input. It is mainly due

to the fact that the amplification factor and the plate resistance of most tubes are not constant over a wide range of signal excursion despite the fact that they are treated as constant quantities. Amplitude distortion can be held down by working an amplifier tube in a limited range where there is near linearity. Severe amplitude distortion takes place when a tube is operated outside its normal range and the distortion then becomes evident to the unaided ear.

2. **Frequency distortion**—which exists when all frequencies of an input signal are not amplified at the same rate. Note the difference between frequency and amplitude distortion. Frequency distortion tends to discriminate against some frequencies already existing in the input while amplitude distortion actually adds additional harmonic frequency energy during the process of amplification. Any amplifier with a plate loading circuit which contains even a moderate proportion of reactance will show a severe frequency discrimination. An RF amplifier with a tuned plate circuit shows very sharp frequency distortion although in this case the frequency distortion is desirable in that it prevents amplification of frequencies (particularly harmonics) that are not wanted.

3. **Phase Distortion**—which exists when the relative phases of the various

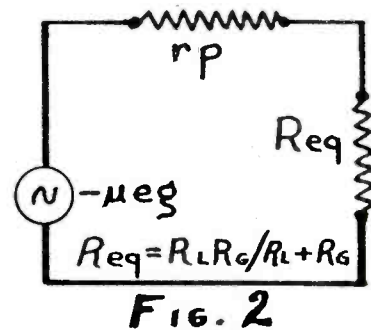
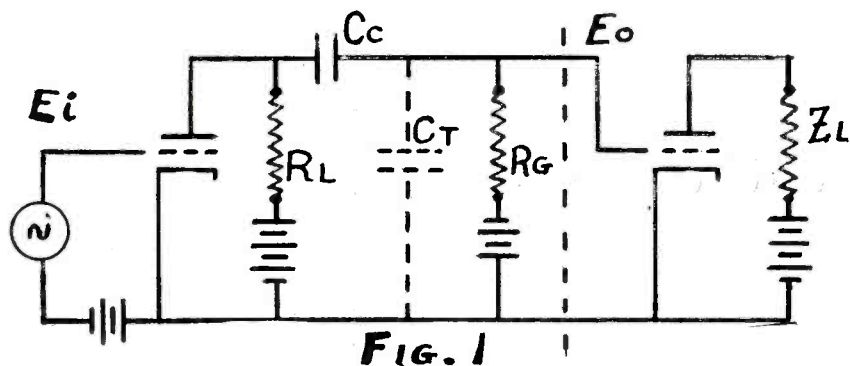


Figure 1—Basic resistance-coupled audio amplifier. Figure 2—Constant voltage equivalent amplifier circuit, where $R_{eq} = R_L R_g / R_L + R_g$.

* Control Supervisor, NBC, Chicago.

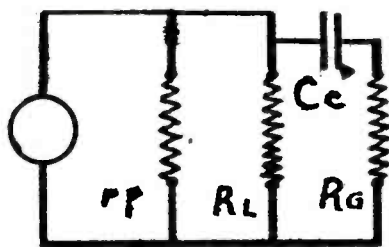


FIG 5

Figure 5—Constant current equivalent circuit at low frequencies.

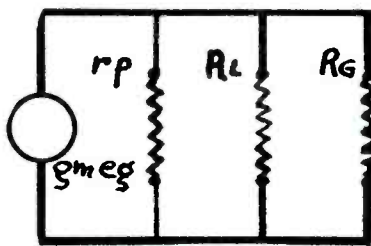


FIG 3

Figure 3—Constant current equivalent amplifier circuit.

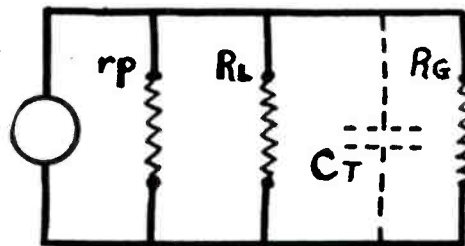


FIG 4

Figure 4—Constant current equivalent circuit at high frequencies.

frequency components in a complex input voltage are not preserved in the output. Putting it differently, the apparent speed or velocity at which various frequencies pass through the amplifier appears to vary so that they no longer occupy their original relative positions. Phase distortion is particularly important in the reproduction of pedestal signals and square waves. Frequency and phase distortion generally exist together and the correction of one will generally correct—to a certain extent at least—the other. In audio work, moderate amounts of phase distortion will not be detected by the ear although it will often cause trouble when an attempt is made to reduce frequency distortion by means of negative feedback. On long distance program repeater circuits, phase distortion has been a serious difficulty because a great number of stages of amplification are used in such service and relatively small amounts of phase distortion per amplifier add up to a serious total phase distortion which is obvious and displeasing to the ear. Phase distortion and its correction will be considered both in this and subsequent articles.

EQUIVALENT CIRCUITS

The fundamental circuit of a two-stage resistance-coupled amplifier is shown in Figure 1. The condenser C_t , shown in dotted lines, represents the sum of all capacities to ground, including plate to cathode capacity of the first tube, grid to cathode capacity of the second tube, capacity to ground of the coupling condenser, etc. This capacity, though generally only 20 to 30 mmfd., seriously affects the amplification at high frequencies, causing both frequency and phase distortion in the upper range.

The circuit of Figure 1 can be simplified to equivalent circuits which eliminate power supplies and represent the vacuum tube as a generator. There

are two types of equivalent circuits in general use. Figure 2 shows the "Constant Voltage" equivalent circuit in which the tube is represented as generating a voltage equal to $-\mu e_g$ (the negative sign indicating the 180-degree phase shift in the tube). The generator has an internal impedance or resistance equal to the plate resistance of the tube. The load resistance is the parallel combination of the plate load resistor and the following grid resistor. At the middle range of frequencies for which resistance-coupled amplifiers are used, both C_c and C_t can be disregarded, their reactances being very low and very high, respectively, compared to the resistances in the circuit. When using the constant voltage equivalent circuit of Figure 2 for calculations, the gain is determined by the formula

$$A = (\mu R_{eq} / R_{eq} + r_p) \quad (1)$$

Figure 3 shows the "Constant Current" equivalent circuit. In this case, the tube is represented as a generator of a constant current equal to $g_m e_g$ which is applied to a combination consisting of plate resistance, load resistor and grid resistor all in parallel. For this type of equivalent circuit the gain is calculated by the formula

$$A = g_m R_{par} \quad (2)$$

where the quantity R_{par} is the above mentioned parallel combination of plate resistance, load resistor and grid resistor. It should be obvious that if R_L is very low compared to r_p and R_G , the net value of R_{par} will closely approximate the value of R_L alone and the approximate gain will be

$$A = g_m R_L \quad (3)$$

Further, under this special condition of very low load resistance the gain of the stage will vary directly with variations of R_L .

It can be shown that the circuits of Figure 2 and Figure 3 are electrically equal and both will give the same calculated gain. The constant current cir-

cuit is most commonly used in video amplifier considerations because of the very low values of load resistor used in video circuits. The constant voltage equivalent is generally used when R_L is greater than 0.1 of the plate resistance of the tube. Thus normal audio amplifiers would ordinarily be considered by means of the constant voltage equivalent circuit.

PHASE SHIFT AND GAIN AT HIGH FREQUENCIES

At higher frequencies the series effect of the coupling condenser C_c can still be disregarded but the effect of the parallel capacities C_t must be considered. As the signal frequency increases, the plate load circuit is no longer a pure resistance but becomes a resistance shunted by a capacity. The effect of this reactive load circuit at high frequencies is two-fold; the gain is reduced and a phase shift is introduced. The phase shift will be considered first.

The phase shift results from the fact that voltage across a condenser lags the current through it by 90 degrees. A vacuum tube actually produces a varying current. As shown in Figure 4, this varying current passes through the tube plate resistance, the load resistor and the grid resistor (in the constant current circuit) and generates a voltage across them that is in phase with the current. At the same time the varying current alternately charges and discharges C_t , creating an alternating voltage across C_t that lags the current by 90 degrees. As input frequency is increased, a greater proportion of the varying current is passed "through" C_t and the combination behaves increasingly as a pure capacitive circuit. Thus as frequency increases the voltage applied to the following grid increasingly lags the current applied to the network. The phase angle will be

$$\theta_n = \tan^{-1} (R_{par} / X_{Ct}) \quad (4)$$

Examination will show that the phase shift will not increase linearly with fre-

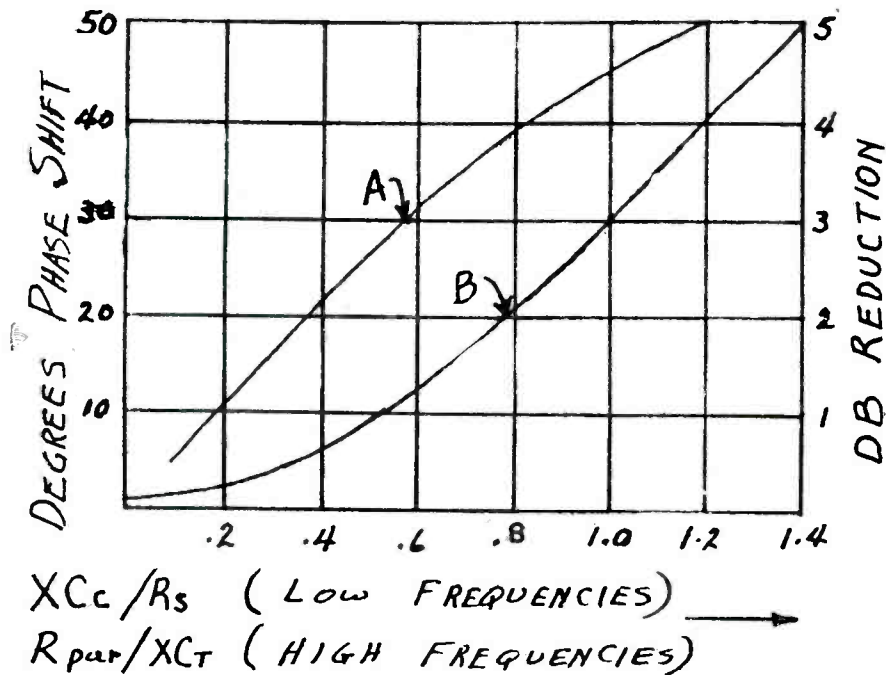


Figure 6—Variation of phase shift and gain reduction with variation of X_c/R_s or R_{par}/X_{Ct} . Curve "A" is phase shift (lead at low frequencies, lag at high frequencies). Curve "B" is DB Reduction at high and low frequencies.

quency. This is an undesirable condition which will be discussed further on in this series.

As mentioned, a reduction of gain also takes place at the higher frequencies. As the frequency increases the parallel reactance decreases resulting in a reduction of the net load impedance. The extent to which the amplification falls off at high frequencies is determined by the ratio that the reactance of the shunting capacity C_t bears to the value of R_{par} . The loss in amplification due to this effect can be estimated by consideration of the fact that the gain is 70.7% (-3db) of the mid-frequency amplification at that frequency at which the shunt capacitive reactance X_{Ct} equals R_{par} . Thus it will be seen that the gain at high frequencies can be maintained at a level more nearly equivalent to the mid-frequency gain (with consequent reduction of phase distortion) by reducing the load resistance but in so doing the actual effect is one of reducing the mid-frequency gain rather than increasing the high frequency gain. The relative gain at some high frequency f_h is given by the expression:

$$A_H = A_M / \sqrt{1 + \tan^2 \theta_h} \quad (5)$$

A_H = Amplification at f_h

A_M = Amplification at mid frequencies

θ_h = Phase shift at f_h

PHASE SHIFT AND GAIN AT LOW FREQUENCIES

At low frequencies the voltage developed at the grid of the second tube of Figure 1 is the voltage developed by current flow through R_G . In turn, the current in R_G also flows through C_c . The parallel capacity C_t can be disregarded but C_c definitely enters the picture. Figure 5 is the constant current equivalent circuit for low frequencies and consists of a series resistance-capacitance configuration. The current in a capacitive circuit leads the voltage in the circuit so the current in R_g will lead the voltage applied to the entire circuit. So also the voltage developed across R_G will lead the voltage applied to r_p and R_L in parallel. This leading phase becomes increasingly evident as the reactance of C_c increases, i.e., as the frequency is reduced. The actual phase angle at some low frequency f_l is given by the expression

$$\theta_l = \tan^{-1} (X_{Cc} / R_s) \quad (6)$$

$$R_s = R_G + (R_L r_p / R_L + r_p)$$

X_{Cc} = Reactance of coupling condenser C_c at f_l

θ_l = Angle of phase shift at f_l

In this case the phase shift is leading as compared to a lagging phase at high frequencies. As with the high frequencies however, the amount of phase

shift does not vary linearly with frequency. It will be noted also that when very low values of load resistance are used, the value R_s in the above formula becomes approximately equal to R_G .

As the reactance of C_c increases (due to reduction of frequency) the current through R_G will also decrease resulting in a decreased voltage across R_G at low frequencies. The output falls to 70.7% (-3db) of the mid-frequency amplification at the frequency for which the reactance of the coupling condenser equals the equivalent resistance R_s in the above formula. This reduction in output can be lessened somewhat by higher values of coupling condenser and grid resistor but these are in turn limited by other conditions so that special low frequency compensation must be used when flat response is desired at very low frequencies. Lacking such special compensation, the gain at some low frequency f_l is given by the expression

$$A_L = A_M / \sqrt{1 + \tan^2 \theta_l} \quad (7)$$

A_L = Amplification at f_l

A_M = Amplification at mid frequencies.

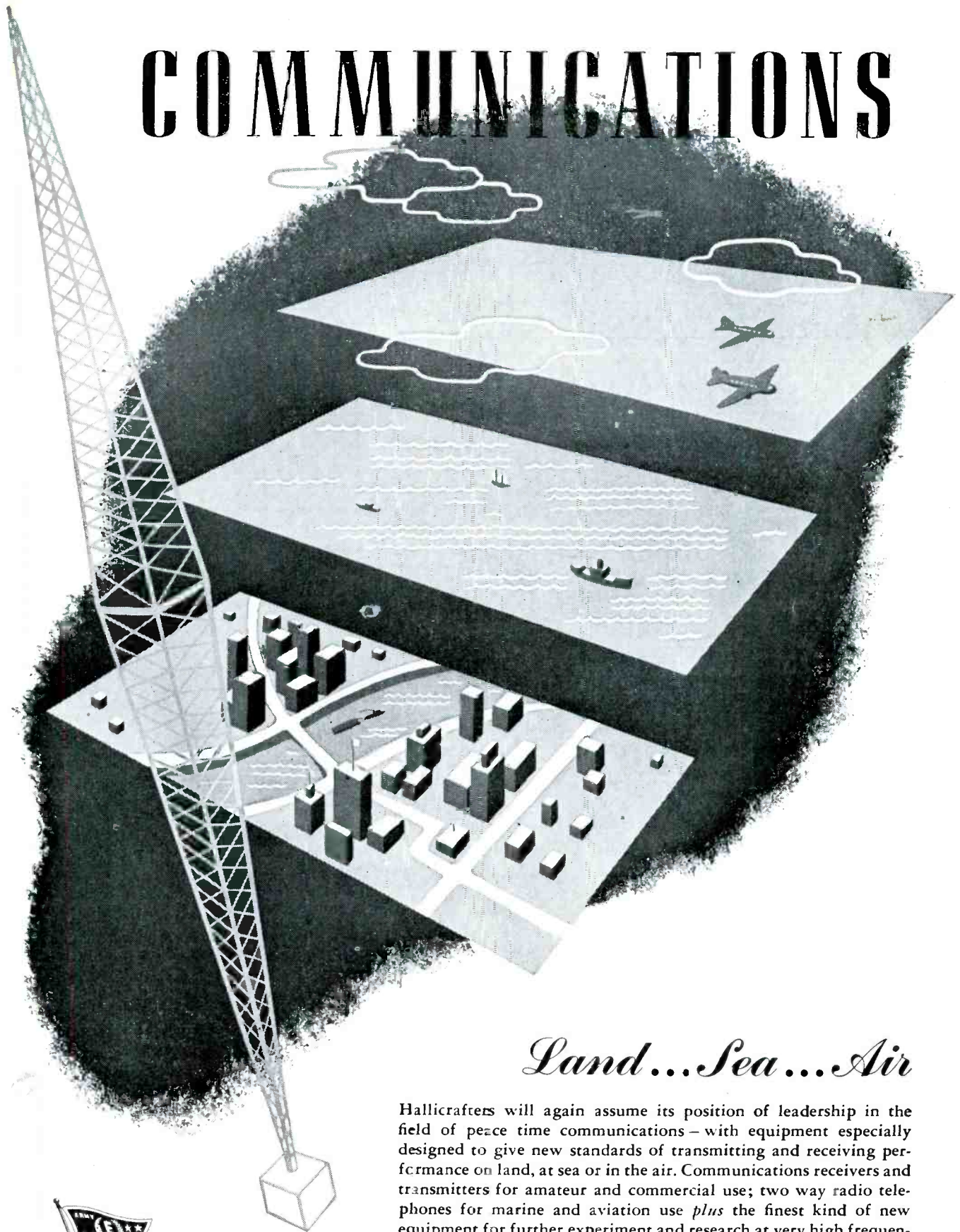
θ_l = Phase shift at f_l .

The variation of phase shift and gain at high and low frequencies is shown graphically in Figure 6 which shows the results of equations 4, 5, 6 and 7 for various values of X_{Cc} , X_{Ct} , r_p , R_L and R_G .

"Aboard U. S. S. Missouri—50 miles off Jap mainland—First Carrier Task Force strike against Tokio—February, 1945—Les Nichols and myself—Ed Franke." The photo shows them with the Recordgraph Film Recorder which has been used almost exclusively for combat sound recording.



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—Photo by Joe Conn

N. Y. - NBC NEWS

By G. F. Anderson, Jr.

WELL, let's see, a problem: How to write this so that it will come up to the standard set last month by one 'Walter "The Sorcerer" Mullaney'.

My goodness but that boy really got around with his news gathering and now we have to wear out precious shoe coupons to equal his efforts. Soooo here is some chaff and chatter and may it be good.

We will start with Master Control this month and give it the lead-off place. A few new faces are seen in Control this month; new only to the Control Room, but not to Broadcast Circles. Journal Editor, Ed Stolzenberger, has "retired" from the Engineering Lab and Television, after concluding six-plus years of service in these departments, to give his efforts to that part of the Company *that pays the bills*, and is now in Master Control. Prior to his six years in tele, Stolzie had spent six years as NBC-NY Maintenance Engineer where he developed, among other devices, the coil-less fade-patch and the portable program applause meter, both of which are still in daily use. In addition to his twelve years with NBC Engineering, Ed has a five-year service pin from the Western Electric Co. and A. T. & T. Co. Transatlantic Telephone, where he had been assigned respectively to Lawrenceville (hi-freq transmitters), Rocky Point (200 kw long wave), Netcong, N. J. hi-freq receivers, and the 24 Walker Street Transatlantic Control Room. He has also been active in NABET affairs, having served several years as Councilman and Ass't National Secretary-Treasurer, and down through the years Stolzie has been progressively Chapter Assoc. Editor, Assistant Editor, Managing Editor and Trustee, and since June, 1940, he has been Editor and Publisher of this Journal, administering a national staff of several dozen persons. Under his management, the Journal has attained national prominence in the industry, and its punctual appearance every thirty days is a living monument to his efforts.

Another new name to Control is Ernest Barber (no, that's his name, not his vocation!) leaving behind him the humdrum life of a studio engineer (I can say that because I'm in Field).

Another studio engineer who had an envious reputation of being a mean man with a slipstick, Clarence 'Westy'

(Continued on Page Thirteen)

N. Y. - ABCO NOTES

By Pat Simpson

WHILE your regular columnist, Gil McDonald, is taking a well earned vacation, yours truly will try to take over. Vacation time leaves us with a dearth of news, but here are a few dots and dashes—As Gil told you in the last issue, Fred Moore worked a tough show with Marty Andrews, ABC Production man, and the result was that Marty spent ten days in the hospital—wonder if that is why Fred was sent to cover the first few Savoy Ballroom pickups? After all, Fred is a pretty husky boy—what's this we read in the Classified Ads about the boys at Bound Brook selling dog houses?—REAL ones, not the kind one uses to house antenna coupling equipment—As Bert O'Leary puts it—"THEY sell dog houses and have the nerve to talk about us playing so many E. T.'s"—John Norton all hepped up over the swell breakfasts he gets every morning while covering the Fitzgeralds' Program from their home—Bob Dougherty, lucky guy, spent a good part of his Florida vacation at ABC's expense—while he was there, Breakfast in Hollywood came to town and he was held over at the last moment—ABC War Correspondent Bob Massell last heard from in Paris after a brief London vacation—seems as though he wants to stay over there awhile longer—Welcome home to two of our favorite announcers—George Hicks and Jack Fraser both vacationing after a long assignment overseas—Gil Markle (NBC SE) having the American boys set him right on his darkroom troubles—bet that is why he wanted to come with us a short while back—John O'Neill cooling off up in the clouds in his Piper Cub these sultry weekends—73's to Gil McDonald for the swell job he did on the Pawling NY Seventh War Loan nemo—Wonder how Walworth feels now that he has to "work" again—his Spotlight Bands show has gone to another network so he's back in the saddle again—The boys are standing by for the next Willie Glasscock production—the last Bill hasn't lived down yet—(Aside to Gil McDonald—see if you can get copies of the pictures wherein Bob Dougherty was conked with a Florida cocoanut for the next Journal)—Boys at WJZ busy painting, plumbing and what not—they promise to have their new plant finished before much longer—that about winds it up for now, fellows, so I'll turn it back to you, Gil.

NEW YORK

(Continued from
Page Twelve)

Westover is among the little cozy group at the Master Desk. We wonder if Westy still uses his log tables to read the studio assignment sheets.

Oh, my goodness, we almost forgot to mention that the fact that Harold "Leetle Luedeke" is another former Studio Engineer that has deserted the Green Fields for the cool and refreshing atmosphere of Master Control.

Herb Riedell, SE, formerly of WRC, Washington, reports that he says whether he prefers Washington or New York. His only comment is, "My entire family lived in New York and I came from New York."

Willard "Red" DuBois, SE, reports that the Waring show is very good, and that the only thing that is worrying him is when is it going to Shawnee on the Delaware.

There are many new names and faces in the lounge this month, and to all we extend greetings and stuff, and if you are not mentioned by name, don't feel that you are forgotten.

The Maintenance department does not have too much to say for itself this month other than Gordon Windham is back from vacation and had an enjoyable time at Montauk Point, L. I., and Dave Maloney is now taking his yearly rest from the duties of a Maintenance Engineer. It is expected that any difficulties that arise due to equipment failure will be taken care of while Dave is on vacation.

The Recording department reports that the records are still spinning and that things are really going in circles. Jack Holmes is resting in Darien, and will be back to crack the whip in a week or so.

The San Francisco cavalcade is back in New York and George Butler, FE, still has another day or two left of his vacation, as this is being scribbled, John Morrissey, RE, is also around.

From WEAf, we find that Robert Clarke, Station Engineer, has returned to the Development Group, and that Jack Flynn has been made Station Engineer and Vincent Barker, from Empire State Television Transmitter, is now Assistant Station Engineer.

Ross Griffiths, who left studio a while back, has now returned, and is a transmitter engineer at WEAf.

The following are the results of the recent New York Chapter Elections.

Reelected Chapter Chairman: Harry Hiller, SE. Councilman: Field, Max Jacobson, Field Supervisor. Maintenance: Dave Maloney, ME. Master Control: Andrew Thomson. Recording: Louis Palley, RE. NBC Studio: Henry Gabrielson. ABC Studio: Pat Simpson. WEAf: Charles Francis. Bound Brook: Stanley Crabtree. WJZ: William Mullaney. RCAV: Fred Lynch. Chapter Treasurer-Secretary, reappointed by Harry Hiller, is Charles Bennis, MCD.

A wee bit more news about a newcomer to studio. Mr. Bedi Zeki has joined the NBC Engineering Department, and Zeki, as he is addressed, hails from Istanbul, Turkey. He came to this country in 1935, and went to RCA and studied radio and thence to filmdom. All this at the expense of the Turkish government. Zeki went back to Turkey in 1936, and returned to New York this year at his own expense to learn some more about American radio.

Dudley Connolly, SE, has been sporting a broken

finger as the result of not getting it out of the way quick enough. It seems, according to his story, that he was at the Persian Room of the Hotel Plaza engaged in a nemo for NBC when he let a nemo table lid drop on his hand and lo—one broken finger. Gee, what a person will do to himself.

When General Eisenhower visited New York, several of NBC Field Engineers had a busy time. Jaime Hackett was busy on the RCA Roof communicating with George Butler, who was in the Mobile Unit with the Eisenhower caravan. Harry Alexander was at City Hall, and he says that there were more people there than there are in New York. Walter Mullaney was out at La Guardia Field, and a sorrier engineer there never was.

It seems that a commercial kept the arrival of Eisenhower off the air.

We have discovered that James Hackett does not like pets. His sons have tried to sell Jimmie on the idea of raising pigeons and rabbits, and they were turned down flat. Jaimee did say that he almost bought a pony for the youngsters. But that it cost too much to have it transported from the middle west. Someone suggested that on the next nemo that Jaimee goes on that will take him in that direction, he should buy the pony and then ride it back home. Then came the Classic remark, "When are you coming East Old Man."

Oh, yes, before we close, we would like to say that George Anderson, FE, was seen around here with a beard, Vandercook style, but it only lasted a day. He grew it, he says, on his vacation. No pictures were taken.

And now, before adieu, we report that George Butler has left the mule hauling department for Television Field. We'll be looking for you GB. Support the War Bond Drive.



The short neat figure in the center of this photograph is Jack Raper—America's oldest columnist in point of years of column writing. Mr. Raper has written the column, "Most Anything" for the past 50 years in The Cleveland Press. The half-century was marked by WTAM's Music Director Lee Gordon as an opportunity in which to dedicate a broadcast to Mr. Raper. Pictures from left to right are CHARLES OTIS, prominent Cleveland businessman and life-long friend of Mr. Raper, Mrs. Raper, Mr. Raper, Lee Gordon and Joseph Mulvihill who is heard on the announcing end of Gordon's "Do You Remember?" Monday through Friday mornings to the N.B.C. network.

Chicago-Corn from a Cob Reporter

By Kermit A. Slobb

HERE I am again, after a fairly pleasant three-week vacation. Stayed at home all the time, and found out it is not a bit cheaper that way. Won't have much in the way of news this month because of the vacation, but hang on just the same. Did decide to give up the Chicago editorial idea, since the whole column is practically an editorial.

As stated last month, I have more dope on Paul Clark, who is the first Chi engineer to return from the Armed Forces. Paul went into the Signal Corps in April of 1942 as a Captain. Spent sixteen months with GHQ radio in the South Pacific Theatre, mainly at Guadalcanal, New Georgia and Bougainville. Incidentally, Paul made the first broadcast from Guadalcanal on the Army Hour in October, 1943. Promoted to Major in January, 1943. In December, 1943, he came back to the United States to become a part of the Army Airways Communications System, and in January, 1944, joined the Sixth Wing Headquarters at Manchester, New Hampshire as Executive Officer. Again promoted in

September, 1944, to Lt. Colonel, which rank he held when he left the Army recently. Paul tells me he had done quite a bit of flying, since he had to inspect the AACS stations in the Sixth Wing area, which at one time included a rough circle extending from Central and Eastern Canada to Labrador, Newfoundland, Baffin Island, Greenland, England, the Azores and Bermuda. Sounds like quite a chunk of latitude and longitude. Paul has just completed about the shortest stay ever seen at NBC though, since he is leaving July 15 to work for RCA in Broadcast Sales. Lots of luck, Paul.

Found quite a few changes when I returned after three weeks absence. Harold Royston, formerly of NBC Field, has gone into Master Control, and Art Hjorth goes from NBC Studio to Field. By the way, I want to thank Art for the fine pictures he takes for this column.

I have lousy luck with typesetters. You

probably didn't notice how the gag two months ago about Chanel No. 5 was misspelled. Reminds me of the time I wanted to make the WAKE, a column in the Chicago Tribune that uses amateur gags (and mine are, brother!) I sent them one about a Vice-President with a Hardware Firm, and of course they set it up as Vice-President and it didn't make sense.

Bev Fredendall has been re-elected Chairman of the Chicago Chapter. At the time I write this, the new Councilmen elected are: Mingle, WMAQ; Rawson, WLS-WENR; Davis, Supervisory and Johnson, Nite Studio. The others were ties and will have to be balloted again.

The Blue Network changed over to the American Broadcasting Company while I was away. Again sticking my neck out, will say that I think ABC is a poor choice of name for a network.

(Continued on Page Seventeen)

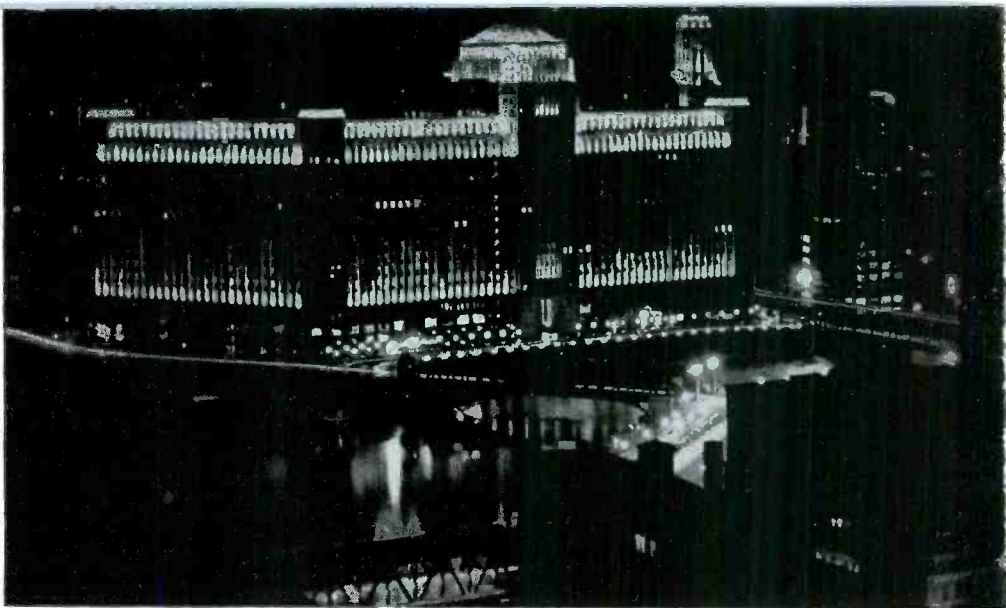
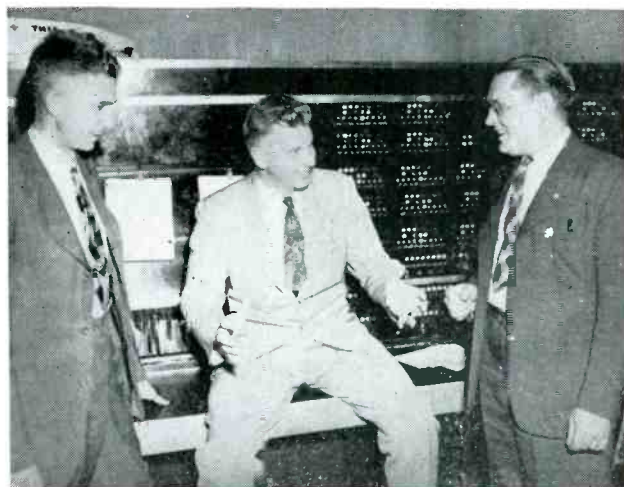


Photo by R. R. Jensen



Meet Helen Hawthorne, fellas. Helen has been with ABC about two years, the last year with our Chief, Ed Horstman. Yep, she's still single. (And some dopes only visit the office to get their paychecks!)

Below, left to right: Charley (Out-of-focus) Corliss, Paul (You should have seen the one that got away) Clark, and Jim (The Great Profile) Platz.





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This Report Comes to You by Way of San Francisco

YOUR reporter goes away on a vacation and what happens? Vernon Harvey, the engineer who was mentioned in a previous issue only because he complained that he never saw his name in print, double-crossed all his "pals." He stood up and took the vows without so much as mentioning it to any of his fellow engineers until a couple of weeks after he did it. He was always near the top of our list and this promotes him to the top position. Anyway—congrats Verne.

All of our visitors are gone now and the plant is again quiet. We all enjoyed their help and hope to have the pleasure of working with them again. Frank Schnepfer had to rush to Macanac Island in Lake Michigan to handle the

Bryan "Duke" Fuhrman of the San Francisco maintenance department shown with two targets shot at 100 yds. with a .22 cal. Remington.



By
Jack
Van Wart



governors' convention. George Butler and Herb Wyers departed a few weeks previous to the others. Hal Schneider made a second visit to Los Angeles on his way back home with John Morrisy. The Press Club of San Francisco will miss all these fellows. John did his "Boy Scout" deed for one day when he detected an error in the hanging of the Stars and Stripes in the Press Club and informed the management that the blue field should be in the upper left corner and not the upper right corner. Could this be a result of his War Correspondent experience????

Your reporter would like to take this opportunity to correct a statement made in a previous issue in which it was stated that the notes of the NBC chimes were B E G. The correct information is that they are G E C which were originally intended to stand for General Electric Co.

We in San Francisco can rightfully boast of having one of the best marksmen in this part of the country. He is Bryan Fuhrman of our maintenance department. In a recent national individual match, Duke made a 272 out of a possible 300. The high score was near 285. In this match there were 1,978 entrees and when it was all over Mr. Fuhrman found himself in the number 130 place. Duke has collected, during his many years of competition, numerous medals and trophies which he oddly enough keeps in an old cigar box. He says he just likes to shoot and doesn't care about the rewards unless it is legal tender. Duke, with three team mates, set a world's record in the four man team match which has yet to be beaten as far as he knows.

If the UNCIO did nothing else it streamlined Sam Melnicoe, ME. Sam was elected to crate the equipment which was borrowed from the other NBC studios for use during the Conference. After all was over, the last report was

that he came out even with the crates and equipment.

There is a certain amplifier in the recording room that will be remembered for a long time by the maintenance department. It all started when the recording engineer on duty reported low level and excessive hum in this particular amplifier. The maintenance department, in the person of Duke Fuhrman, struggled to remove it from the rack and found numerous condensers which were very tired. Those were replaced and she was fired up and the results were very favorable. Everything was as it should be until it was placed back in the rack. Tone was fed into the amplifier and practically nil came out. All the connecting loops, etc., were checked and rechecked and it was decided that the only thing to do was to take it out of the rack once more. This continued a total of three times until finally just before taking the amplifier to the roof to throw it over, it worked and is still working; why, they can't seem to figure out! Oh well, radio is a thing of the past anyway.

All the supervisors are on vacation now. With Bob Shover, RE, Lee Kolm, MCR, and George Dewing, SE, returning, it was time for Oscar Berg, Maintenance Supervision; J. Alan O'Neil, Recording Supervisor, and George McElwain, Field Supervisor, to have their time off. Oscar's son received a 10-day furlough from the Marine Corps at the same time, so we imagine that a fine vacation will be had by all in the Berg home.

ARC-OVERS from KGO
Transmitter
By KEN MARTIN

MYRON CASE took off for his vacation June 18th, with plans for an approved war-styled vacation—just "fixing up" his new shack

out in San Leandro, but best guess is that Myron will wind up kicking his heels down on his Sunnyvale farm before he's due back around July 8th.

Along about THAT time, George Armen (The secret's out!) Irwin will have his long, slinky Olds all primed for a nice long rest in the family garage whilst the Irwins bus to Yosemite—the lucky people!

Pop Perry Sos'd in from his extended vacation for an extra week. Pop's a sick man and undergoing some rigorous light treatments. John Winters will continue to pinch hit for Pop.

Far be it from us to cast aspersions and derogatory remarks, but some dreary mid watch, that guy Frank Barron is going to SLIP and have a nasty compound accident with that wild "bug" he insists on using to intimidate the SX-GO-BN wire! Pick up the pieces Frank, we warned you it was a booby trap.

Councilmen are up for election again but GO has been asleep at the post—probably be able to report the PEOPLE'S CHERCE next presstime. Herb Kramer has been doing a magnificent job for GO and he's good enough for our money. Understand BN—otherwise KPO transmitter has plunged the inestimable and capable Mort Brewer into POLITICS as their Councilman. A worthy NABET man and just between us, if we ever have an old-fashioned tug-of-war I want Mort for the anchor man—he's plenty solid!

Of ALL the times to go househunting—but "Genial" Gene Nickels has the bee in his bonnet and is actually dickering for ACREAGE out San Leandro way. Much worried looks, map reading and telephoning going on right now. 'Gene is benefitting from a liberal education in realty agents to whom he refers (always a master of understatement) as ROAD AGENTS.

Chief Engineer Hank Dunton, chipper and back on the job after his all too short vacation "over a hot barbecue pit" and in the hospital, reports successful removal of the wen on his shoulder but answered last issue's riddle only by saying it weighed 4 pounds—the which is SOME wen!

"Good Boy" Blanchet, this issue—ALSO RAN.

We ominously predict startling news next issue, involving J. Wallace "Buck Rogers" Downs if he recklessly persists in antagonizing his TFARD DRAOB whose harried Chairman regards Wallace's suspicious overtures with a cautious and jaundiced eye. Hope Wallace doesn't find himself in the position of the gent who had the tiger by the TAIL!

Mrs. Herbert Kramer is back in the nest again after a sojourn of five weeks in Utah but you STILL can't get that guy Herb on the 'fone. Remind me to find out he does this and will write it up.

GO had an "oily" summer—filtering the plate transformer oil—quite an event, considering it only takes place once every so-many-years. 30 for now.

CHICAGO

(Continued from
Page Fourteen)

Somewhat like a man being tagged with the name Judas, since ABC is associated with so many defunct organizations. In the Chicago Telephone Directory I find 19 firms using American, such as American Button Company, American Broom Company, etc.; and 58 firms using the name ABC. In the same directory, I find NO firms using the letters NBC or CBS or Columbia ——— Company, and only 13 firms using National ——— Company, and they seem to steer clear of using NBC, as for instance, the National Biscuit Company uses NABISCO rather than NBC.

From ABC to XYZ. Seems that the ABC had a half-hour show from Mackinac Island, Michigan, the other night which was cut off the air because they weren't using NABET men for the pick-up. WXYZ was the station furnishing the engineers. ABC alleges NABET'S interpretation of the contract was in error, but Fredendall says it was a clear-cut violation of our contract. Fun!

If Stolzenberger reads this column, maybe he will explain how come his address is 116-03? Whatinell does the -03 stand for?

Get quite a kick out of Norman Dewes' column on Hollywood. Very clever stuff, but is that guy hard on the poor typesetter who has to use capitals every third word.

Interesting article in the American Magazine this last month on \$1,000 a week actors. Mentioned seven actors or actresses (in New York?) who make \$40,000 to \$75,000 a year. I would be willing to bet that there aren't many in Chicago radio who do that well. Imagine the top people here get from \$15,000 to \$30,000. Tried to get some info on that, but couldn't. Maybe it's none of my business, but I think that we'll get more fees here if the actors, announcers, singers and sound men get more.

Does your producer act different lately?

I hardly know any more to tell you about the WLS studio group going into IBEW. We had a General meeting just

before my vacation in which that matter came up. Burr Whyland, a WLS studio man, was asked why they had joined IBEW, and all I got out of his answer was something about "conditions". When pressed for a more explicit answer, he stated he couldn't tell what those conditions were. So that's that.

The meeting was rather interesting. Our Prexy, Mr. Powley, gave a speech and answered various questions. Did understand that we are being given "propositions" by IBEW, LATSE and ACA. These to be taken up at a meeting of the National Council in August. How about AFRA?

There was much discussion of IBEW at the meeting by a small "pressure" group. Here's the best laugh of the whole evening: After a log discussion about IBEW by two or three members of the "pressure group" who were holding the floor, Art Hjorth finally got up and yelled, "Can a NABET man say something at this meeting?"

The gist of the matter came up when it was discovered that the "pressure group" had Krusel, of the IBEW local, all primed to give us a speech IF we wanted it. Well, we didn't want it, and the guy wasn't allowed in the room. Which only goes to prove what I said about IBEW cooking their own goose. After the meeting the guys stayed around to have a discussion on problems peculiar to studio engineers, particularly on relations with production men. Very interesting and educational. See you next month.

(Mr. Slobb: Very glad to reply to your column queries; first, we definitely read the highly-amusing stuff from around the country; read Mr. Dewes' column—his wit and style are unique; one of these fine days you'll be able to say, "I knew him when we both wrote for the same Journal." To your second question, the street numbering system in the VERY ALERT Richmond Hill (R. H. Chamber of Commerce note!) is the last word, and after I lift the window shade a bit, you'll see the light; example: 116-03 91 Av. In this system, the Avenue cannot be deleted; to tag the 91 as the Avenue, automatically tags the 116 as the intersecting Street. The -03 indicates the second building lot on the odd-numbered side of the street. If you address us as 91 Street, the 116-indicates 116th Avenue, which is miles from here. Further, the 116-03 indicates we are on 91 Ave., between 116 and 117 Streets. Very simple for strangers to find their way. We actually occupy the corner and second lot, and therefore could legally use 116-01. Hope this will permit you to sleep better! Regards—Ed S.)



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National Broadcasting Company

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FROM UP THE MOHAWK

By William J. Newt Barnes

ELECTION day along the Mohawk has come and gone, two full months before bass season opens. After tallying up the score, here are the results:

- Don Morey.....Chairman
-Councilmen
- Ken Durkee.....Television and FM Transmitters
- Jack Shay.....Television Studios
- Fred Vert.....WGY, WGEO, WGEA, WGEX Transmitter
- Ruth Wallgren.....WGY, WGFM Studios (Women)
- Horton C. Mosher.....WGY, WGFM Studios (Men)
- Stan Godel.....Sec'y-Treasurer

Don Morey has done such a swell job for the chapter that he was re-elected un-un-am-im-ous-ly-ly NUTS \$\$\$%&*(' any way every one voted for him. (Of course, rumor hath it we have a goodly supply of stationery on hand and we hate to waste paper.)

Stan Godel being a new poppa has proven him a wide-awake guy, so-o to him goes the appointment of Sec'y and Keeper of the FUNDS. Our thanks go to Hal Bergman for his fine work in that capacity the past year.

Due to large number of YOUNG LADIES in the WGY, WGFM studios, RUTH WALLGREN was elected to serve as council ? something or other with Hort Mosher. Gess the girls will have a mother now! Or should we call her, "DEAN OF WOMEN."

A long green cutworm got past the guard at South Schenectady the other day and chewed off a couple of Oley's tomatoe plants. (Mr. Olman) (Antenna Maint.) BOY! WAS HE MAD!

Hort Mosher's glass arm got the best of him so the job of digging up the stuff goes to a REBEL. Had to come to NEW YORK to find that DAM YANKEE was two words.

Joe Gagne comes to South Schenectady as vacation relief. Funny how all the vacations fall on night tricks, HUH! Joe?

Well I see Slim is waiting to take me fishing, so business before pleasure, gotto go now—

DEWES' DAFFY DICTIONARY

- Cycle:** Half of a bicycle . . .
- Permeability:** Ability to purr and meow at the same time . . . (cats)
- Lines-of-Force:** Any good line that works . . .
- Joules:** The pay-off . . .
- Shot-Effect:** Never leave guns lying around . . .



Beryl Wallace of Hollywood

The revealing feud for the title of "The Broadcast Engineers' Sweetheart" continues unabated—WE HOPE! Comments on the contest indicate that *this* Journal is not only read, but very carefully scrutinized. Tha's good!—Ed S.

from HOLLYWOOD . . . By Norman Dewes

Balboa, California

HI, FELLOWS! Norm is down here on his vacation, and I haven't been able to get him out of bed since it started. He gets up in the middle of the night and raids the ice box, makes the rounds, and then falls back in for another twenty-four hours. I kept telling him that the deadline for the column was here, but his only reply was, "Fooy on the column. Come here honey, I want to talk to you." I brought the portable down tho, and managed to find a handful of smudgey, unreadable notes in his coat pocket, written on the backs of old envelopes and memos from Mr. Denechaud, and I'm going to try to unscramble 'em, altho why anyone should want to read any of the stuff he dreams up is beyond me. The memos from his boss are very interesting, however, and I am saving them in a scrap book and whenever he gets to feeling cocky, I drag out the scrap book and read a few of 'em back to him and it always cools him off, but fast. Mr. Denechaud is the one that should be writing this column, for my money.

Well, here goes. After this, where it says "we," that means him, not us. He says you got to call yourself "we" when you write high-class material, why, I don't know, but include me out of it. Like it says in the front of the books I read, "Material in the following is fictitious and any resemblance to real persons is purely accidental". Brother, you can say that again. See you later.

Mable.

"There it is—" points Lt. Bob Brooke, USNR, visiting the Army on Iwo. Left, Jim (KFI) Vandiveer; center, Censor Al O'Dea. Bob sez "Hope this is over soon and 73."

(Official U. S. Navy Photo)



P. S.—If it sounds corny or isn't true, remember I'm just copying down what's here, capitals and all, and am not responsible. I don't know what it means, anyhow, and if the big lug gets sued it will serve him right.—M.

NBC STUFF . . . the picture we HOPE Stolzie is printing came in from Lt. Bob Brooke, formerly NBC Hlyd studio man and now with the Navy Broadcasting unit on Guam . . . we don't know just what the sign MEANS, but apparently it is some place where Officers gather. Maybe some sort of a CLUB, maybe. Both Jimmy Vandiveer and Bob look fine. We don't know who the guy in the middle is. (He looks nice, too. M.) Lt. Brooke wrote in the margin that they were taken on Iwo Jima while visiting, but it could be Laguna as far as we can tell . . . Final elections and run-offs for the office of Hlyd Chapter Chairman for NABET are over and the Peepul's Choice is Mr. Thor La Croix of the OTHER network . . . "La Crotch" as we call him should make a VERY good man, as he was National Secretary-Treasurer of NABET when the national offices were out here in Hollywood, has served several terms as Blue Councilman and is a SHARP character. ALSO a busy man these days, what with being in charge of KECA Operations, NABET operations and having the STORK on the beam and in the landing circle over his house. The La Croix vacation starts soon too, and Thor plans a trip to Noo Yawk to see WHAT'S COOKIN', iffen the bird will only LAND. Murdo MacKenzie is back, after nearly three years with the Air Corps Reserve as instructor and Assistant Director of the ground school at Polaris Flight Academy out in the desert near Lancaster, Calif. Mac taught meteorology and weather to American Eagle Squadron pilots who went to England, and also to British Cadets and regular Army Air Corps pilots. He was one of our BIG studio men when he left, and is the husband of songbird, Trudy Irwin, who sang with Kay Kyser and Bing Crosby for a long time. They have a lovely baby bird named Karen Lee, who is fourteen months old now. Saw in one of the trade papers where Marvin Young, former NBC Hlyd producer, has been upped to a full Colonel. Col. Young is

head man for the entertainment branch of the Army Special Services in NY, and is overseas at present, we believe. Rumor has it that Bro. Mortimer O. Smith, former Hlyd Recording Eng., is coming back soon too . . . Mort has been with the OSS and in charge of one of the big Pacific Coast listening posts maintained to keep the Government informed on enemy radio activity. Miv Adams, an Ossifer in the U. S. Marines and who passed thru on a visit last month, has been assigned to the Bureau of Ships in Washington . . . for a former Field Supervisor, Miv has been afield a lot and is probably glad to spend a little time in THIS country. Heard, too, that Wally Snow, former Hlyd Sound Effects and then to agency producing, has taken a war job as brakeman on the Southern Pacific RR . . . what a switch . . . which winds up our Service News for this mo. In the INOVATIONS DEPT are new arrangements of the jack strips. (What are jack strips? M.) in the patch bays on the mixer consoles in the audience studios . . . Doctor Figgins (Maint. Super) and his crew of Interns have moved the cue loops up one row and have connected up several sets of three jacks, in both series and parallel, to facilitate tying several mikes together for special effects, etc. "The MAIN idee," sez Frank, "is to eliminate all those X—X—haywire black boxes," meaning the collection of SECRET boxes containing special combinations of jacks, pads, pots, filters, keys and switches which are used for various "special deals" by the Mix Masters. What Frank doesn't REALIZE tho, is that those little black boxes were DEAR to our hearts, and were CHERISHED and SOME of us can't do our shows without 'em. Besides, they looked very MYSTERIOUS when plugged full of patch cords and did wonders to help impress the agency people in the booth with the MAGIC of radio, and how much the engineer's work should be valued . . . (All right, HOW MUCH . . .) PLEASE, Frank . . . let us have just ONE little black box . . . please . . . we're MAD at you anyway, 'cause we came breezing thru the shop to find OUR favorite black box in RUINS . . . its tender insides all segregated into neat piles of SCRAP and its exterior

reposing in the WASTE BASKET . . . we're going to GET EVEN, as soon as we can devise a devious and DEVILISH way . . . DURN ya, anyhow. Which REMINDS us . . . wonder what that nice RED button in the middle of the Master Control Desk panels is for . . . we mustn't tell, MUST we . . . Attended a SPECIAL showing down in "D" of the Westinghouse moom pitcher made in our hereabouts a short time ago and starring our Mr. Rob't Jensen . . . it's called "Music in the Sky" and depicts how they put on the Westinghouse Sunday show with John Charles (J. C.) Thomas, Vic Young and Ork, etc. In it are many of our weller-known engine-ears, including Ross Miller, busy at the recording tables, Lew Winkler and Raoul Murphy testing things right 'n left, and Kenny Hicks 'n Floyd Wetteland looking very technical in MCD. They got Bobbie Jensen listed in the credits as "Technical Director," which brought a good laff from the audience (made up of building employees AND fellow engineers) Robbie even has LINES yet, and calls forth in stentorian but slightly quavering tones, "GO AHEAD" and then grabs and starts twisting seven or eight pots at once and the V. I. meter starts a perfectly MAD series of jerks and they are OFF . . . inasmuch as Bob is a friend (up to NOW) of ours, we won't comment on the TECHNICAL aspects of the thing, except to wonder if the chorus were singing on LAPEL mikes, perhaps . . . it was a GOOD show, however, and very interestin' and well put together, the KEYNOTE of the whole opus being the beautiful large CLOCK on the BACK wall of the super-control booth, which gave everybody gorgeous GRUEN time . . . Third annual NBC/UCLA Radio Institute Classes are under way and will continue thru August 10th, with Radio City department heads and representatives as tutors . . . these classes are held yearly in cooperation with Northwestern, Stanford and UCLA, and have proven very popular with people who want to get into radio broadcasting, or who ARE in and want to find out what they are into . . . Engineer 1st Class Art Brearley, NBC Hlyd SE, is chalking the blackboards for the Technical sessions again this year, and reports increased attendance and interest . . . ALSO more beautiful GIRL students, which when we looked in on him, Art had seated all in the FRONT row . . . NATCHERLY . . . something seemed to be making Brear-

ley NOIVOUS, tho, as he kept squirming around on his stool and occasionally would reach around and SCRATCH, and later we found out that he was sitting on a BEAUTIFUL case of POISON IVY . . . it SEEMS that Art is allegedly ALLERGIC to the stuff and out where he lives on his Rancho in the Sierra Madres the weed is rather plentiful, so THIS year he determines to git shut of it once 'n for all and hires a bulldozer and scrapes all he can see away off to one side, to be burnt, etc. After the scrape job, he notices a lot of fine rocks which have been uncovered and left behind, which would make a FINE barbecue pit, fireplace, etc., so gathers 'em all up and stacks 'em in a neat pile, to await developments. WELL, he didn't have long to wait, for NEXT DAY blisters start to appear and out crops an EXTRA fine case of youknowwhat, on his hands, legs and OTHER places . . . (Tee heeeeee. M.) it seeming, that the ROCKS were where the IVY used to live. Snamf, snamf, snamf. Speaking of ROCKS, the NBCCA swimmin' pahty down near Santa Monica turned out VERY well, with everybody getting well dampened, inside or OUT, but also not a few somewhat BRUISED, the ocean shore at that particular spot being rather ROCKY . . . as we RECALL, tho, the rocks are well back from the WATER, and whatdidwe TELL ya . . . without casting ANY aspersion, you MIGHT SAY the party went on the ROCKS . . . (What does he mean? We thought it was a nice party. Anyway, here's a few SHORT SHOTS, as Norm would say. Have to save a little space for the ABC gang. M.) Johnny Cravens, vac relief in MCD, and that Tex-x-x-as drawl of his sounding very UNUSUAL on the PAX . . . Charlie Norman and Eddie Miller darkly discussing some secret plans for some sort of a FISHING project, where they buy a boat, hire a crew who catcha da feesh, while Norman & Miller, INC. sit on the pier and counta da monee . . . sounds like a GOOD proposition . . . speaking of BOATS, Carl Lorenz is now planning to build one about 45 feet long, which will make about 18 to 20 knots, under combination sail and diesel power and sleep 6 or 8 people . . . THAT we want to see . . .

Rhoda, our beautiful secretary on vac, and Pick (Operations Super) trying to keep up on the paper work, filling out all the forms, etc. . . . sez he'll NEVER catch up with Rhoda,

tho, in filling out FORMS . . . (Why, CRAIG! I think you fill yours out very well. M.) Joe Kay inheriting a batch of mikes 'n amps from San Fran and the United Nations Conference pickups . . . keep 'em LOCKED UP, Bud, or the ABC'll have 'em . . . as Hal Platt, NBC Field Shop Staff, sez, "Those Blue guys will steal ANYTHING they can lift and ain't bolted down". To which we reply, "TRUE." Iffen yuh can't git tha stuff ONE way, yuh gotta git it howsomer yuh CAN, huh, fellows . . . Oscar Wick going to build a shop over his RABBIT hutches during his vac . . . sounds a little ODD, but better over than UNDER, we say . . . Hal Lea and his betrothed Evie Raff sippin' sodas in Thrifty . . . TWO straws, of COURSE . . . if our photog-rapner gits it out, may have an ART



—Photo by R. R. Jensen

Miss Evelyn Raff and "Hal" Harold B. Lea.

pic of the Motorcycle Kids for this issue . . . if it's in here, ain't THEY the ones . . . inasmuch as THEY are about to become ONE, we won't go into DETAILS, but shoulda seen Hal pitching nickles in the corridor, and ALMOST hitting the jackpot . . . should we tellum the TARGET???? (There's a lot more here, but will have to save it until next time. Maybe it will keep, well iced. M.)

ABC STUFF . . . Well, it looks like the ABC peepul have finally agreed upon a post-war site for Western broadcasting operations . . . it isn't set yet officially, but it LOOKS like the corner opposite NBC's Radio City, where Music City is now. Leases in the offices there haven't been renewed beyond V-J day and the Hlyd C. of C. is trying to centralize broadcasting around Sunset 'n Vine, so MAYBE we'll still be neighbors, you NBC

stinkers . . . close enuf to borrow an ND-10 anyway . . . after **Platt** goes home, of course. It is understood that NBC will expand onto the Parking Lot and the Otto K. Olesen corner as soon as possible, and Don Lee/Mutual is moving soon and probably up here too, so everything will be COSY, huh . . . all we need now is some sort of a CLUB or something for ALL radio men in town . . . sort of a SWING Club, that could be swung in UNISON, and then we'd really HAVE something, wouldn't we . . . WOULDN'T we . . . More New Faces on the ABC . . .

(Slogan: "Gitcha self a job that'll suit ya to a 'T' on the Aitcheson, Topeka and the A-B-C") so to bring you up to date, we'll run down the morning line-up . . . ANOTHER grad from KFSD in San Diego is **Raymond H. Baird**, up for vac relief and over to KECA Studios . . . **Ray** was formerly with WJW, Cleveland, WCED, DuBoise and WSTV, somewhere in Ohio . . . married, no progeny and w8TFL. Then we have **Kenneth Grinde**, down from Aberdeen, Wash., where he was Chief at KXRO for 2 yrs. and previously in MCD at KOMO/KJR Seattle and at KTBI, Tacoma. Is here permanently at KECA, to replace **Taggart**, departed. **Bre'r Taggart** goes back to KFI from whence he came, and we are SORRY, 'cause **Dick** is an interestin' guy and we had just began to become acquainted . . . he is quite an artist, in addition to his radio proclivities (That doesn't sound nice. M.), and has done set design for M. G. M. paints pitchers, and hopes to do set designing for Television when it GETS HERE. And then we have **James Alfred Pearce**, who of course is called "Al". Al is from WWSW, 'way back in Pittsburg, PA. Was there for 13 yrs. ass't Chief Eng., has a B. S. degree in Mechanical Engineering from Pitts U, where he shone as a basketball tosser. Married, TWO kids, w8KTU, and even LOOKS like the Al Pearce WE know . . . iffen he was SMART he would have us call him "Jimmy" . . . Al arrives here in a late model but sorta BEAT UP Buick, loaded down with STUFF and we noticed up behind the back seat a box of ladies' STATIONERY, a roll of TISSUE and a pair of field glasses . . . ready for ANYTHING, huh Al . . . In preliminary excavations, learned that the **Grinde** kid's cousin was ONCE engaged to noneother than **Marie Wilson**, the O-o-o-o-o-o-h Gal of Ken Murry's Blackouts, and he KNOWS

her . . . gotta cultivate THAT guy . . . (Norm, I hope you're kiddin', 'cause if you ain't you're due for a hit in the head. M.) As usual, some fun-yay things happened during the first days of these neophytes (They look like nice guys to me. M.) sichas Al starting an ET playback 5 minutes late (the man said start it "five after," didn't he Al?) and **Ray Baird** getting KECA on 5 min late, due to oversleeping 'cause his wife, still in San Diego, had mailed his alarum clock up to him and it TICKED in transit and the postoffice dropped it in a barrel of water or something it was a BOMB. More dirt later on these characters.

We were visited by **Pvt. Hal Powell**, recently deducted by the U. S. Army . . . was on furlow from Camp Crowder and the Signal Corps and among ALL things, visiting radio shows on his time off. Was interviewed on Don McNeil's Breakfast Club in Chi and dropped in on us on Tom Breneman's Breakfast in Hollywood . . . sat around in the booth during the warm-up with a nostalgic look on his puss, so we let him mix the show and went down for cawfee 'n aigs. Tom and the producer were quite UPSET when after they were into the show five minutes or so to come upon us sitting at a table with the customers. Heheheheh.

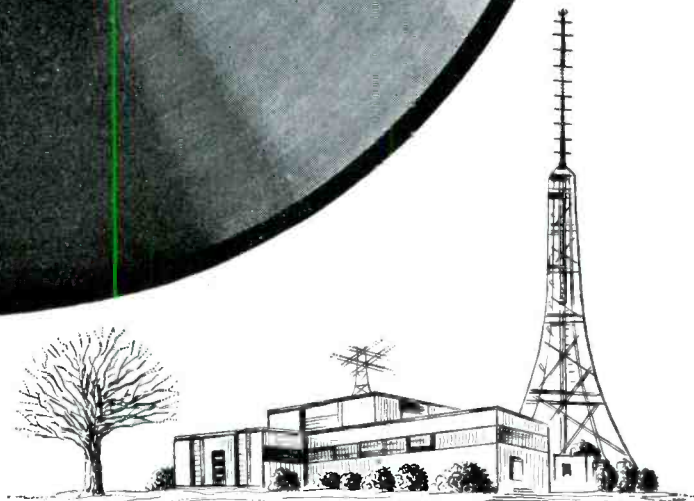
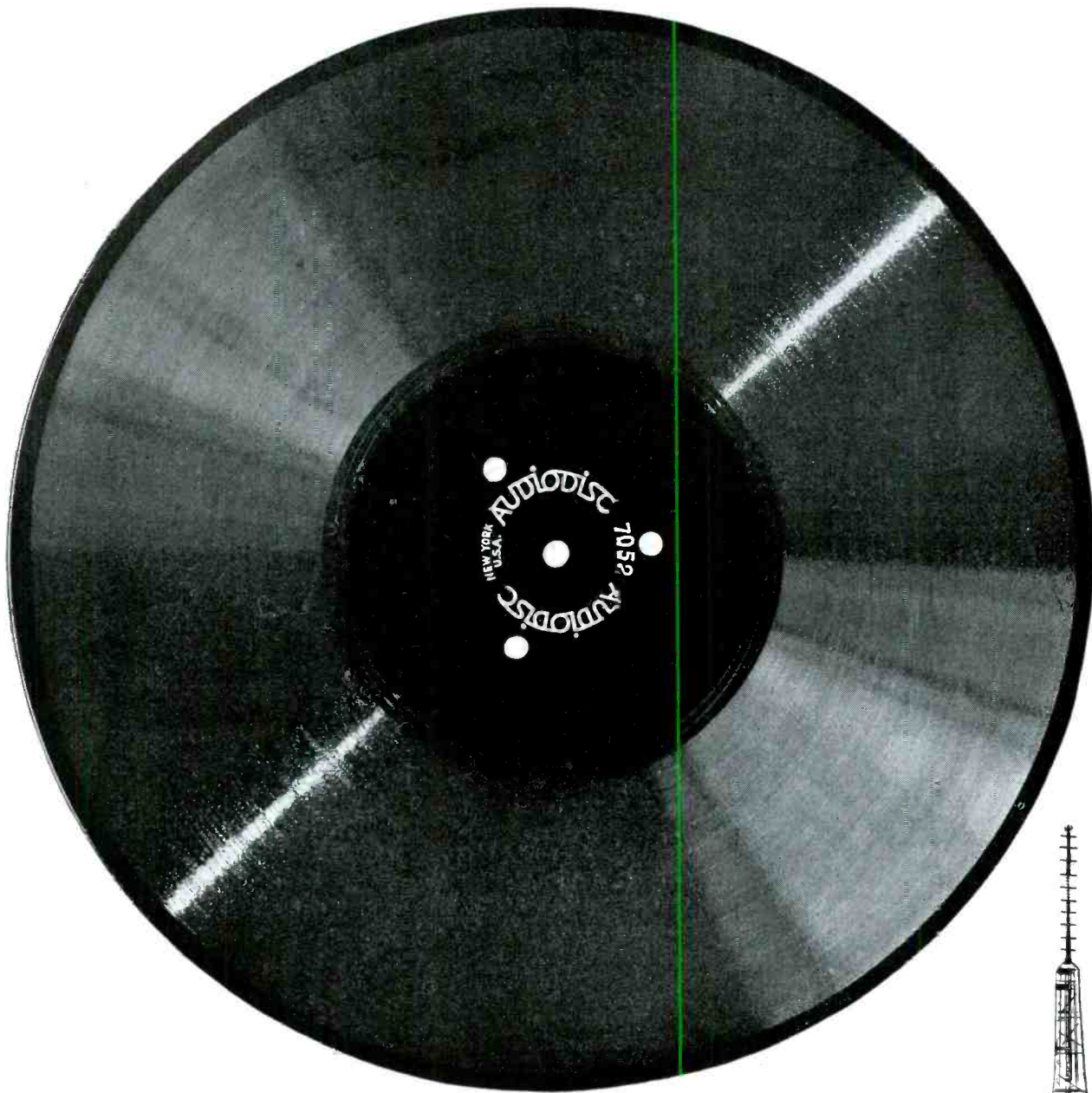
(We take you now to KECA. M.) KECA STUFF . . . **Johnny Eilers** and **Thor La Croix** report "everything running smoothly" at the Sunset 'n Highland studios, if you use the term loosely . . . with several ABC TC's originating from there, including Walter Winchell, Louella Parsons and Hollywood Mystery Time, the Charlotte Greenwood Show and Blind Date. **Johnny** (Maintenance Super) **Eilers** has his shop fixed up nicely, with assorted telephones, speaker monitoring loops, etc., and **Thor** has the Master Desk pretty well under control by now. We ALL still recall the HECTIC days of installation . . . and the FUN we had, too . . . one instance we still chuckle over is when **Ben Adler** from Noo Yawk was out here and helping us trying to figure things out and we asked why certain jack assignments weren't coming out right and **Ben** sez, "It's very simple, boys . . . you've just got the wrong NON-CLOMENTURE on 'em," meaning nomenclature, we guess. Snamf, snamf. And speaking of JACK assignments, wonder if **Jack Colvin** has recovered from his out here yet . . . will probably NEVER be the same . . . just REMEMBER, fellows, KECA spelled

BACKWARDS is . . . (I don't get it. M.) More to say about KECA next month.

JUST STUFF . . . Over to KHJ/Don Lee/Mutual to visit with the fellows and dropped into McDesk . . . **Maurie Schmitz**, and we hope he's SPELLED right was on dooty and we made with the shop chop awhile . . . guess those fellows have the same joys 'n sorrows as WE do. We DID learn that **Maurie's** wife and that **Marie Wilson** (you know . . . the O-o-o-o-o-o-h Gal . . .) (Yes, we know. M.) went to school together and were CHUMS, etc. . . . what a set-up, and we DO mean Marie . . . wonder if . . . but NO, natcherly NOT . . . but still . . . if she were OUR wife's school chum, WE would be willing to go back to school, ANYNITE . . . huba-huba-huba. (That does it. Just wait until you wake up, Bud. M.) Saw **Bob Glenn** and met one of the fellows from Recording, too . . . they are using some of these new RCA Varacoustic mikes over there and report good results. Over to Columbia Square to have lunch with **Cam McCulloch** and talk over B. T. M. G. affairs and learned that CBS plans new additional studios soon too on THEIR Parking Lot, each seating 450 listener-lookers. **Cam** sez the Mixers' Guild is going to re-organize soon, with more SOCIAL events, which is ALWAYS a good idee, we maintain. Also will probably be opened to all branches of broadcasting.

HERE 'N THERE . . . OR . . . what you can see when you got your eyes OPEN . . . suchas the beautiful blond in the liberry, reading a book called "Mary and the Fairy" . . . and the beautiful swelter gal in Castles' photo shoppe across from NBC, who REMINDS us somehow of that Marie . . . we asked her if she ever worked in a DARK ROOM, and she said "Yes . . ." And the sign on the Bullevar'd saying "15 minute Bubble Bath—89 Cents—Drive In" . . . and the sign in the Art Shoppe window which sez "Our Galleries show original and SANE oil paintings only" . . . and **Les Paul** of the Les Paul 3-0 who sits and plays the guitar and eats RAW CARROTS during his broadcasts . . . and down at the Melrose Grotto, adjoining the Mutual/KHJ studgios, the crackers they serve yuh with the chowder have NBC stamped on 'em (Haw!) . . . haven't checked the crackers at Britts', adjoining CBS yet, but if they have NBC on 'em TOO, that will be simply

(Continued on Page Twenty-four)



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Detroit News

THE advent of V-E Day has finally brought about a return to "almost normal" operations at WWJ and with this, a return to the forty hour, five day week. This move has necessitated the hiring of three new technicians—Al Furget, recently of the U. S. Army; Harold Heatley, formerly of WSAM in Saginaw, Mich., and Al Sanderson, who worked for years with WMO in Highland Park. This sudden change in our working schedule, put this Chapter in a bit of a spot—working under a Union Shop agreement we had to dig up three experienced men in a hurry, which is no easy task in these days. It occurred to us when this happened, that it would be a fine idea if NABET could establish some kind of an employment agency, and keep all Chapters posted on men available for employment.

Elections in Detroit resulted in a complete return of all the 1944 officers, this in spite of the fact that our heavy eating Chairman tried to take a rain check; Doran, however, was drafted, in spite of his plea of being too busy to handle the job.

Vacation time being here, we are in the midst of a confused schedule. LeRoy Bridgman spent his three weeks in the wilds of Northern Ontario someplace, where he couldn't plug in his electric razor (he's always getting into jams over that razor)—anyhow he came back to work looking like a fugitive from the House of David, with the most atrocious looking mess of whiskers we ever laid eyes on—looked like a cross between a Shredded Wheat biscuit and a toilet brush.

Just happened to notice Ole Lapham hasn't been around lately, and discover he has been vacationing for the past two weeks. Steady Eddie Boyes left this week for Higgins Lake with his Mercury loaded down with canoes, bird seed, cats, rabbits (the family pets) and, of course, the family.

We just received word that our former stormy petrel of WWJ—Rotund Robert Pennebaker, had terminated his services with ABSIE in London, and had been transferred to Luxembourg, and knowing Ted the way we do, we hope he likes the beer in this part of Europe better than he did the English variety.

Joe Brendel is by far the most popular guy around the Detroit News these

By
Dave
Stewart



WWJ-Detroit engineers recall old times together, trying out antique equipment used in early station broadcasts, as they prepare for WWJ's 25th birthday celebration, August 20. (L. to R.) Ed Boyes has been with the station 23 years; Chief Engineer Herbert Tank, 22 years, and Assistant Chief Engineer and Short-Wave Editor of the Detroit News, A. B. Allen, 18 years. As can be easily deduced this is a posed picture—otherwise Allen wouldn't leave that pack of cigarettes on the table!

days—with the current meat shortage and consequently, a shortage of eggs—you see Joe owns a chicken farm.

Corby Stone has left the environs of WWJ's studios for the quiet sanity of the transmitter out on the Eight Mile Road. And talking of the transmitter—Al King's gang are all in a state of confusion, due to the fact that Detroit City Fathers have voted to set up housekeeping with the new municipal airport right in the back door of the Xmitter. This will mean that the property will be condemned as a menace to navigation and that the boys out on the Eight Mile Road will have to uproot the towers and go hunt a new location. . . . Sure is tough on guys like Grandpaw McCausland and Ed Barkkarie, who own homes in the vicinity of the present site.

Albert "Clutch" Allen, was the

most recent victim of the gas coupon gag. One of the studio crew stood near our supervisor's office the other day and said in a loud voice, "Can any of you guys get rid of 'T' coupons—I have a whole mess of 'em?" Albert liked to break his leg getting across the hall, screaming, "Gimme! Gimme!" Whereupon he was handed one of those little tabs they tie on Lipton's Tea bags.—Never mind, Al, we bit on it, too.

Roger Ellis is back on the morning shift again and sure looks it—By the time 2:00 P.M. gets around, Rog. looks about ready to collapse . . . must be he hasn't gotten used to his old stunt of using the telephone for a pillow.

Come August 20—WWJ will celebrate a quarter of a century of broadcasting . . . but more on that in a later issue.

Hollywood

(Continued from
Page Twenty-two)

PEACHY . . . and around town there are a coupla STREET cars who to boost the 7th War Loan are painted up like Flying Tiger planes of the Chinese Air Force . . . VERY distracting to be staggering along and look up to see a streetcar with TEETH leering atcha . . . and to make it COMPLETE, out here the Railway Companies call the guys who grind the box in front "Trolley Pilots" and urge you to become one, etc. . . . then, if yer kid ast yuh if yuh wuz in the WAR, yuh can say, "Yes, son . . . I flew the "D" car up Vermont Avenoo" . . . the new BUSES they have out here are rather UNUSUAL, too . . . they are nice LOOKING and comfortable, but they are no GENTLEMEN . . .

when they pull up to the curb and halt, their air brakes emit a MOST unusual noise . . . sort of a long-drawn-out FOO sort of a noise . . . which sounds like they should certainly say "Pahdon ME" immediately after. It's a CINCH they aren't LADY busses either, for no lady would make a noise like THAT. We were set up on the sidewalk in front of Melody Lane for a "Walkie-Talkie" broadcast (where the M. C. has a roving pack set and does a Man-in-the-Street routine) and in the middle of the show this bus pulls up to the curb and goes into its act, RIGHT on mike, and the phone rings and the MAN wants to know "Who DAT?" Then there was the sailor on the corner waiting for a ride, with a bright blue zipper kit bag in one hand and a full-rigged FISH pole in the other

... we waited 15 min just to see if he would try to get on the Sunset bus like THAT ... and the two sailors on the corner watching the gals go bouncing by, dodging traffic at the corner, and one sailor sez, "Some jump and some DON't, huh Joe ... "And the two WAVES getting off the street car amid all the rushing cars and the 1st WAVE sez to her partner, "Careful, dearie ... don't let's get our COUPONS clipped ... we're too young to die" And the car tearing down Vine Street (natch) and across crosses a very pitty gal in an "in between" dwess ... you know, NOTHING in between ...

and of course a WHISTLE was indicated and just as WE were puckering up, the guy in the car presses a button and the CAR gives forth with a genuine Wolf Whistle, but LOUD, and everybody jumps and the gal nearly loses what little she had to LOSE ... and to wind up OUR DAY we drop into Thrifty for a sundae last Sunday and asked the beautiful, but ... gal behind the counter for a pineapple nut job and she sez, "Sorry-e-e-e, but we can only give you nuts on Mondays" so we sez OK, give us a pinapple nut MONDAY, and she sez, with a VERY blank stare, "Sorry-e-e-e, but this is

Sunday ... " and that was where we CAME IN, so we LEFT. BCNU.

Well, fellows, there it is. Norm had a lot of other stuff written down, but some of it I had to throw away, if he wants to go working for the Company. It all sounds like a lot of ripe tripe to me, but the Column is in, or out, or something. Hope Mr. Stolzenberger can read my typing, which is more than I can do. If any of you guys get the time, drop down and look us up in the phone book and we will mix you a thing.

Love,

Mable.

Doings in DENVER

WELL, here we are again in print after missing a month, due to "circumstances beyond our control". It is summer in good ole Colorado at last. There has been winter weather up to the end of June. Maybe this is due to our new vacation schedule that went into effect this year. This year's schedule allows two men off at once for vacation so that all have a chance to vacation during the summer months. The fellow who usually has had a vacation in December got it in June this year so the weather accommodated itself so that the shock of having a vacation in the summer wasn't too great. **Gene Carpenter** (SE) and **Francis Nelson** (TE) started off the vacation schedule, followed by **Vern Andrews** (SE) and **Carl Nesbitt** (TE). At the present writing, **Garland Dutton** (TE), **Stan Neal** (SE) and **Yours Truly** (SE) are on the loafing board, or maybe we should say "fishing schedule". Stan also took the "Janlou" up to Grand Lake for some sailing. Grand Lake has the highest boat club in the world and although the regattas were nationally known, they have been discontinued during the war.

Election of officers is past history. **Russ Thompson** (TS) refused to run for his "8th term". In a hot nominating session **Stan Neal** and **George Anderson** won the nomination for chairman of the Denver chapter. After some campaigning for both candidates the election results were a tie so more enthusiasm was stirred up among the members for a second ballot. On the second ballot, Andy was elected our new chairman. We all want to thank Russ for his untiring efforts in behalf of NABET these past years; that was a

super job done. **Vern Andrews** was elected studio councilman and **Russ Thompson** was elected transmitter councilman; **KFKA** at Greeley elected **Wade Johnson** for councilman.

At this time we welcome **Kenneth Cooper** to our transmitter staff at KOA. Kenny joined us the first of June, coming from **KFKA** in Greeley where he had been their chief engineer for the past three years. This adds another to our line of Greeley "novices". Kenny is the fifth engineer to come to KOA from Greeley. It all started about eleven years ago when **Russ Thompson** joined the KOA staff from **KFKA**. The next man to join was **Al Isberg** who now is in New York. About four years ago **Carl Nesbitt** came to KOA; a year later your Denver reporter, and now Kenny. Mr. Green, owner of **KFKA**, is beginning to view us with a suspicious glint in his eye every time we go up there.

Here's a bit o' news from up Greeley way. **Chuck Hays** left the staff to go to Grand Junction, Colo., to work. **Ray Smith** has replaced **Kenneth Cooper** as chief. Ray is a new NABET member. Welcome to the field, Ray! **Oliver Pierce**, former summer relief at KOA transmitter replaced **Chuck Hays**. On July 2nd **George Anderson**, our chairman, went up to Greeley for the NLRB

election for representation of union and closed shop at **KFKA**. The result was a 3 to 1 vote in favor of NABET and negotiations for contract will start immediately.

The transmitter gang at KOA had a luncheon for Mr. Mullen, vice-president of NBC while he was here visiting from New York. That same evening there was a cocktail party at the Onyx Room of the Brown Palace Hotel for the entire staff. **Milton Shrednik's** orchestra played for the cocktail party and it was voted a real success by all.

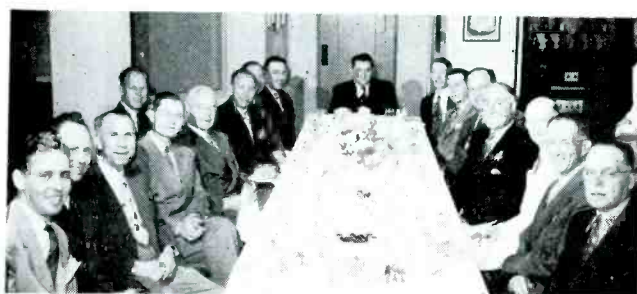
Aubrey Blake and **Milt Hall** had quite a thrill last month when they had a pick-up from gliders being towed and snatched from the ground. **Joe Rohrer** has written a complete story which appears elsewhere in this issue. **Aubrey** also went down to Glenwood Springs naval hospital over the "Fourth" for a series of pickups which has been a yearly event. He also got in some fishing while he was there and came home with fifteen nice trout. That is pretty good for now as the streams have all been running pretty high due to late melting of snows on the upper peaks. For further fishing news write to Colo. Game and Fish Dept.!

As we write the finis to this attempt, we see that the old stork is still hover-

(Continued to Page Thirty-six)

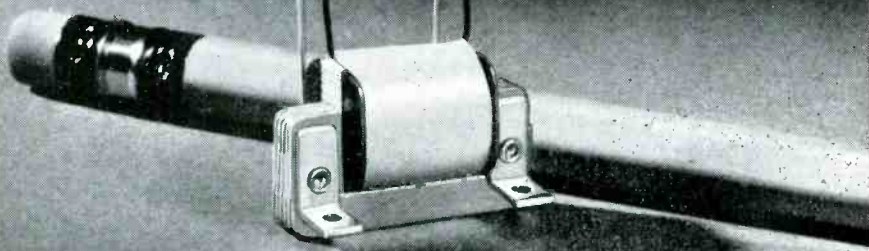
By

G. G. Pogue



GUEST: VP FRANK E. MULLEN

Post-War Performance!

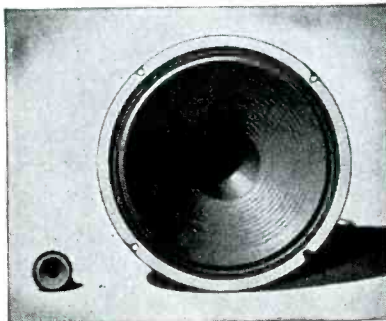


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ROCHESTER

HIGHLIGHTS of the past month's activities in the Rochester Chapter were two-fold: Station WOLF at Syracuse joined the NABET gang, and President Al Powley visited Rochester and sat in on a Chapter meeting.

We, of the Rochester Chapter, in behalf of the National Council, wish to take the opportunity to welcome the Syracuse members to the National Association of Broadcast Technicians. It will be our pleasure to have the WOLF boys and girls as our guests at the next Chapter meeting.

The WOLF situation has been on the fire for some time but now, we are happy to say, the situation is settled, the contract has been negotiated and by the time this column appears, will be signed.

For the information of all "Journal" readers, Station WOLF operates on 1490 KC and is a quarter-kilowatt. It is technically staffed by: Paul North, Studio Supervisor; "Fay" Santello, Jimmie Knapp and Dick Grant (all of the Control Room), Tom Crimmins, Transmitter Supervisor; and Alf Carlson and Don Muir, transmitter men. It is our understanding that Tom Crimmins is just getting back on his feet after an operation at Crouse-Irving Hospital.

For the present, the Syracuse membership will be included in the Rochester roster.

* * *

President Al Powley's visit came as a complete and extremely pleasant surprise. He was heading back to Washington and stopped off in Rochester to see the gang and make the trip over to Syracuse to sit in on WOLF's final contract negotiations. Our gang was out in force to renew acquaintances with Al and the meeting was devoted to a discussion (long and involved) on the subject of "affiliation".

"Bum" Holly, WHAM Control op, spent the Fourth of July in Rochester's General Hospital. Surgical action was taken to clear up a foot infection that has had Holly on the ropes for better than a year. All the guys and gals in the Bugleburgh Chapter sincerely hope that this session sees an end to "Bum's" trouble.

Ken Henderson, formerly of WHEC, is slated for a career as Field Man for

Broadcast Engineers' **26**
Journal—August, 1945

NEWS... *By Art Kelly*

Raytheon in the Pacific area. He is travelling with the Navy.

* * *

Charlie Snyder, President of Rochester Chapter, has moved into his newly acquired home. Psst, Charlie!! When's the house-warming.

* * *

Ray Lucia, WHAM Chief Control Op, is torn between two vacation desires. He wants to visit the Adirondacks and also to put a new slate roof on his house. I'm putting my bet on the mountains.

* * *

Fran Sherwood and Craig Williams of WHEC found themselves in the Marine Corps on July 4th . . . at least temporarily! The LST-512 hit the beach at Rochester's Charlotte Beach and WHEC covered the landing. Fran and Craig were aboard covering the radio gear. So, to "blend" into the picture, they wore Marine uniforms. It hit both boys as humorous since Fran is a discharged veteran of Naval campaigns in the Pacific and Craig is 4-F. They were Marines for a day, anyhow.

* * *

George Wilson, also of the WHEC Control Room, is the Rochester Chapter's ace fisherman. He spends all his spare time with rod and reel. You should hear him tell about the big ones that got away.

* * *

We tip our hats to Helen Christ and Clara Weston, two new operators at WSAY. These young ladies, plus Beryl Shay, add plenty of interest to Chapter meetings. Oh, if Marconi could only see radio today!

* * *

And while we are tipping our hats, here's to a greater WSAY in the Rochester area. The station is now on the air with a new R. C. A. transmitter and a directional beam supplying a thousand watts to listeners.

* * *

Beryl Shay, of WSAY Control, has no more use for women car drivers. She was side-swipped the other day while driving home from work!! Everything happens to Miss Shay. She is also embroiled in an OPA case enveloping a chicken and an overcharge on ceiling prices. Well, cheer up Beryl. You got a chicken out of it anyway. 73 Kelly.

A

A



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To the Editor:—

We want a Society of Broadcast Engineers, for the Broadcast Engineer, and managed by the Broadcast Engineer, and affiliated with no other union.

I note that in the News Bulletin of NABET, March 15, 1945, that the San Francisco Chapter of the NABET would like to join with the CIO in order to gain strength. We, NABET, can have more strength than that, if all Broadcast Engineers are solidly united in one big Union!

It is no surprise to see, in the latest edition of the Union Bulletin, the desire on the part of the San Francisco Chapter to seek strength for our organization by affiliating with the CIO. Suppose we take the bull by the horns and master this problem.

First let us decide that we will not go anywhere else to get that strength. We can have it for ourselves if we so desire. It is up to us to decide for ourselves what we want, and then take steps to attain our desires. I will not say that what I write is all that can be said on this subject, nor that these opinions are correct, but would like to feel that it is a step in the right direction and that others will offer suggestions and do a little thinking and acting on the subject.

Any group of men who have attained our position should be above members of other Unions. We should feel that we not only need the strength but also the respect of our status in life. That respect we must command by our actions. We should leave the demanding to members of other labor Unions. Our organization, if it so desires, can command the respect of our employers and the public in just the same way as the Bar and Medical Associations have attained their respect. That is up to us; we can have a forced unionization, or an association to which it will be a privilege to belong. Let us attain the latter.

We need not fear any encroachment on our rights by our employers or outside Unions if we employ the proper tactics in dealing with our employers and the public. Labor has gained many rights by acts of Congress, *which another act of Congress can take away*. No act of Congress or any other law-making body has that power over respect.

Our strength can only be attained by having *every engineer in every station in the same association*, then all who try to harm us, or our ideals, will fail. We know that regardless of any studio activity, without the engineer, no program can be broadcast. **WHAT MORE STRENGTH DO WE NEED?**

So let us look at the problem of acquiring our needs. We must convince every engineer in every station that only by being solidly combined, minus commitments of any nature to any other Union or affiliation, will this be possible. Why should any Broadcast engineer go on strike, in sympathy with any electrical worker, when the problems of both groups are so far removed and remote from each other? Our problems are *not* the same as theirs; our aims are not the same as theirs, nor are our problems or aims understood by their leaders, who are solely organizers, and too often patrons of "Black Jack" methods. We are intelligent enough to recognize our needs and should be intelligent enough to attain them in a tranquil manner. I would suggest that we study the underlying principles that formed the afore-mentioned Bar and Medical Associations. Both of these organizations are, after all, two Unions whose members are wise enough to be self-governing and command respect and dollars. They have even gone so far as to have the law protect them by the imposition of penalties on the non-licensed practitioners within their respective professions. The Federal Government of this country has considered the

radio industry important enough to require that a Federal Government license be held by all transmitter engineers. In the light of the importance attached to the Radio Industry by the Federal Government, why shouldn't we remain, independently, a SOCIETY OF BROADCAST ENGINEERS? Our Organization is closer to the level of the Professions than to that of Labor.

We want a Union OF Engineers, FOR Engineers, and managed BY Engineers with absolutely no strings attached to any other Union.

LET US ACT ACCORDINGLY.

Thanks for reading this, and let us hear from you.

RAYMOND A. McENTEE,
WOR Recording Dept.

(Mr. McEntee: It is always a healthy sign when, first, the individual will put his thoughts in writing, and, second, then signs his name! A.T.E. and NABET have been gaining strength and experience steadily these past twelve years; however, from time to time, we have been plagued with "affiliation hysteria" which generally resulted from badly misquoted and distorted rumors or part-truths. Some years ago, one of our Chapters asked for information about IB, and the hysteria had us already "sold out" to IB; we are still independent, self-governing, because we still want it that way; you can be sure that when any serious thought is given to affiliation, that it will be out in the open, simply because no one but the individual NABET Member has the POWER to vote NABET out the window. You mention the San Francisco Chapter and the CIO; as we remember it, the SF chapter asked that information about the CIO be obtained; this is healthy and normal and we should presume that our National Office has similar first-hand information about all of the unions, including the IBEW, IATSE, AFRA, CIO's ACA, FAECT (Federated Architects, Engineers, Chemists, and Technicians), Federated Long Lines Employees of the A. T. & T. Co., etc. To have this information is just good business, and should the day come when affiliation will benefit us, then by having this information we will be in a position to make a wise choice. Remember President Powley's wise words when he took office: the NABET members are not going to be run by the Union office, the Union office is going to be run by the will of the Members.

It is our plan to devote considerable space in the next issue to the results of the Convention's discussion of this and other subjects important to the NABET Membership.—Ed. Stolzenberger).

Also in the Mail

Dear Ed.:

You may not hear from some of us boys for long periods at a time but we're always thinking of you, and when the ole Journal reaches us, *brother*, it's practically like stepping back into the studios for a few pleasant hours. . . .

(Signed) LT. B. LENOX DUNBAR
(Studio Engineer on Military Leave from WOW, Omaha)

FLASH!

Ted Kruse, T/4 AUS, former Circulation Manager of the Journal, just returned from Germany, in fine shape, and reports receiving the Journal regularly in Germany! Now if we could only print the paycheck, too!

CARRIER COMMAND

(Continued from
Page Four)

distance flown, 20 miles. A pick-me-up type battery broadcast receiver was used in the plane. We have found this type receiver very convenient for plane cueing. Additional antenna pickup is obtained by wrapping a wire around the doublet transmission line which brings in plenty of signal. Operation of the low impedance line to the transmitter is not affected. The receiver is, of course, provided with headphone jacks.

The receiving antenna for the glider pickup consisted of two doublets put up at right angles to each other to reduce the polarizing effect when the transmitting and receiving antennas are at right angles. Deep fades are noticed under these conditions with one doublet, and the only practical way of mounting an antenna on a plane is in the horizontal position, making vertical non-directional reception impossible. Receiving equipment for the glider pickup was the NBC type ND 25 program receiver.

There was no shortage of men desirous of operating the airborne transmitter. There was a gulp or two when it was required that parachutes be worn. On one demonstration pickup of the heavy CG 13 glider the nylon tow-line was broken, and there were stories of an announcer being killed in similar exhibition "snatches" in the east.

Aubrey Blake and Milt Hall handled the two broadcasts aired by KOA, both announced by Cecil Seavey, KOA special events man. Only Hall experienced the thrill of being "snatched". Asked for his reactions we got the following: "You ask what the reaction to a snatch glider take-off is like. They landed the one we were to ride in front of all the spectators and drove out a jeep which was immediately hooked to the front end in order to tow it to the point where the snatch was to be made. The jeep was hauled in by the glider to show its freight hauling capabilities. We had a few minutes to install the transmitter and antenna before the C-47 was to come over and make the pickup. I might mention that most of this time was taken up by inexperienced methods of installing a parachute on my back. Part of the time I was being thrown around in the glider as it was being towed into position. The transmitter was fastened in place with webb

belting and as much packing as possible to absorb the shock. I was just getting the transmitter tuned up when Seavey yelled from up front 'get set Hall, here we go!' I had barely time to dive for a spot where I could brace myself and hang on, the parachute making an excellent pad to lean against. I grabbed two hands full of tubular supports and was so well braced for the inevitable, I was practically paralyzed. Suddenly everyone was yelling 'let's go'. We were all of a sudden in the air going 125 miles per hour when I remembered what I was supposed to be doing up there. I looked up front and could see Seavey talking in the mike not waiting for the cue I was supposed to give. I could hear the program coming back on my cue receiver so I knew all was well. It occurred to me that I should check the transmitter tuning. I reached for a dial and got a handful of air about two feet above the rig. A quick check of the meters indicated that the transmitter had weathered the snatch better than I. I began to relax again and the trip seemed easy enough till they released the glider from the tow ship. We stalled almost immediately, the pilot was laying it on a bit. Things just didn't seem quite right without the sound of a prop. It was a great experience and I would like to go again anytime. Next time I will take note that the pilot's back is not supported from his mid back up. Then I won't knock myself out trying to stabilize myself against a jerk that never comes, but which is taken up by the nylon rope".

What's new?
by
**JORDAN
MCQUAY**



POST-WAR competition in radio communications will have one important result: much lower rates. Cabling by radio from New York to London will cost only about 20 cents a word; press rates on long messages will be as low as 2 cents a word. And telegraph communications between this country and Paris, Rome, Berlin, Moscow, Tokyo, Manila, and Hawaii will be correspondingly low in price. Radio telephone service will be even cheaper, with a proposed rate of 12 dollars for three minutes now being planned for the New York-London link. And rates to other countries almost as low.

* * *

Radio manufacturers are eyeing the proposed post-war 400-megacycle unlicensed amateur band with mixed feeling. Some visualize a vast new market for their u-h-f wares, others prognosticate on the evils of overcrowding by unlicensed pseudo-amateurs. None claim to be developing sets for such a market. But it's certain they won't pass up a sure-fire market; it's certain that plenty of 400-mc walkie-talkie sets will be built. Watch for action on the ultra high frequencies!

* * *

Two-ton "block-buster" bombs are released from such heights that they're travelling at a speed of over 500 miles an hour when they strike a target.

(Continued on Page Thirty-five)



Troop Carrier Command glider, type CG4A. KOA personnel—left to right, Charles Baker and Cecil Seavey, announcers; Milt Hall and Aubrey Blake, engineers.

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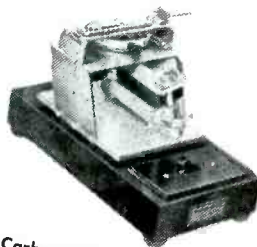


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KODY

By J. B.

IT HAS been some time since I have collected myself and my old '28 model portable to report the doings of our gang here at KODY. The deadline comes and goes, and I find I haven't done my duty to my fellow men and woman on the old KODY ranch.

At present Orlo Bonner is in Denver entertaining the RI and trying to persuade him to give him a first class ticket. Results — uncertain. Vincent (Joe) Ridgeway is now a member of NABET and it is up to him to buy the steaks. — ??? What are steaks? Our little Bobby Sox girl at the control board, Emma (Gerkin) Small, has polished up her bicycle and now pedals out to the transmitter in the wee small hours of the morning to set the wheels rolling and the electrons flowing and sundry other chores that go to getting KODY on the ether—the same, we have plenty of out here on the western Nebraska plains. Emma was married just before Christmas and her GI husband is now in Germany, so it is up to the male portion of our staff to see that she don't get too lonesome.

Since last hearing from KODY, we have installed two new RCA 70-C1 turntables. The old type 70-B's are now doing a fine job as audition equipment. Also, we have received our second Presto Recorder and now have the required number to run off a half hour program. They are doing a swell job. Despite the handicap of war limitations, KODY now is fairly well equipped and Nebraska's best local channel station.

Harry Wright left us last Fall to join the Merchant Marine. After several trips across the Atlantic, he decided to quit the Maritime service and go to school. He stopped in for a visit and some refreshment with the boys here, and is now in California.

At the beginning of the Seventh War Loan drive it was yours truly who packed up the recorders (portable???) and with what seemed like tons of equipment, drove around the sandhills of Western Nebraska, recording interviews between the citizens and our own roving reporter, Joe DiNatale. Joe enjoyed it all very much. He could hardly bear to see all those Juicy T bone steaks

Broadcast Engineers' Journal—August, 1945 30

NEWS

Eaves

on the hoof, and know he had to go back home and eat hamburgers. KODY's Manager, John Alexander, went along, and we all had an enjoyable time.

Last week, Alex Dreier was brought to North Platte and KODY, by the efforts of Johnnie Gillin, Manager of WOW, Omaha, and John Alexander of KODY. Of course, the usual PA installation had to be made at the theatre and recording equipment set up. Orlo Bonner had about all he wanted by the time he hefted the loud speakers up a 25 foot ladder and anchored them in the conventional place, while yours truly stalled around and pretended to be very busy making the proper connections here and there. He returned the favor next morning by *not* showing up and I had to take them down. While Alex Dreier was here, we had the usual steak dinner at Cronin's, in company with about thirty representatives of Skelly Oil, WOW, KODY, and the local Chamber of Commerce.

Brig. General Butler B. Mintonberger, whose home is North Platte, was in town last week. The proper celebration was held with speeches, a fine parade, and to top it off, we had all the good old fashioned beef barbecue we could eat. KODY was represented as usual, with the whole proceedings being carried directly on the air. Johnnie Gillin and Bill Wiseman, of WOW, were here, and enjoyed it very much.

Your reporter spent an afternoon at the lake south of town last week soaking up a little sunshine (too much in fact). At present I don't care for any friendly pats on the back.

Joe Ridgeway spent last weekend at Omaha, and had a nice visit with Joe Herold and the other boys down there. He also sat in on the Union Pacific show, "Your America," which is produced by WOW personnel.

Now a final item—Miss Geraldine Eads, traffic, was married June 29th to 2nd Lt. Robert W. Wing of the Marine Air Corps and stationed at Cherry Point, N. C. How about a kiss for the bride, boys?

Miss Glenna Parks, receptionist, is scheduled to take the vows July 15th. 73's for now.



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1. Lathe turned, 25 lb. cast iron turntable, balanced, with disappearing drive pin and rubber turntable pad.
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3. 1/20 H.P. General Electric constant speed motor.
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5. The turntable attains full speed in less than one revolution.
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7. This single unit type construction insures positive and easy alignment of the REK-O-KUT overhead mechanism with the turntable.
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Since our monthly output is subject to WPB regulations, we suggest that you send your order without delay.

Coming!

We'll soon be ready to announce more REK-O-KUT products for broadcasting stations and sound recording studios. Be on the lookout for them.

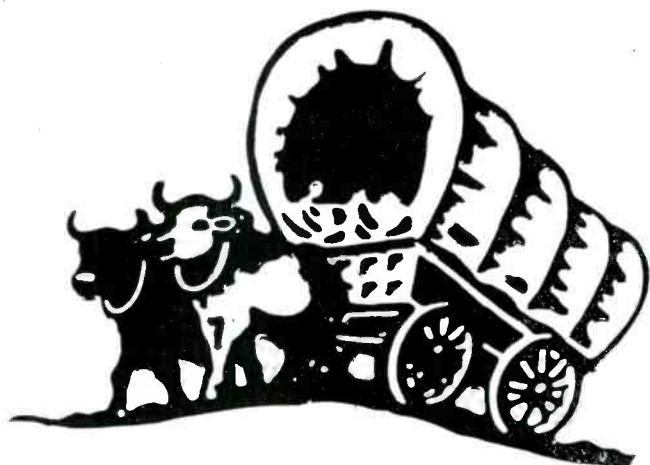


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Omaha News *By* Bob Rudd

Meet the Boys

CECIL O. HAGRMAN is another WOW Engineer that grew up in a small town, received his education there, was bitten at an early age by the radio bug and later came to the city to work in his first job of professional operating.

"CY" the radio man, tool maker and model plane enthusiast first saw the light of day at Aurora, Neb., Nov. 25, 1908. He completed grade and high school, but that was only a small part of the valuable practical education he received in his spare time while outside of school. At the early age of ten, he worked on farms and learned the value of hard work and the necessity of sticking to a task until it was done. This taught him patience and perseverance, a too rare thing in these high pressure days. His dad ran a garage and it was here that he first became



Cecil O. Hagrman

interested in tools and machinery. His father taught him the use of tools and how to take care of them. He showed a natural trend to science and it wasn't difficult for him to grasp the fundamentals of mechanics and electricity. Working on cars taught him a lot about both. His contact with batteries and their associated equipment came at this time.

His first touch with radio came in 1922, when he was fourteen years old. It all came about when his father brought him home a pair of "Red Cap" headphones. Dad wanted a radio and CY was to build it. CY, not knowing exactly how to start, but eager to apply his knowledge to something new, set about his task. He found out that there were two kinds of radios—crystal sets and "tube" sets. The crystal sets were of no practical use in his town as the nearest station was too far away to be picked up. This left only the "tube" set. He learned that the parts for these sets could be bought in "kit" form, but found that the price was prohibitive. It looked like he would have to give up the idea of building a radio until one day when he came across a copy of a magazine called "Radio". While thumbing through its pages, what should he find

but a diagram of a one tube "three circuit tuner". Here was what he was looking for but he didn't understand the diagram, being unable at that time to read radio symbols. Reading the article told him most of the story but applying this particular type of electricity to something he knew nothing about, made it very difficult. He got the parts together piece by piece; the wire to wind the coil and the oatmeal box for the coil form. Somehow he managed to get the batteries and the 201A tube. Tubes in those days were \$9.00 a piece, and the batteries—well, they were more than most boys could afford. He got them somehow but success was not to be his for some time. It took him six months before he finally got it working. His first station was WFAA. This triumph was all he needed. Here was something that got into your blood, here was fun and thrills. This radio made another convert, probably for the rest of his life.

All during his high school days his one and only hobby was making and servicing radios. He was the "kid down the street" that would fix your set—just for the asking. When anyone had any trouble, they called CY. He didn't get any pay for it for a while because then it was fun.

During his last year in high school, he got a job in a drug store. This was in 1927. He carried on his radio work in his spare time and now he occasionally got a service job for which he received pay. The pharmacy took up much of his time and in fact found it so interesting that he seriously thought of taking up pharmacy as a profession. He had picked up a lot of it while working and all he needed now was a certificate. In 1930 he went to Denver and enrolled as a pharmacy student. The course was to take three months. It looked very much like radio was going to loose an ardent fan, but fate deemed it otherwise. He missed passing the exam by two-fifths of one point. He came back to the drug store and worked there for the next five years, until 1935.

The biggest event of his life, and by far the most important of any that had happened, was his marriage in 1933 to VERA GROSVENOR, his childhood schoolmate and sweetheart. With the added responsibility that marriage brings he felt the need of more income and decided to go into the radio business for himself. During his eight years at the drug store he had built himself up a good service business which by now took up to much of his time. It was either give up radio or pharmacy. He rented some floor space in the local Ford garage and started on his own. He carried on here for a year but radio was fareing rather badly at that time so in 1936 he took a job as service man with an appliance store.

He had been interested for some time in getting a "ham" license so in his spare time he started studying up on this somewhat different phase of radio. In 1937 he took the exam and was issued the call W9DWB. His first transmitter was built for 160 meter phone but he later worked 40 cw and ten meter phone.

He stayed with the appliance store until 1940 and then had an offer of a job in Columbus, Nebr., at a better salary. It was while in Columbus that he qualified for his Telephone First License. His work on the amateur bands had brought him enough knowledge that the step to a Telephone First was inevitable. CY felt that broadcasting offered him a better future and the license would be insurance against the time when, perhaps, he would get out of the service business.

This came true the same year that he got his license

and in September, 1943, he found himself working in his first broadcast job here at WOW. Since that time CY has become an important part of the engineering department and he has proven his ability in many ways. He works both studio and transmitter. CY also takes care of most of the radios in the station and he is the man that goes out to check some listener's set when he or she calls up and says: "I can't get your station on my dial". His reputation as a service man is still outstanding and he works much of his spare time helping other service men or in making calls on his own. He has a wonderful set of tools, many of which he made himself. Many of them are tools to take care of those hard-to-get-at jobs that plague service men from time to time.

CY has several hobbies in addition to that of radio servicing. He delights in making service equipment. He has made numerous Wein and Wheatstone bridges, decade resistor boxes and mixing systems. Many of the above items have been sold to other radio men for use in their own business. Another hobby is that of tool making. This writer has personally seen many of the tools CY has made and all of them are real masterpieces. CY makes other gadgets with apparent ease. He makes lapel pins, rings and novelties, and in fact anything that can be made from metal. One hobby that is dear to his heart is the building of model planes. He has made numerous gas models and has successfully flown them. He has one under construction now but needs the motor to complete it. We don't quite know how he finds the time to do these things but it all goes back to that early day when he learned how to work and carry out a task.

CY and VERA HAGRMAN have three fine children. Roger is 3, Ray is 5, and Dick is 12. Dick is very interested in radio and it looks like another radio man is in the making as he already works on sets and helps CY.

CY gets a vacation this month for the first time since 1927. We would say that if ever a man is entitled to one, he is. **HERE'S HOPING HE ENJOYS IT.**

Things and Stuff

ROY GLANTON spent his vacation mowing the lawn and working in his garden.

* * *

BOB RUDD spent the first week of his vacation at Boy Scout camp with the lads in Troop 19. Some fun; they almost killed him with hikes, obstacle courses, cooking, swimming, etc. Wheeeew, never again. The last week was spent in seeing the sights right in the old home town.

* * *

PERC ZIEGLER, formerly with KFAB, is now Chief of KBON. Congratulations PERC and lots of success in your new job.

* * *

FRED FRYE has finished building a six tube super put out by Meisner. It comes in kit form (good old days) with complete instructions for wiring and assembly of parts. Works fine, too.

* * *

A newcomer to radio started with WOW June 15th. His name is HERSCHEL JEPSEN, and he is a telephone man with 20 years of experience.

* * *

It probably is not generally known, but KERMIT

SLOBB of NBC Chicago, is a very good friend of our Lt. DUNBAR. Both came from Fremont, Nebr.

* * *

Vital Static

Birthday greetings to LOUIS DeBOER. He will be 24 on Aug. 10. Congratulations to WALDON SIEH as he completes his first year with WOW, Aug. 14.

* * *

Sympathy

The Engineering Department wishes to express its sympathy to Technical Supervisor JOE HEROLD upon the death of his brother.

ART

Whether or not this picture offers anything along the line of "photographic art" will have to be decided by the dyed-in-the-wool art critics. I'll have to admit that that's a snazzy looking Mobile Unit . . . but I've always maintained that you cannot eat a Mobile Unit fried "southern style." Those chickens, in a frying pan, would be art that I'm qualified to judge.

Which reminds us that some engineers seem to be born lucky. Take Harry Caskey for example . . . that's him sitting there in WTAM's Mobile Unit . . . and he seems to be more interested in those chickens than he is in the pickup. They say there are several hundred more where those two came from too!

Jim Chapman is standing between the two chickens. . . He heads WTAM's Farm Bureau. He's on the air 6-6:45 each morning, Monday through Saturday. That's a lot of time to be on the air each week, and it takes a lot of material to stay on week after week. Jim Chapman scouts around the state interviewing farmers who do not have time to make the trip to WTAM. Jim takes a portable recording outfit along . . . that's how Caskey gets this free publicity.

This picture was taken on Herbert Starr's 154 acre poultry farm over in Geauga County. Poultryman Starr and his son Keith sold 20,000 chicks last spring, Keith is standing to Jim's left . . . his dad is hemmed in by Jim and Caskey. In addition to the 20,000 chicks, the Starrs have plenty of fryers and layers. Caskey says the Starrs keep their chicken houses locked! Keith is reported to be an expert shot with a '22 and his dad keeps a twelve-gauge handy just in case.

(Left to right) Keith Starr; Jim Chapman, head of WTAM's Farm Bureau; Herbert Starr; Caskey and No. 5.



Washington News

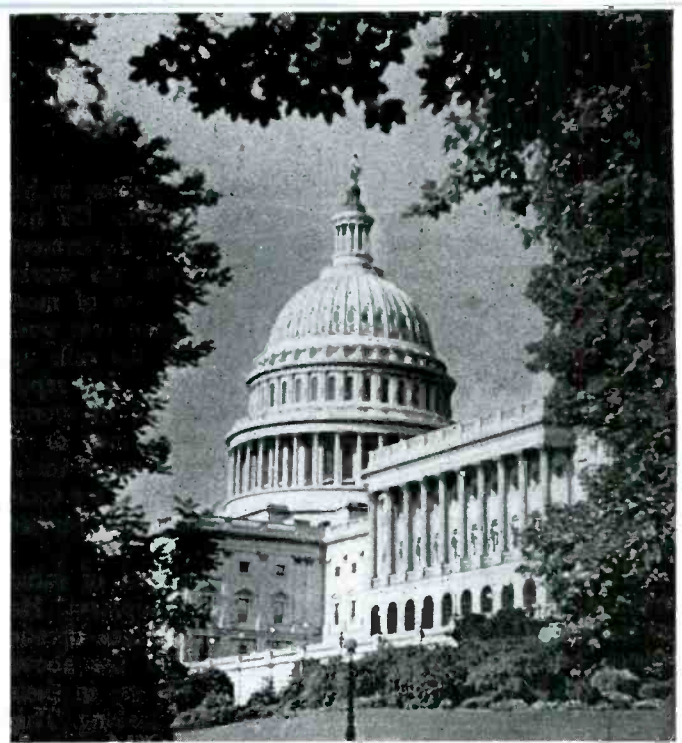
By R. E. Shenton

AFTER playing hookey for a few months, we return humbly, tempering our negligence with the announcement that resumption is in actuality our swan song. Clarifying, beginning with the September column, Mr. Van Beuren De Vries, Studio Engineer, will seize the editorial pen from our palsier hands, and apply his considerable journalistic ability to the bewildering task of narrating D. C. Doings.

Van, as he is known, was discussed in some detail in a column a few months back, but in order to refresh your memories, he has had varied experience in writing in a professional manner, and spent quite a time in the merchant marine before coming to NBC, so that his background should be an ample indication of what is in store for regular readers of this mostly monthly oration from Washington.

Since last appearance of a Washington column, there has been a fairly large number of important occurrences, including VE-Day, NBC's coverage of which has already received much favorable comment; the tragic death of President Roosevelt; and most recently the triumphant return of General Eisenhower to the United States. Because our city was the chief center of interest in the last mentioned event, we'll relate a little about what actually went on during that day.

The General arrived at Washington National Airport



shortly after 11 o'clock in the morning, and the actual landing of the plane in which he flew from Europe was described by John Batchelder of the Washington announcing staff from a runwayside vantage point.

The motorcade from the airport included in its make-up the silver and red Mobile Unit No. 7, containing Narrator Ben Grauer and Engineer Sam Newman at the controls of the portable high frequency transmitter. A complete and colorful description of the trip from the airport, through the notorious Pentagon Building and on into Washington was well handled by the portable crews, who managed to keep their truck close enough to the vehicle in which General Eisenhower was riding, to describe even his facial expression, and friendly waving to the thousands of local citizens out to greet their victorious leader. Pausing in front of the District Building on Pennsylvania Avenue, while the General was officially given the keys to the city, the retinue resumed its way on down to the Capitol Building, at which General Eisenhower made his narrative address to a joint meeting of both Houses of Congress, which climaxed the broadcast, and rounded out the story of the arrival with a completely personal and reassuring note.

WMAL, the local ABCO outlet, also aired complete coverage of the events, boasting a long, low Chrysler phaeton as their mobile unit. Operating at a considerably higher frequency than the transmitter in the NBC unit, a noticeably excellent signal was the result. The entire engineering staff here was on duty, resulting in a watch list that looked rather more like a New York one than a typical one for Washington. We're sorry that it was impossible for us to make some pictures of the interesting events, but throughout the proceedings, we were strapped to the Scullys, recording that which everyone else had a hand in creating.

Well, we'll trade our mill in for a gross of Hershey bars and six aspirin, adding somewhat remorsefully that it's been fun grinding out these typesetter's nightmares, but we're sure our successor can surpass us both in quality and frequency, there being absolutely no doubt about the latter. And so, stepping from the editorial chair (junior grade), we join the fortunate masses to whom the 10th of the month is just the day after the 9th, and just 5 days from payday.

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WHAT'S NEW

(Continued from
Page Twenty-nine)

The Army's first large fixed station in Germany—built in 7 days at Frankfort—is a 40-kilowatt job putting out a slam-bang signal to the States. Former NBC engineers (Lt. Col.) Fred Shidel and (Maj.) Paul Moore had more than a passing interest in the "project." But we'll have to wait a few years to hear personal details about the record installation.

* * *

Powered by jet propulsion, a helicopter of advanced design is claimed to have greater speed than orthodox helicopters. The new Helicospeeder has no antitorque rotor, and is much simpler to operate. Dials are few in the cockpit of the helicopter, and one throttle does most of the work. Jet propulsion motors are practically free from vibration.

* * *

Two thousand miles of coaxial cable have been laid—most of it underground—by the American Telephone and Telegraph Company. This is primarily part of their plan to lay a concentric circuit coast-to-coast by 1948—a deadline they expect to beat easily. Completed sections of the coaxial line are now in use—carrying experimental and commercial television and carrier telephony.

* * *

Former NBC engineer (Capt.) Dave Kempkes relates the following from Cairo, Egypt. A supply of lend-lease diapers sent to Africa for the usual use of infants found their way into strange hands. The Arabs, it seems, had never heard of diapers. They wound the cloths around their heads and used them for turbans.

* * *

Using a new robot navigator mounted in the rear of a jeep, it's possible for our soldiers to determine their exact location at any given time. The gadget—called an odometer—traces every movement of the jeep on a graph or map placed beneath its stylus. The robot cartographer is used widely to manufacture maps of unknown areas "in the field." It's an electronic device, the details of which aren't likely to be available until the war is won.

* * *

Claims that radio waves can guide, speed up, or retard pigeons are the bunk. So say Army pigeoneers, after reading wild claims in some of the radio trade magazines. Birds, not being mechanically constructed, can't be expected to "respond" to electromagnetic waves. With or without radio waves, the birds still fly a true course to their home lofts. Often doing many jobs of war communication that even radio can't accomplish.

* * *

Scheduled for immediate post-war production are lightweight, self-charging portable radios. A boom in this type of set is expected, and radio manufacturers will meet the market demand with an unprecedented number of portables.

* * *

He was the oldest inhabitant of the New England fishing village, complete with flowing beard, stooped with the weight of years. "Yep," he remarked, looking up from ancient heterodyne, "I'm 94. And I ain't got an enemy in the world!" He rang a comfortable bullseye on the cuspidor, and then chuckled, "Thank God, they're all dead years ago."

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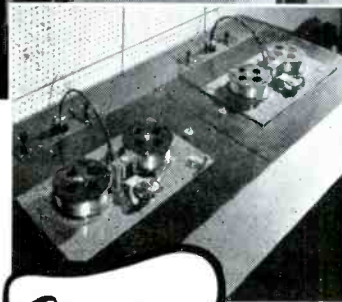
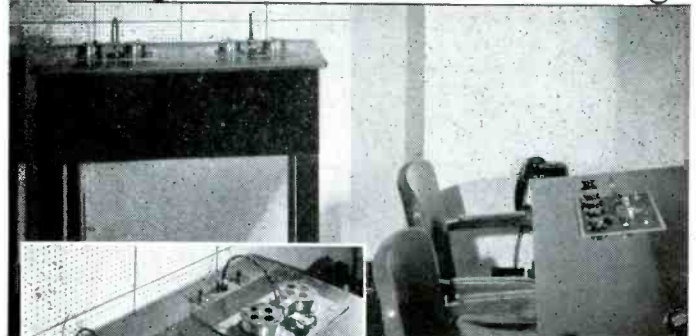
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Notes from the 'Steel City'

By James H. Doll

I'M NEW at this game of journalism, how some ever my fellow workers chose me to enlighten the world on the doings in the "Smoky Town" so let's have at it—

First off, the officers following last election are: Chairman, Howard "Mac" McClelland; Secretary-treasurer, Frank Woltemar; Committeemen, Clarence Fabian (Xmtr) and Alphonse Stasiak (Control).

CLARENCE FABIAN will long remember the 23rd of June. Just a year ago on that date he had the unique experience of having the towers practically fall in his lap. He's in favor of forming a club exclusive for op's who have had the same delightful experience (count me out), and swears that if it ever happens again he'll take up chicken farming in earnest.

Wet grass may be ideal for landing small pontoon planes in an emergency, but when it comes to motorcycles, it's strictly no go. JOHNNY FREUND learned the hard way and spent two hours one Sunday morning getting all three wheels back on the driveway.

The smiles seen around the control room and transmitter are due in no small measure to the fact that JAMES SCHULTZ (Chief Engineer) announced that the long looked forward to vacations might be forthcoming after all.

FRANK WOLTEMAR believes in the old adage, practice makes perfect. Every weekend, weather permitting, he's out on the links trying to get within fifty of par. "Red Eyes," as Frank is known to the boys in studio C, is quite a worker, incidentally. He not only handles the throttle on the "Morning Express," but also gets the afternoon shift at the "Tune Factory" started.

I've heard rumors to the effect that ALPHONSE (Pride of Lawrenceville) STASIAK can't make up his mind whether to chase Dan Cupid or run away from him.

That's all the news for this time, see you again soon—Jim.

TRADE NEWS

British trade circles expect rapid upsurge of television activity, a high audience, and low-priced receivers.

Nothing further on the "Fifth Network" tentatively known as Associated Broadcasting Corp., which, it is rumored, has already leased network lines from the A T & T Co. From the FCC however, we learn that the Aviation Corp's planned purchase of the Crosley WLW broadcast interests is in the mill, with a possible WINS—New York outlet. This would give the country six—count 'em, six, networks! Not to mention the flock of FM networks and the Eastern US television networks that will spring up surprisingly soon after V-J Day; as a matter of fact, they will become realities before the average person will be able to buy a new automobile.

Hallcrafters Company has announced the appointment of R. J. Sherwood as sales manager; he has formerly been connected with the General Dry Battery Co., where he had been assistant to the president. Hallcrafters has just acquired a newly designed Micro Turret Punch Press, which permits precision chassis layout in 10 to 40% of the time normally required by skilled mechanics; this device accounts for part of Hallcrafters phenomenal war production records.

RCA announces a new metal to glass seal for vacuum tubes that will permit the use of steel instead of special alloys which are not only more costly, but scarce.

Mr. Henry J. Barreca has been elected president of the Amalgamated Radio Television Corp. He has formerly been production engineer, and chief tool engineer of American Hardware Co., Inc., of Mt. Vernon.

Twentieth-Century Fox Corp. plans to get into commercial television in New York City, and has already filed with the FCC.

NBC Television has lost television engineer Robin D. Compton, who

became chief engineer of KMBC Kansas City's AM, FM, and Television. John Fricker, former NBC television engineer, is now Chief Engineer of KSTP St. Paul's AM, FM, and Television.

Permoflux Corp., Chicago, announces greatly increased research, engineering, and production facilities, where they manufacture loud speakers, headphones, transformers, microphones, etc.



Dr. William E. Wickenden, President Case School of Applied Science, Cleveland, has been elected president of the AIEE.

Acrovox Corp. has sent out a mimeo captioned "Don't get burnt!"—Leave Surplus Goods Alone—too many uncertainties and dangers lurk among government-dumped radio components for the regular jobber to take a chance. When handling such merchandise, it should be clearly represented as "dumped goods" and sold only "as is"—because manufacturers WILL NOT guarantee or replace such items that may have deteriorated in warehouses.

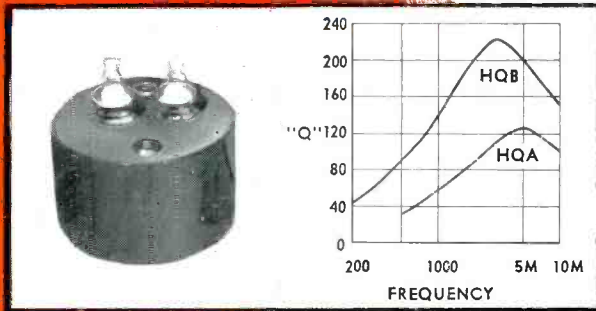
DENVER

Continued from
Page Twenty-five

ing around and about KOA. On May 27th he stopped at the home of Blair Dobbins (former transmitter engineer now with Curtiss Candy Company at Fort Collins). It was a fine baby boy weighing 9 lbs. 8 oz. and his name is Mike (Is that short for "Microphone"? Ouch!) Blair passed out seegars, also Baby Ruth candy bars. (Send him a bill, Stolzey, for the commercial plug.) The other arrival was at Kenny Cooper's residence. It was a beautiful baby girl, Kenny's third girl, weighing 8 lbs. 9 ozs. and her name is Margaret. Looks as though Kenny is going into competition with Eddie Cantor. Well, with the announcement of the cradle roll we'd better wind up this newscast until next month and here is your announcer—(It must be the hot weather)—S' Long!

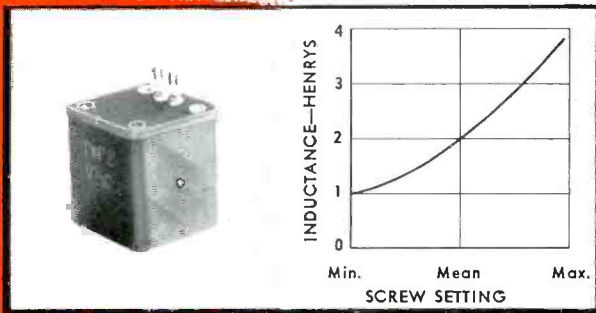


FOR INDUCTORS



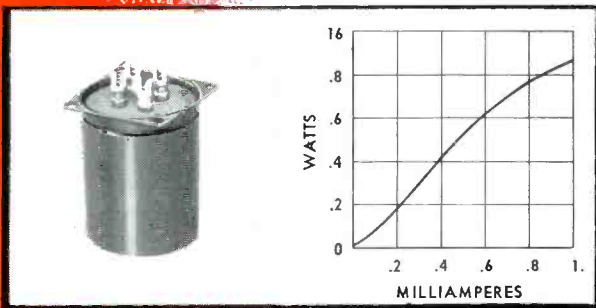
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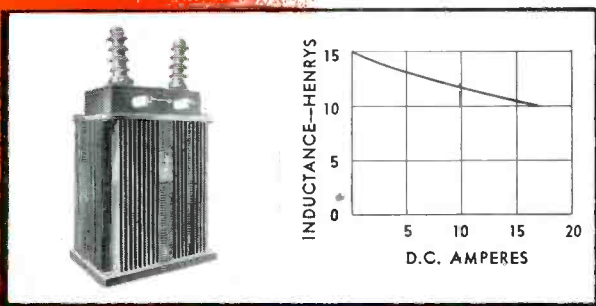
TYPE VI-C VARIABLE INDUCTORS

These inductors are available in optimum values from 10 Mhy. to 10 Hys. They are tunable over a wide range by inserting an Allen Head wrench in the adjusting screw. Units measure 1 1/4" x 1-7/16" x 1-7/16".



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