OPERATING INSTRUCTIONS

for

CORD TYPE PRIVATE

BRANCH EXCHANGES

MICHIGAN BELL TELEPHONE COMPANY

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for

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FOREWORD

THIS booklet covers the most important points of private branch exchange operating.

The quality of telephone service received by members of your organization and those who call your Company depends upon the equipment and operating methods used at your switchboard and at the Telephone Company central office.

We who operate the central offices and you who operate the P.B.X. switchboard thus have a joint responsibility. The suggestions contained herein are designed to coordinate these operating procedures so that a fast, dependable, and courteous service will be assured.

We think you will find the instructions helpful. In addition to them a P.B.X. Service Representative is available to answer questions and consult with you regarding the service at your switchboard. The P.B.X. Service Representative will be glad to call on you upon request.

MICHIGAN BELL TELEPHONE COMPANY

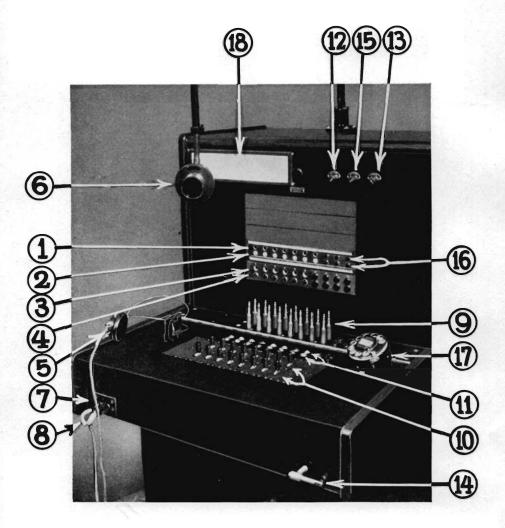
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A TYPICAL cord type P.B.X. switchboard has the following operating parts which are illustrated on the opposite page:

- 1. Extension jacks.
- Extension line signals.
 (Dial Extensions—Lamp cap marked "D")
- 3. Trunk jacks.
- 4. Trunk line signals.
- 5. Attendant's receiver.
- 6. Attendant's transmitter.
- 7. Attendant's telephone jack.
- 8. Attendant's telephone plug.
- 9. Connecting cords.
 - (a) Front Cord—Used to answer an incoming trunk signal and to complete an outgoing or extension-toextension call.
 - (b) Back Cord—Used to answer an extension line signal or to complete an incoming to extension call.
- 10. Connecting keys.
 - (a) Front Key-Used as talking key and ringing key.
 - (b) Back Key—Used as through dialing key or for night connections.
- 11. Cord supervisory signals.
 - (a) Front Row-Red signal associated with front cord.
 - (b) Back Row-White signal associated with back cord.
- 12. Buzzer (BUZZ) key.
- 13. Hand generator (GEN) key.
- 14. Hand generator.
- 15. Battery (BATT) key.
- 16. Designation strips.
- 17. Dial.
- 18. Condensed operating instruction card.

Equipment On Cord Type P.B.X. Switchboard



A typical cord type P.B.X. Switchboard Equipped for Dialing



Trunk-to-Extension Calls

Answering Incoming Trunk Calls

WHEN you answer an incoming trunk line signal, operate a front or "Talking" key away from you, pick up the associated front cord, that is, the cord toward you and plug into the

trunk jack above the lighted signal. Never plug in on an incoming call until you are ready to answer as this stops the ringing signal and may cause the calling party to hang up without waiting for your answer.

Do not have more than one talking key operated at a time.

Use cords in rotation from left to right. This helps you to know on which calls to give reports or subsequent rings and also assists in distinguishing calls on which conversation has not yet started because such



"—operate a front or talking key away from you, pick up an associated front cord—"

calls will generally be on cords grouped together.

What to Say When Answering

Answer incoming calls with your firm name (or telephone number) as, for instance, "Smith-Jones and Co." Long names may be abbreviated by leaving out initials or the business designation. Care should be taken to choose an answering phrase that will not be misunderstood for any other well-known firm in your locality.

During certain hours, if desired, you may use a phrase such as: "Smith-Jones and Co., Good Morning!" The use of "Good

Morning" should not be continued, however, for more than about an hour after the opening of business if your firm is one which receives repeated calls at short intervals from the same individuals.

Acknowledging the Order Received

Listen closely to the order. Request repetition or repeat in a questioning tone any part of the order of which you are not certain. If you repeat, listen carefully for a possible correction.

If you are sure you understand the order correctly, acknowledge with "Thank you." If you know the desired extension is busy, however, or that the desired party is not available, you may report this immediately without acknowledging.

If more details are required to establish the desired connection, question the calling party as necessary, using a phrase such as the following:

"Is that Mr. J. F. Brown or Mr. W. G. Brown?"

"Is that the Mr. Brown in the Shipping Department?"

"Do you wish price information or to inquire about a shipment?"

If the order was indefinite tell the calling party or operator, as you establish connection, the individual or department to whom he will be connected. Say, for instance, "I'll give you the Credit Department," or "Mr. J. F. Brown takes care of that, I'll connect you with him."

In large organizations it is generally advantageous to have connections requested by extension number instead of by name. To further this end, you should avail yourself of any suitable opportunity to tell the calling party the number to be used on future calls. Say, for instance, "I'll give you the Credit Department, extension 214," or "That would be Mr. Brown on extension

215. I'll connect you." If you have determined by questioning who is desired, say for instance, "Thank you. The number is 215. I'll connect you."

When you answer an incoming trunk signal, an out-of-town operator may say, for example, "One moment, please? Cleveland is calling." Acknowledge by saying, "Right," and wait on the line for the calling party's order. It gives an out-of-town customer a much better impression of your concern if you are waiting to receive and comply with his request. If an out-of-town operator says, for example, "Mr. J. S. Allen, please? Cleveland is calling," acknowledge, for example with, "Thank you. I will connect you."

Keep a list of companies and persons from whom you are authorized to accept charges on collect toll calls and give acceptance promptly when asked by saying, "Charges accepted." If the call is from a person whom you know is not entitled to such service, say, "One moment, please?" and refer the matter to an individual in your firm who can pass on such expenditures. On an incoming collect call, if it is necessary to have the charge quoted, say, "Please quote the charge," as soon as you accept the call.

Establishing Connections

If the called extension is not busy, plug the back cord of the pair used in answering into the called extension jack and immediately start to ring by operating the back key toward you. Ring steadily for two seconds and then pause for about ten seconds and follow with another ring of about two seconds. Continue ringing at these intervals until an answer is received or it is evident that no answer is likely to be secured. If the called extension is slow in answering or does not answer, proceed as outlined in "Progress Reports," Page 12.

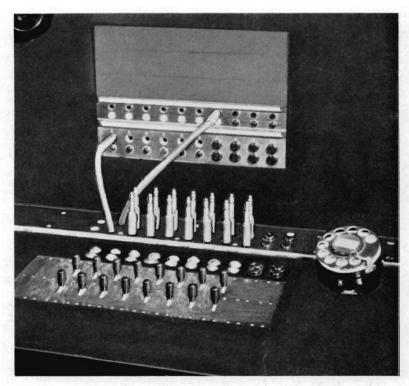
If the extension is busy, you may say, for example, "Mr. Smith's extension (Extension 250) is busy. Will you wait?"

The answer you receive to this report does not always give you all the information needed. Accordingly, if your firm receives many out-of-town calls, the following phrase may be used:

"Mr. Smith's extension (Extension 250) is busy. Will you wait, or do you care to leave your number?"

This will expedite the disposal of calls on which the calling party might otherwise be put to unnecessary expense.

If the calling party gives an out-of-town number or mentions that he is talking on a long distance call, you should of course



A completed incoming call.

make every effort to connect him immediately. If possible, ring an extension that you know is located close to the one called and request the person who answers to tell the desired individual that you are holding a toll call for him, giving the place and the name of the calling party, if you know them. A list of extension numbers arranged in groups according to locations will help you in such cases. You will find it helpful also to maintain a list of alternate parties who can talk satisfactorily for each other on business matters, so that if one party is not available, you can suggest another.

Where the calling party waits for connection to a busy extension, make frequent attempts to secure the line. If you are establishing a connection after a slight delay, cut in on the line and say, for example, "You may have Mr. Smith, now." If the delay has been considerable you may add, "Thank you for waiting."

On an incoming toll call, if the party called cannot be reached, the calling operator may leave word, saying, for example, "Please call operator 45 at Cleveland, Ohio." Make sure that you understand the name of the calling place and the number of the operator to be called, and make a memorandum of this information. Do not request the name of the party calling as this delays the connection unnecessarily and is seldom required by the extension user. Use whatever method is locally available for bringing the message to the attention of the desired party and as soon as he is ready to talk, hold him on the line, reach Long Distance and report, "Operator 45 in Cleveland, Ohio, is calling Mr. J. S. Allen. He is ready to talk." The operator will make an immediate attempt to have the call completed while your party remains at the tele-

phone. Give your listed number when Long Distance asks for it.

To further assist you in giving prompt and accurate reports concerning persons not available, including those who are out of town frequently, it is advisable for you to keep a record of their whereabouts, when they will return or where they may be reached.

Progress Reports (Voluntary Supervision)

On calls which are delayed due to a busy or a slow answer condition, it is most important to give progress reports to the calling party at frequent intervals. The calling party cannot hear you ring an extension line, and reports are required not only as an act of courtesy but also to encourage waiting long enough to provide ample opportunity for the called party to answer. Progress reports furthermore enable the calling party or operator to change the order in the event that it would be better to talk to someone else.

Give reports at least once every 30 seconds. Say, for example, "Mr. Smith's extension is still busy," or in the case of a slow answer, "I am trying to get Mr. Smith."

If it is desired to fix the number of the called party in the calling person's mind, this may be changed to "Extension 325 is still busy," or "I am ringing 325."

If several progress reports are necessary on one call, later reports may be varied by saying, "Mr. Smith's extension is still busy. I will watch it closely," or "Mr. Smith has not answered yet. I will keep on ringing."

In giving a progress report, be sure to operate the right talking key so that the report will be given to the person for whom it is intended.

Request to Make a Transfer on an Incoming Call

If you are requested to make a transfer on an incoming call,

acknowledge the request. Carefully keep the talking key operated to avoid a cutoff, remove the cord from the first extension line jack and insert the plug in the jack of the desired extension provided it is not busy.

If the desired extension is busy, report this to the person calling and proceed as on a new incoming call to a busy extension giving frequent progress reports and being governed by any change in instructions received.



"-carefully keep the talking key operated to avoid a cutoff, remove the cord from the first extension line jack-"

Re-calling the Central Office Operator

If it becomes necessary to re-call the central office operator for



"—operate the back key away from you and then to normal two or three times—"

any reason, operate the back key away from you and then to normal two or three times and then pause for an answer. The operation of the key should be at the rate of about two times a second. If no response is received repeat the procedure until the operator answers.

Disconnecting

Disconnect a cord pair on which, after conversation, you receive a steady lamp signal associated with the back cord.

Do not mistake slow answers from extensions for disconnect signals. If you are in doubt, operate your talking key and challenge with "Waiting?" before disconnecting. Likewise, do not mistake a disconnect signal for a slow answer on the part of an extension. Some conversations are very short, and it is therefore necessary to watch connections closely for the retirement of the supervisory lamp when the called extension answers. Care should be exercised in this regard so that you do not unintentionally re-ring an extension user.

Disconnect as soon after a disconnect signal is received as is possible without interfering with other operating work.

Take down the front cord first and then the back cord.

In disconnecting, in order to avoid cord trouble, always grasp the shell of the plug rather than the cord itself.

Trace cords by hand as well as by eye, if necessary, in order to avoid cutoffs on other connections. Be careful not to disturb plugs in adjacent jacks.



"-always grasp the shell of the plug rather than the cord itself-"

Extension-to-Trunk Calls

Answering Calls from Extensions

WHEN you answer an extension line signal, operate a front or "Talking" key away from you, pick up the associated back cord, that is, the cord away from you and plug into the extension jack above the lighted signal.

What to Say When Answering

Considerable variety may be employed in the answering of extension line signals. If the call is from an extension to which only one individual ordinarily has access and you know the name of this individual, the expression "Yes, Mr. Smith," or "Good Morning, Mr. Smith," may be used. For more general use, "Your call, please?" or "Order, please?" may be employed. The word "Operator" is not generally advantageous because it may lead to an answer being confused with the answer of a central office telephone operator.

If you receive no response to your answer and it is necessary to request the order again, do so.

Acknowledging the Order Received

Listen closely to the order and if you understand it, acknowledge with such a phrase as "Yes, Sir," "All right, Sir," or "Thank you." If you do not understand the order, request the calling party to repeat by saying, for example, "What number, please?" or "What is the order, please?"

If you understand the repeated order, acknowledge with "Thank you."

Establishing Connections

On a call for an outside number pick up the front cord of the pair used in answering and immediately plug into the jack of an idle trunk to the central office. In a dial area the through dialing key should be operated before plugging into the trunk. As explained below, this operation is necessary for the extension user to dial his call.

If you have a separate group of trunks for outgoing service only, use one of these trunks in preference to a two-way trunk. If you do not have one-way outgoing trunks or if all of the one-way trunks are busy, use a two-way trunk selecting an idle one from the high numbered end of the group.

Restore the talking key after you have plugged into a trunk to the central office when the extension user makes his own call. If your switchboard is served from a dial office you should operate the through dialing key (back key) away from you also, before plugging into the trunk. In this case leave the dialing key operated until you disconnect the cord.

If the call is given in such a way that it is apparent the calling party does not know that he should place his own call, say, "I will give you an outside line," as you connect him to the central office.

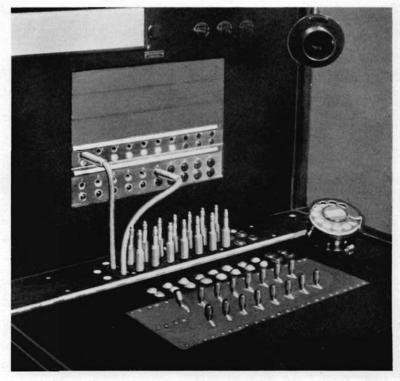
If your switchboard is served from a dial office and you are instructed to dial local numbers for an extension line not equipped with a dial, or if there are certain extensions not permitted to place their own outgoing calls, do not close the talking key but remain on the connection to receive dial tone. Start to dial the number exactly as listed in the directory as soon as you hear dial tone. Be sure not to restore the talking key until the dial returns to normal after you have dialed the last digit of the number.

If your switchboard is served from a manual office and it becomes necessary for you to call local numbers yourself, do not close the talking key and pass the order as soon as the operator answers. Remain on the connection to furnish the number again if requested or to correct any mistake you may observe in the advancement of the call.

Do not release the calling extension even though the user may have hung up. In this way, the calling extension will be available immediately when the called number has been reached.

Request to Make a Transfer on an Outgoing Call

If you are requested to make a transfer on an outgoing call, acknowledge the order and where such is the case, explain to the



A completed outgoing call showing the selection of the highest numbered trunk.

The through dialing key is operated to permit the extension
user to dial his own number.

extension user that his flashing has caused a cutoff. Any movement of the extension receiver hook on an outgoing call generally results in a cutoff. This can be avoided, however, if your party makes the request from a different extension line. When a request is received on another line, acknowledge the order, release the extension on which the request was obtained and close the talking key. If the through dialing key has been operated on the original connection restore it to its normal position, open the talking key and insert the plug of the back cord in the jack of the now desired

extension. Start conversation if necessary and restore the talking key. Be careful not to have two talking keys operated at the same time.

Disconnecting

Disconnect a cord pair on which, after conversation, you receive a steady lamp signal associated with the back cord as outlined under "Disconnecting" on incoming calls, Page 14.

Out-of-Town Calls Description of Services

THERE are two major classes of out-of-town calls: Station and Person.

Station Calls

A station call is one on which the calling customer does not specify that he wishes to reach a particular person or private branch exchange extension station or department at the called point. Such a call is handled at minimum rates and results in maximum speed of connection. A station call is considered established when anyone at the called number answers.

The economy and speed of station service have made it popular. You may find that a larger use of this class of service may be of advantage to your firm.

Person Calls

A person call is one on which the calling customer specifies that he wishes to reach a particular person, a private branch exchange extension station or department.

Person rates are higher than the corresponding station rates and a small report charge is made in some cases if the called telephone answers but the call is not completed. The use of person service may be more satisfactory to the calling party in such cases, for example, where conversation is desired only with the party called and there is some doubt as to whether he will be readily available. On a person call repeated efforts will be made to reach the person desired.

Collect Call Service

At the request of the calling party and with the approval of the called party or station, the charge on a person or station call may be reversed to the called station.

Outward Calls

Routing Calls to the Proper Operator

IN some cities all out-of-town calls are handled by one group of operators. In other cities it has been found desirable to divide the operating work on out-of-town calls. Where the work is divided, certain classes of calls such as station calls to nearby points should be given to the local operator and all other classes should be given to Long Distance. Your out-of-town service will be accorded the most satisfactory handling if your calls are always given directly to the proper operator. Placing calls with the correct operator can be easily accomplished by following instructions which can be obtained from the directory, your Private Branch Exchange Representative or the Long Distance Chief Operator.

Record of Frequently Called Numbers

It is possible to give faster service on out-of-town calls if the operator is furnished with the called number. You will find it desirable, therefore, to maintain a list of out-of-town numbers for persons or firms frequently called so that the number will be available when a call is placed. It generally is advisable for exten-

sion users to maintain their own lists as well. The faster service not only saves time for you and extension users but also makes your trunk lines available sooner for other calls. The business office or the P.B.X. representative will be glad to assist in furnishing numbers and in preparing the lists.

Whenever it is necessary to place a call by name and address because the telephone number is not known, add the number to your list immediately on learning it from the operator. Always correct your list when you find that one of the numbers has been changed.

Placing Outward Calls

Extension users should be encouraged to file their own out-oftown calls while holding the line. Any assistance necessary should be given to assure extension users reaching the proper operator.

Faster service can be secured if the called place details are passed to the operator first and the calling number later when requested by her. This permits the operator to secure the calling number and any further details while waiting for the called telephone to answer, and thus results in saving your time. When a call is placed, the operator should be given the name of the called place, the state if the called place is not in your state, the called number, and on person calls, the name of the party called. As an exception, if the charges are to be reversed, precede the name of the called place with the word "Collect." The name of the calling party on "Collect" calls should be also given after the calling number has been passed.

The name of your firm or an individual is not required when placing out-of-town calls, except as described above.

If you wish to be notified at the end of a stated period or to have "Time and Charges" quoted, make this request when the operator asks for the calling number. It is important to indicate clearly the class of service desired when passing the details of the call. Misunderstandings can be avoided by observing the following examples:

Examples—Call Placed with Local Operator

- 1. "Pontiac 2-5678."
- 2. "Randolph 1234."

Examples—Call Placed with Long Distance Operator

Station Calls

- 1. "Cleveland, Ohio, Cherry 2345."
- 2. "New York City, J. H. Reynolds' residence, 129 Locust Street."
- 3. "Paterson, New Jersey, Hansen and Company, 999 Market Street."

Collect Station Call

1. "Collect, Baltimore, Maryland, Cadillac 3456."

Person Calls

- 1. "Chicago, Illinois, Plaza 5678, Miss Carson."
- 2. "Denver, Colorado, Exchange 4567, Extension 34."
- 3. "Pittsburgh, Pennsylvania, American Copper and Brass Company, 745 Main Street, Shipping Department."
- 4. "Atlantic City, New Jersey, Mrs. Elizabeth A. Warrington, 241 Prospect Avenue."

Collect Person Call

1. "Collect, Miami, Florida, Biltmore 6789, A. C. White."

When necessary to place calls for extension users, secure all the essential details, request the extension user to hold the line and in his hearing pass the details of the call promptly and accurately to the proper operator as outlined in the preceding examples.

Remain in on the connection until the start of conversation or until the call is otherwise disposed of, lending whatever assistance is necessary to assure prompt and complete service.

If you have a separate group of trunks for placing out-of-town calls, give the first number of this group when asked to furnish the calling number. If you have no separate group of trunks, give the number shown in the telephone directory for your firm instead of the trunk number.

If the extension user has not held the line on a station call, ring the calling party as soon as the call is passed to the called place.

If the extension user has not held the line on a person call, ring the calling party as soon as an answer or a report regarding the called party is heard. Do not address the called party when reached, unless you have been instructed to do so, but say, "One moment, operator," and report, if necessary, to your party, "Ready on your call to Chicago."

Calls Not Completed on First Attempt

ALL out-of-town calls which are not completed or not canceled on the first attempt are followed up by the operator in accordance with a schedule designed to render as fast and reliable service as possible without annoyance to the calling or called parties. In giving a report of delay, the operator may tell you the time at which she plans to try the call again. You may suggest a more convenient time if this is desirable. If you wish no further reports on your call until the called party or station has been reached, simply tell the operator this.

If you do not keep a record of out-of-town calls, it is assumed that the extension user will identify himself by giving the operator his name or extension number at the time he receives the first report of delay. This will make it easy to locate him when the operator is ready with the call.

If you keep a record of out-of-town calls, the identifying information may not be necessary because the operator will give you all subsequent reports and your record of the call will identify the calling party. If, however, there are several occupied positions at your switchboard, furnish the operator with either the extension number or with your position number so that she can again reach you or so that she can locate the calling party.

All subsequent reports which you receive from the operator should be given promptly to the calling party unless you know that he does not wish further reports. To avoid delay in the completion of calls, the extension user should be requested to notify you where he may be reached, if while his call is active, he leaves his office or the extension from which the call was filed.

It may occasionally happen that, when the operator is ready with the call, your party will not be available. The operator in this case will leave word for him to call Long Distance when he is ready to talk. When the calling party becomes available, ask him to hold the line, reach Long Distance and say, for example, "Mr. Jones is ready to talk on his call to Chicago, Superior 1234. This is Plaza 2-5678." The operator will, at once, make another attempt to complete the call while the calling party remains at the telephone. If the operator leaves word to call a certain operator, for example, "Long Distance Operator 45," make a note of the operator's number. In such a case, when you reach Long Distance, ask for "Operator 45" and when she answers, give the report to her.

If an operator reports, for example, "On your call to Cleveland, Cherry 2345, we are ready," and you think you can reach your party without delay, say "Thank you. One moment, please."

Reach your party as promptly as possible, using the other cord of the pair used in answering. When the calling party answers, say, "Ready on your call to Cleveland," and cut out of the connection as soon as conversation begins.

If, while a call is active, the calling party leaves the office unexpectedly or becomes occupied so that he will not be available to answer the telephone for a considerable period of time, reach the operator and ask her to hold the call until a specified time, or until you ask for another report on it. Where a report has been received on a delayed outgoing call that the called party is expected during a normal lunch hour or after office hours of the calling party request it be held until later in the afternoon or the next day, as the case may be. This will prevent the called station or party from being called unnecessarily. Avoid canceling a call which you think will be required later the same day or on a following day. The operator will hold the call until you wish another attempt made. In requesting a report on a previously placed call, be careful not to give the operator the impression that you are placing a new call. Say, for example, "Will you try my call again to Chicago, Superior 1234? This is Plaza 2-5678."

Extension-to-Extension Calls

Answering and Acknowledging Calls from Extensions

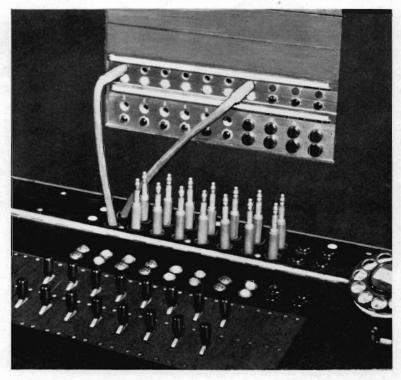
ANSWER and acknowledge an extension line signal as outlined in "Extension-to-Trunk Calls," Page 15.

Establishing Connections

On a call for another local extension pick up the front cord of the pair used in answering, plug into the proper jack if the line is not busy and immediately start ringing by operating the front or "Talking" key toward you. Ring steadily for two seconds and then pause for about ten seconds and follow with another ring of about two seconds. Continue ringing at these intervals until an answer is received or it is evident that no answer is likely to be received.

If the desired extension is busy give a busy report and disconnect.

If the called extension is slow in answering or no answer is received, proceed as outlined in "Progress Reports," Page 12.



A completed extension-to-extension call.

Re-call Signals

If either or both supervisory signals flash, or when one supervisory signal lights, operate the talking key and answer with a phrase such as ,"Yes, please?" or "Order, please?"

Attempt immediately to carry out any instructions received on answering a re-call signal.

Disconnecting

When both supervisory signals light disconnect both cords immediately.

Attention to Signals

HEN several signals simultaneously await attention at your switchboard, it is important to give some signals priority. The following outlines the proper choice between signals of different types.

First-Re-call Signals (Flashing Cord Lamps)

A re-call signal should be answered in preference to answering a signal on a new call.

Second-Incoming Trunk Signals

It is a generally appreciated courtesy to give the promptest answer possible to people who are trying to reach your firm.

Third-Extension Line Signals

Next in order of importance are answers to extension line signals.

Fourth-Disconnect Signals

A call on which a disconnect signal has appeared should be taken down promptly but this should not be allowed to interfere with the answering of re-call signals or of new calls. So far as possible, connections should be taken down as an overlap operation, i. e., while doing other work such as ringing.

Signals of a given type such as trunk or extension line signals should be answered in the order of their appearance.

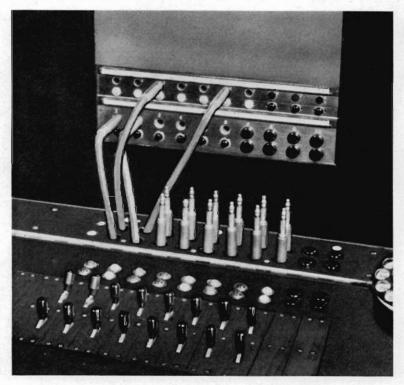
Keep your eyes on the cord supervisory signals as much as possible when you are not required to look at the face of the board.

Do not keep memorandum pads or other objects on the keyboard in such a position as to hide the cord signals.

Night Connections

Establishing Connections for Night Service

BEFORE leaving the switchboard be sure to establish connections for any night service required. Keep a list showing the extensions used for night connections and the number of the trunk to be connected with each.



Night connections. Note that the back keys are operated to permit the extension users to make outgoing calls.

Care is required to avoid improperly set up night connections which will cause signals to appear at the central office throughout the night and put the trunks involved out of service.

When you establish night connections operate the back keys of the cord pairs used away from you. Extensions requiring incoming or two-way service at night are then connected to trunks in the two-way group beginning with the listed number. Where certain trunks are listed in the telephone directory for night service, these trunks, rather than the trunks beginning with the listed number, should be employed.

Before leaving the switchboard operate the buzzer key and the battery key to the "Off" position.

The Private Branch Exchange Representative will be glad to assist you in connection with any special routine that may be required for establishing night service.

Releasing Night Service Connections

As soon as you occupy the switchboard in the morning, restore the battery key to normal, and after determining that the lines are not in use, take down the cord pairs used for the night connections and restore the keys to normal.

Important Points to Keep in Mind

1. Use of Buzzer Key

When away from the switchboard always have the "Buzz" key operated.

2. Use of Directory

On a call for which you do not know the number, consult the directory unless you are reasonably sure that the number has been added since the directory was published. You can generally save time by looking up numbers listed in the directory yourself instead of calling Information. Call Information to obtain a number

which you think has been added since the directory was issued. Give the information operator the name and address, and if possible the business of the desired party.

3. Maintaining a List of Numbers

It is highly desirable to keep a list of numbers frequently called so that they will be readily available to you. New numbers

obtained from Information or reported by an operator should be retained for this list because generally such numbers if called once will be called again.

4. Reporting Equipment Out-of-Order

Switchboard equipment or station equipment which is out of order should be reported to Repair Service promptly. Before reporting a false signal on an extension line, however, hold the line for several



"—it is highly desirable to keep a list of numbers frequently called—"

minutes on an idle cord and challenge from time to time. If the signal remains permanent arrange for someone to visit the station to assure that the receiver is not off the hook.

5. Emergency Calls

When calling the Fire or Police Department, you should give your message direct to the department concerned. Give your name, address or location of emergency and the nearest cross streets.

If the emergency warrants, you may call or dial the operator, give her the name of the department wanted and she will establish the connection.

If you receive a call from one of your extension users on which it is evident that he wishes to report an emergency, remain in on the connection in order to help pass any information which may be necessary.

6. Emergency Reference List

It is a good plan to maintain a list of officials and employees of your company whom you should reach when you receive important calls with reference to any emergency that may require prompt action. The home telephone numbers of specified individuals also, should be kept in order that situations requiring immediate attention may be disposed of promptly.

Voice Aids

OVER the telephone, a good speaking voice with a pleasing tone, distinctness and resonance is as much a part of good service as speed and accuracy in actual call handling. Good tone and voice expression may be readily mastered by observing a few simple rules.

To promote distinct speech, the muscles of the mouth should be freely used, enunciation must be clear and the end sounds of all syllables brought out.

A voice having good resonance seldom becomes tired. By resonance is meant a round ringing voice. This is produced by a force in back of the spoken words. The lungs are filled by inhalation; during exhalation the breath supports the tone and brings out the full clear ringing quality that carries. Inflection is employed by allowing the voice to rise or fall in pitch usually on the last part of a word or syllable.

Emphasis is a stress or special force given to certain words or syllables in a phrase, usually the words by means of which the important thoughts in the phrase are expressed.

A good voice assures accuracy and efficiency of operating, the elimination of all forms of misunderstanding over the telephone, greater ease of talking and a good effect on the listener.

As an aid to clearness, distinctness and proper enunciation, the different digits and party line letters are given as follows:

Numeral or Letter	Pronunciation	Formation of Sound
0	Oh	Long O
1	Wun	Strong W and N
2	T-00	Strong T and Long OO
3	Th-r-ee	Strong R and Long EE
4	Fo-wer	Long O and strong R
5	Fi-iv	First I long and the second short and a strong V
6	Siks	Strong S and KS
7	Sev-ven	Strong S and V and well sounded VEN
8 .	Ate	Long A and strong T
9	Ni-en	First N strong, long I and mild emphasis on the EN
10	Ten	Strong T and N
J	Jay	Strong J and long AY
M	Em	Short E and strong M
R	Ahr	Strong R
\mathbf{W}	Double u	Full value given to each syllable
F	Ef	Short E and strong F

If both an office name and number are involved, give the office name first with a rising inflection and then the number with a rising inflection on the last two digits or on the party letter if there is one. Pause slightly between name and number. If an office numeral is involved, treat it as part of the office name, thus, "Beacon 3-12-34?"

In addition to using the rising inflection, emphasize the digits that are underlined in the following examples:

Adams 2-28-40?	Plaza 2-1 thousand?
Beacon 3-26 hundred?	Cedar 4-28-40J?