

Operating Practice
for
No. 506 Type Private Branch Exchanges
(Also applies to No. 505-C Type)



The Pacific Telephone And Telegraph Company

FOREWORD

This booklet covers the more important points of private branch exchange operating, as applied to your particular type of switchboard, and is provided for your information and assistance.

The quality of the telephone service received by members of your organization and of others who call your company from outside depends on the arrangements and operating methods used at your switchboard and at the central office.

We who operate the central offices and you as operators of the P.B.X. switchboards thus have a joint responsibility, and the suggestions contained herein are designed to coordinate your operating procedures with those used in the central office, so that a fast, dependable, and courteous service will be assured.

While we think you will find the suggestions contained in this booklet quite helpful in the general handling of your telephone traffic, further assistance may be obtained by calling our P.B.X. instructor, who will be glad to advise you on any matters pertaining to your telephone service.

P.B.X. OPERATING PRACTICE

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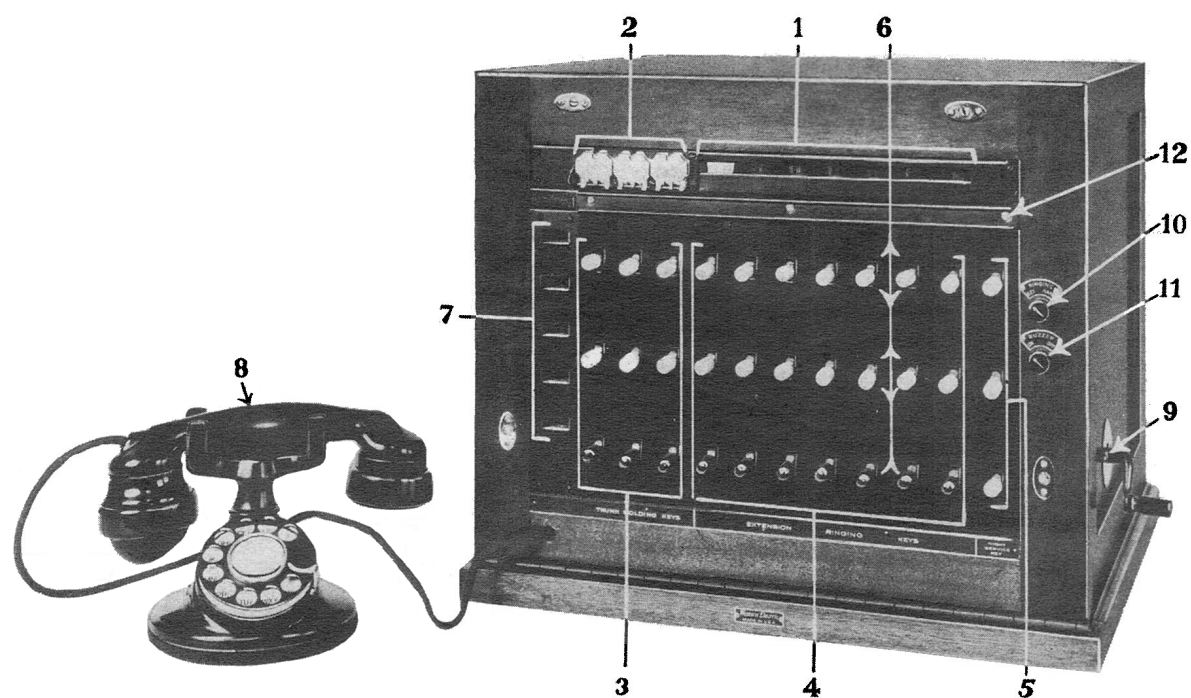
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T.P.T. & T. Co.



No. 506 Type Private Branch Exchange Switchboard

DESCRIPTION OF NO. 506 TYPE SWITCHBOARD

1. Extension Line Signals - White visual signals associated with the extension lines.
2. Trunk Signals - Drop signals associated with the central office trunk lines.
3. Trunk Keys - A vertical row of three switching keys located directly below each trunk drop signal for connecting the trunk to any one of the five connecting paths (see item 6, following). The lowest key associated with each trunk is a "trunk holding key" when operated to the downward position, and may be used for "holding" a trunk connection pending completion to an extension.
4. Extension Keys - A vertical row of three switching keys located directly below each extension line signal for connecting the extension to any one of the five connecting paths. The lowest key associated with each extension, when operated to the downward position, will ring the associated extension.
5. Attendant's Keys - A vertical row of three switching keys located at the right side of the switchboard face for connecting your telephone set to any one of the five connecting paths. The lowest key also serves as a night service key when operated to the downward position.
6. Connecting Paths - Telephone circuits provided for establishing connections between extensions, and between extensions and trunk lines by means of the extension and trunk keys.
7. Supervisory Signals - White visual signals associated with the connecting paths. The supervisory signal associated with a particular connecting path is displayed when the extension user hangs up the receiver on an existing central office connection, or when both extension users hang up on a connection between two extensions.
8. Attendant's Telephone Set.
9. Hand Generator - For use in generating ringing current if the central office ringing power should fail.
10. Generator Key - For use in connection with the hand generator if the central office ringing power should fail.

DESCRIPTION OF NO. 506 TYPE SWITCHBOARD - (Cont'd)

11. Buzzer Key - This key, marked "BUZZER," controls the operation of the buzzer associated with the supervisory, and trunk and extension line signals.
12. Designation Strip - Used for a general designation of each type of key, and also for a specific designation for each trunk and extension.

OPERATING INSTRUCTIONS

1. ATTENTION TO SIGNALS

- a. All line or supervisory signals should be answered promptly. However, when several signals of different types await attention at your switchboard, preference in answering them should be given in the following order:
 - (1) Recall Signals (flashing supervisory signals).
 - (2) Incoming Trunk Signals.
 - (3) Extension Line Signals.
 - (4) Disconnect Signals. Completed calls on which a disconnect signal has appeared should be disposed of promptly by restoring the trunk and extension keys, but this should not be allowed to interfere with the answering of recall signals or of new calls. As far as possible, disconnections should be handled as an overlap operation; i.e., while doing other work such as ringing.
- b. When several signals of one type, such as trunk signals, await attention, they should be answered IN THE ORDER OF THEIR APPEARANCE. Careful observance of this procedure will insure a consistent answer on all calls, and will avoid the possibility of an unusually slow answer on any particular call.

2. ANSWERING NEW CALLS

- a. When you answer a signal, remove your receiver from the switchhook, operating an attendant's key and the trunk or extension key involved in an idle connecting path. In the case of a trunk call the trunk drop signal should be restored by gently lifting it back into place with your finger.
- b. Do not have more than one attendant's key operated at a time. This is very important, as serious operating difficulties will result from such errors.

OPERATING INSTRUCTIONS - (Cont'd)

3. WHAT TO SAY ON ANSWERING

a. Incoming Calls

- (1) Answer incoming calls with your firm or organization name or telephone number as, for instance, "JONES AND COMPANY", "BROWN BROTHERS", etc. Long names may, of course, be abbreviated by leaving out initials or business designation. Care should be taken, however, to choose an answering phrase that will not be misunderstood or mistaken for the answer of any other well-known firm in your locality.

b. Extension Calls

- (1) Considerable variety may sometimes 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?", "ORDER, PLEASE?" or "OFFICE," may be employed.
- (2) The word "OPERATOR" is not generally advantageous for the reason that it may lead to an answer being confused with the answer of a central office operator.
- (3) If you receive no response and it is necessary to request the order again, do so using the same phrase.

c. Recall Signals

- (1) Answer recalls with a phrase such as "YES, MR. SMITH," if you know definitely who is calling. Otherwise, you may answer with, "ORDER, PLEASE?", "OFFICE," "ATTENDANT," or with your firm name if it is reasonably short.

4. INCOMING TRUNK CALLS

a. Acknowledging the Order Received

- (1) Listen closely to the order and repeat any part of it which you are not sure you understand. If you repeat, listen for a possible correction.

OPERATING INSTRUCTIONS - (Cont'd)

- (2) If you understand the order correctly without repetition, acknowledge with "THANK YOU," except that if you know the desired extension is busy or that the desired party is not available, you may report to the calling party immediately without pausing to acknowledge the order.
- (3) If it was necessary to repeat a portion of your order and if the calling party corrected this repetition, acknowledge with "THANK YOU."
- (4) If more details are required to establish the connection which is desired, question the calling party as may be 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 IS IT TO INQUIRE ABOUT A SHIPMENT?"
- (5) If the order was indefinite and it is necessary for you to determine which department is required, tell the calling party or operator, as you establish connection, the individual or department to whom he will be connected. Say, for instance, "I WILL GIVE YOU THE CREDIT DEPARTMENT," or "MR. J. F. BROWN TAKES CARE OF THAT. I WILL CONNECT YOU WITH HIM."
- (6) When you answer an incoming trunk signal, if an out-of-town operator says, for example, "One moment, please? Cleveland is calling," acknowledge the order by saying "RIGHT." Wait on the line for the calling party to be connected, as 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 the order by saying, for example, "THANK YOU," or "MR. ALLEN? ONE MOMENT, PLEASE?" and establish connection as outlined hereafter.
- (7) 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. If the call is not from a person whom you know to be entitled to such service, refer the matter to an individual in your firm who can pass on such expenditures. On an incoming collect call, if it is

OPERATING INSTRUCTIONS - (Cont'd)

necessary to have the charge quoted, say, "PLEASE QUOTE THE CHARGE," as soon as the originating operator obtains acceptance of the charge.

b. Establishing Connections

- (1) If the extension is not busy, operate the associated extension key in the connecting path being used and ring. When the called extension answers, restore the attendant's key and then hang up your receiver. The attendant's key should be restored BEFORE hanging up the receiver in order to avoid causing any noise on the connection when the receiver is hung up.
- (2) If the extension is busy, you may say, for example, "MR. SMITH'S EXTENSION IS BUSY NOW. WILL YOU WAIT?"
 - (a) The answer you receive to this phrase sometimes does not give you all the information needed. This is particularly true if the incoming call is from an out-of-town point. If your firm receives many out-of-town calls, it is best to follow a practice that will help you to recognize them and will accelerate completion of calls on which the calling party might otherwise be put to unnecessary expense. To this end, if the extension is busy, the following phrase may be used instead of the one shown above: "MR. SMITH'S EXTENSION IS BUSY. WILL YOU WAIT, OR DO YOU CARE TO LEAVE YOUR NUMBER?"
 - (b) In response to this question, if the calling party gives the number of an out-of-town station or mentions that he is talking on a Long Distance call, you should of course make every effort to connect him immediately. A good way of speeding up the completion is to 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 obtaining prompt action. You will find it helpful also to maintain a list of alternate parties who can talk satisfactorily for each other on business

OPERATING INSTRUCTIONS - (Cont'd)

matters, so that if the party called is not available, you can suggest an alternate.

- (3) In case the calling party waits for connection to a busy extension, make frequent attempts to secure the line and establish connection as soon as it becomes available. 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."
- (4) On an incoming toll call, if the party called cannot be reached, the calling operator may leave word for him to call, for example, "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. Route a copy of this message to the desk of the party called and continue to make frequent efforts to reach him by telephone. As soon as he is ready to talk, ask him to hold the line, reach Long Distance and report, for example, "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 the called party remains at the telephone. Give your listed number when Long Distance asks for it.

c. Ringing

- (1) Start to ring immediately after connecting to the called extension. Ring steadily for about one or two seconds, repeating at ten-second intervals. Continue ringing until an answer is received or until it is evident that no answer is likely to be received.

d. Progress Reports

- (1) On calls which are delayed due to a busy, slow answer, or while you are looking up information or attempting to locate the desired party, it is important to give progress reports to the calling party at frequent intervals. The calling party cannot hear you ring on an extension line, and progress reports are required not only as an act of courtesy but also to encourage him to wait long enough to provide ample opportunity for the called party to answer.

OPERATING INSTRUCTIONS - (Cont'd)

Progress reports furthermore enable the calling party, or operator in case of Long Distance, to change the order in the event that it would be better to talk to some one else than to wait any longer for an answer from the person first requested.

- (2) Give progress reports frequently, not less often than once every 30 seconds. In giving reports 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."
- (3) If several progress reports are necessary on one call, the later reports may be varied by saying, for instance, "MR. SMITH'S EXTENSION IS STILL BUSY. I WILL WATCH IT CLOSELY," or "MR. SMITH HAS NOT ANSWERED YET. I WILL KEEP ON RINGING."
- (4) In giving a progress report, special care must be exercised to operate the attendant's key in the right connecting path in order that the report will be given to the person for whom it is intended.
- (5) If, on an incoming trunk call, it is necessary for you to leave the connection before the called extension has answered, operate the bottom key associated with the trunk involved to the holding (downward) position, leave the trunk key operated and restore the attendant's key. The supervisory signal will operate when the attendant's key is restored and will remain operated until the called extension answers. When the called extension has answered, restore the trunk holding key.
- (6) If no response is received to a progress report and it appears to you that the calling party may have hung up, follow the report with "ARE YOU WAITING?"
- (7) If the called extension is still busy or no answer has been received after a prolonged period as, for instance, two minutes, give a further progress report and add, "WILL YOU TALK WITH ANYONE ELSE?" If, however, you are in a position to suggest the name of some one else who could handle the call, you may vary this phrase in order to suggest the proper person or department. If the calling party accepts this offer, it will generally be advisable for you to explain the circumstances of the call to the other person

OPERATING INSTRUCTIONS - (Cont'd)

answering before establishing connection. To do this, first operate the trunk holding key of the trunk involved, and restore the trunk key used in answering. Then ring the other individual, using the same connecting path, and when he answers say, for instance, "I HAVE A CALL FOR MR. SMITH AND I AM UNABLE TO REACH HIM. WILL YOU TAKE IT?" or "WILL YOU TAKE A CALL FOR MR. SMITH AS HIS LINE IS BUSY?" Unless he gives you other instructions, establish the connection by re-operating the trunk key used in answering and restoring the associated trunk holding key.

- (8) If the calling party is unwilling to have his call transferred to anyone else, offer to take a message, saying for example, "IF YOU WILL GIVE ME YOUR NAME AND TELEPHONE NUMBER, I WILL TELL MR. SMITH YOU CALLED." Record any information furnished as a result of this offer and use whatever method is locally available for bringing it promptly to the attention of the desired individual.

5. CALLS FROM EXTENSIONS

a. Acknowledging the Order Received

- (1) Listen closely to the order and if you understand it, acknowledge with such a phrase as "YES, SIR", "ALL RIGHT, SIR," or "THANK YOU."
- (2) 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 the order is repeated and you understand it, acknowledge with "THANK YOU."

b. Establishing Connection

- (1) If the connection desired is to another extension, operate the proper extension key in the connecting path used if the line is not busy, and immediately commence ringing. If the desired extension is busy, give a busy report and disconnect, unless the calling party requests you to try the call again.
- (2) If the call is for an outside number, restore the attendant's key, select an idle trunk, and operate the proper trunk key in the connecting path being used.

OPERATING INSTRUCTIONS - (Cont'd)

- (3) If the extension user calls local numbers himself, hang up your receiver and pay no further attention to the connection unless you are signaled.
- (4) If the call is given in such a way that it is apparent to you the calling party did not know he should call local numbers himself, say, "I WILL GIVE YOU OUTSIDE," as you connect him to the central office.
- (5) If your instructions are to call all local numbers yourself or if there are certain extensions, such as those of officials of your company for which you are to furnish this service, or in the case of an extension line not equipped with a dial when your switchboard is served from a Dial Central Office, leave the attendant's key operated and remain on the connection for the answer of the central office operator or to receive dial tone. (In the latter case the extension key should be restored before connecting to the trunk for dialing.)
 - (a) If your switchboard is served from a manual office, 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.
 - (b) If your switchboard is served from a Dial Office, commence to dial as soon as you hear dial tone. Dial the number exactly as listed, beginning with the letters of the office name (if any) which are shown in heavy type in the directory. Be sure not to restore the attendant's key on this connection nor to operate the attendant's key on another connection until the dial finger wheel returns to normal after you have dialed the last figure or the party line letter. After dialing, re-operate the extension key of the extension involved, restore the attendant's key and hang up your receiver. The extension key must be operated and the receiver off the hook at the calling extension before the attendant's key is restored, as otherwise the central office connection will be released.'

OPERATING INSTRUCTIONS - (Cont'd)

6. CONNECTIONS THAT HAVE BEEN ESTABLISHED

a. Recall Signals

- (1) Answer recall signals promptly. Keep your eye on the switchboard as much as possible so that you will immediately observe the supervisory signals when they operate.
- (2) You may find it desirable to have the buzzer operated during periods when traffic is light and the switchboard only partially attended, so that the operation of a supervisory signal will be promptly noted.
- (3) Attempt immediately to carry out any instructions received on answering a recall signal.

b. Request to Transfer a Call

- (1) If you are requested to transfer a call, acknowledge the request and LEAVE THE ATTENDANT'S KEY OPERATED and your receiver off the hook. Restore the extension key of the extension from which the call is to be transferred, and operate the extension key of the desired extension (if it is not busy) in the same connecting path used. Then ring this extension.
 - (a) If the desired extension is busy, report the fact to the person who is holding the line and proceed as on a new incoming call to a busy extension, giving frequent progress reports and being governed by any change in the instructions which may be made.
- (2) Requests to transfer calls will usually be received in the manner described above. However, if you answer an extension line signal and receive a request to transfer a trunk connection from a specified extension to the calling person's telephone, proceed as follows:
 - (a) Acknowledge the request and restore the keys used in answering. Operate the attendant's key on the trunk connection to be transferred.

OPERATING INSTRUCTIONS - (Cont'd)

- (b) Restore the extension key on this connection, and connect to the extension requesting the transfer by operating the proper extension key in the same connecting path. Start conversation by saying, "GO AHEAD, PLEASE."
- (3) It may occasionally happen that on an incoming toll call the party may ask to be connected first to one extension and then to be transferred to another extension. In addition to making a memorandum of such a request, if necessary, you should ask the first extension user connected to signal you when he has finished talking instead of just hanging up, so that you will know when to make the transfer. This will avoid giving a disconnect signal to the toll operator which would result in a cut-off.
- (4) Where the switchboard is connected to a Dial Central Office, extension users should understand that they cannot signal you for the purpose of transferring an outgoing local call without risking a cut-off. On such a call it will be necessary for the extension user to call you on another telephone and give you the details of the transfer.

c. Recalling the Central Office Operator

- (1) If it becomes necessary to recall the central office operator for any reason, operate the attendant's key on the connection; then alternately restore and re-operate the trunk key in the same connecting path. Signal slowly three or four times at the rate of about one signal per second and then pause for the operator's response.
- (2) At switchboards connected to a Dial Central Office it is possible to flash on all incoming calls, but on outgoing calls only when connected to the Telephone Company's local or Long Distance operator. On other central office trunk connections restoring and re-operating the trunk key will cause a cut-off.

d. Disconnecting

- (1) Where two extensions are connected, the supervisory signal will appear only when both the calling and called persons hang up. On a trunk connection, the supervisory signal will appear when the extension user hangs up. When the ap-

OPERATING INSTRUCTIONS - (Cont'd)

pearance of the supervisory signal indicates that the conversation is completed, restore the trunk and extension keys promptly.

- (2) Do not mistake slow answers from extensions for disconnect signals. If you are in doubt, operate the attendant's key and challenge with "WAITING," before disconnecting.
- (3) 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 the connections closely in order not to miss the retirement of the supervisory signal when the called extension answers. If care is not exercised with regard to this, you may unintentionally re-ring an extension user.
- (4) Disconnect as soon after a disconnect signal is received as is possible without interfering with other operating work. A prompt disconnect is especially important, to avoid the possibility of a new incoming call being connected to the trunk and thus ringing the extension. Should this happen, as will be indicated by the trunk signal operating on the connection which has not yet been disconnected, restore the extension key and answer as on a new incoming call.

7. NIGHT CONNECTIONS

- a. Careful consideration should be given at each P.B.X. to the selection of trunks and extensions for use when setting up connections for night or unattended service, as the varying conditions at different switchboards prevent the use of any one plan in all cases. In any plan that is used, however, it is advisable to connect the listed trunk number to an extension that will be answered at night and by some person in a position to give out general information regarding the firm. At switchboards served by a Dial Central Office only extensions equipped with dials should be connected for night service; otherwise outgoing calls cannot be made.
- b. In order that night connections may always be made in a uniform manner, a list should be maintained showing the extension numbers and corresponding trunk numbers to which connections are made for night service.

OPERATING INSTRUCTIONS - (Cont'd)

c. Establishing Connections For Night or Unattended Service

- (1) Operate the buzzer key to the "OFF" position.
- (2) Operate the desired extension key in an idle connecting path, and in the same connecting path operate a trunk key of the trunk to be used for the connection.
- (3) After making all the night connections, OPERATE THE BOTTOM ATTENDANT'S KEY DOWNWARD TO THE NIGHT SERVICE POSITION. This key should always be operated to this position at night and on Sundays and holidays when the switchboard is left unattended.

d. Releasing Night or Unattended Service Connections

- (1) To restore the switchboard for day service, restore the bottom attendant's key to normal, connect the buzzer and observe the supervisory signals. Connections on which conversation is taking place are indicated by the associated supervisory signals not being operated, and should not be disturbed. The remaining trunk and extension keys should be restored to normal.

INTER-CITY CALLS

1. DESCRIPTION OF SERVICES

There are two major classes of inter-city calls, station-to-station and person-to-person.

a. Station-to-Station Calls

- (1) A station-to-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 at the called point. Such a call is handled at minimum rates and results in maximum speed of connection. A station-to-station call is considered established when anyone at the called number answers.
- (2) Station-to-station rates to a given point vary according to the time when the call is placed. The twenty-four hours of the day are divided into rate periods, such as day, evening, and night. During the evening period the station-to-station rates are appreciably lower than those applicable in the daytime. Also station-to-station rates are further reduced during the night rate period. Reduced evening and night rates do not apply, however, on connections over routes where the initial day station-to-station rate is 25 cents or less. Further information pertaining to rates to various points may be obtained by consulting the introductory pages of your telephone directory, or by calling or dialing the Long Distance operator.
- (3) The effective times for the different rate periods applying on a call to a particular point likewise may be obtained by calling or dialing the Long Distance operator.
- (4) The economy and speed of station-to-station service have made it popular. You may find that a larger use of this class of service would be to the advantage of your concern.

b. Person-to-Person Calls

- (1) A person-to-person call is one on which the calling customer

INTER-CITY CALLS - Continued

specifies that he wishes to reach a particular person or P.B.X. extension station.

- (2) Person-to-person rates are somewhat higher than the corresponding station-to-station rates and a small report charge is made if the called telephone answers but the call is not completed because the specified person is not reached. There are no reduced evening or night rates on person-to-person calls.
- (3) The use of person-to-person service may be more satisfactory to the calling party in those 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-to-person call repeated efforts will be made to reach the person desired. If, however, an answer from the called station is received but the call is subsequently canceled by reason of failure to reach the desired person, the calling party will be assessed a report charge, but not a message charge.
- (4) You should be quick to recognize the occasions on which person-to-person service is preferable, and, as opportunity arises, to suggest the advantages to your extension users.

c. Collect Call Service

- (1) At the request of the called party or the calling party, and with the approval of the called party or station, the charge on a person-to-person or station-to-station call may be reversed to the called station. There is no extra charge for this service except in the case of station-to-station calls on which the day rate is twenty cents or less. These low rate calls take a special collect rate which is a little higher than the regular rate.

d. Sequence Service

- (1) Sequence service is offered which makes it possible for a customer to place at one time any number of inter-city calls on which he wishes to talk consecutively. Sequence calls can be placed by telephone, or, if many calls are involved, a detailed list may be sent to the toll office in advance of the time the calls are to be completed. If you expect to require the same sequence of calls frequently, you may arrange to have the list kept on file at the toll office so that you can refer to it in requesting the service, and the toll operator can obtain from it the details of the calls.

INTER-CITY CALLS - Continued

- (2) Sequence service is very popular with many business customers and you may find that it could be used to greater advantage by your concern. The Long Distance Chief Operator will be glad to discuss your service needs with you, and if you desire, will arrange to have a representative call to work out with you the most satisfactory service arrangement.

e. Conference Service

- (1) Conference service is offered which permits of connecting three or more stations, at least one of which is in a different city, so that a person at any one of the stations may talk with all other stations simultaneously. This service is of distinct value when several individuals located in different cities wish to discuss a subject in conference.
- (2) You may find that your concern can use this service advantageously. All you have to do to secure a conference connection is to ask Long Distance for the "conference operator," and give the call to her.

2. OUTWARD CALLS

a. Routing Calls to the Proper Operator

- (1) In some cities all inter-city calls are handled by one group of operators. In other cities it has been found desirable to divide the operating work on inter-city calls. Where the work is divided, certain classes of calls such as station-to-station calls to nearby points should be given to the local operator, and other classes should be given to Long Distance. Your inter-city 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 Long Distance Chief Operator, the P.B.X. instructor, or from the introductory pages of the telephone directory.

b. Record of Frequently Called Numbers

- (1) Undoubtedly you have noticed that it is possible for faster service to be given on inter-city calls if the operator is furnished with the called number. You will find it desirable,

INTER-CITY CALLS - Continued

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

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

c. Placing Outward Calls

- (1) On inter-city calls, connect the extension user to a trunk to the proper operator so that he can give his call to her direct. The operator receiving the call will make an immediate attempt to complete it while the calling party remains at the telephone.
- (2) It will facilitate the giving of fast service if the details of the called place and station (and name on person-to-person calls) are given to the operator first and the calling number is given later when requested. This permits the operator to secure the calling number and any further details while waiting for the called telephone to answer, and this results in saving 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-to-person calls, the name of the party called. If, however, the name of the central office identifies the called place, as may be the case for some nearby points, the name of the called place and the state may be omitted.

Examples - Call Placed with Local Operator

"CAPITAL 1234."

"BALLARD 2345."

INTER-CITY CALLS - Continued

Examples - Call Placed with Long Distance Operator

Station-to-Station Calls

"CLEVELAND, OHIO, CHERRY 2345."

"SAVANNAH, GEORGIA, J.H.REYNOLDS' RESIDENCE,
129 LOCUST STREET."

"PATERSON, NEW JERSEY, HANSEN AND COMPANY,
999 MARKET STREET."

Person-to-Person Calls

"CHICAGO, ILLINOIS, PLAZA 5678, MR. F.B.CARSON."

"ATLANTIC CITY, NEW JERSEY, MR. JOHN JONES,
241 PROSPECT AVENUE."

- (3) If it is desired to have the charge quoted, "PLEASE QUOTE THE CHARGE," should be added to the order.
 - (a) If charges have not been requested in advance of completing a call and they are desired, signal the Long Distance operator immediately after the conversation is finished and request charges. If she does not answer, you will know that your line has been released, and it will be necessary for you to call Long Distance again and request charges, giving sufficient details to identify the call readily. For example, "PLEASE QUOTE CHARGES ON MY CALL TO DENVER. THIS IS BEACON 5678."
- (4) If you are required to place calls for extension users, secure all the necessary 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. When asked to furnish the calling number, always give the number shown in the telephone directory for your firm instead of the trunk number.
- (5) If you are required to keep a record of all inter-city calls, you can do this on calls you did not place yourself by leaving the talking key operated and recording the details of the call as they are given to the operator by the extension user.

INTER-CITY CALLS - (Cont'd)

3. CALLS NOT COMPLETED WHILE YOU HOLD THE LINE

- a. With the possible exception of calls to nearby points, all inter-city calls which are not completed or 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, in order that 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 to give you no further reports until she is ready with the call.
- b. If you do not keep a record of inter-city 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.
- c. 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.
- d. 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 until you are ready with his call. 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.
- e. 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, for example, "Long Distance operator 45." It is important that you make a note of the operator's number. As soon as the calling party is ready to talk, ask him to hold the line, reach Long Distance and say, "OPERATOR 45 CALLED ME. THIS IS BEACON 5678. MR. JONES IS READY TO TALK ON HIS CALL TO CHICAGO." The operator will at once make another attempt to complete the call while the calling party remains at the telephone.

INTER-CITY CALLS - (Cont'd)

- f. 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 same connecting path used in answering. When the calling party answers, say, "MR. SMITH IN CLEVELAND IS ON THE LINE," and cut out of the connection as soon as it is obvious the parties are ready to talk.
- g. 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. This will prevent the called station or party from being bothered unnecessarily. In this connection, avoid canceling a call which you think will be required later the same day or on the following day. The operator will hold the call until you wish the attempt made. Two person-to-person calls, where one would do, might result unnecessarily in two report charges, or in both a report charge and a message charge.
- (1) 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, "THIS IS BEACON 5678. I WOULD LIKE A REPORT ON MY CALL TO CLEVELAND."

IMPORTANT POINTS TO KEEP IN MIND

1. USE OF DIRECTORY

On a call for a number which you do not know, 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 rather than calling Information. Call Information to obtain a number which you think has been added since the directory was issued, and give the information operator the name and address, and if possible the business of the desired party.

2. MAINTAINING A LIST OF NUMBERS

It is desirable to keep a list of numbers frequently called so that the numbers 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.

3. EMERGENCY CALLS

- a. To report a fire, or call the police or an ambulance, call or dial the operator and say, "I WANT TO REPORT A FIRE," or "I WANT THE POLICE," or "I WANT AN AMBULANCE."

- (1) If you have to leave the switchboard before the desired department answers, tell the operator the address where the help is wanted and anything else needed to be sure that you are correctly understood.

- b. If you receive a call from one of your extensions in which it is plain to you that the calling party wishes to report an emergency, give the call to the central office operator as above and remain in on the connection in order to help pass any information which may be necessary.
- c. If your switchboard is served from a Dial Office and numbers for reaching the several emergency departments are published in the directory, you may if you wish keep a list of these numbers and complete emergency calls by dialing them yourself.

4. 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, also, of some individuals should be recorded in order

IMPORTANT POINTS TO KEEP IN MIND - Continued

that situations requiring immediate attention may be disposed of at all times.

5. SERVICE DIFFICULTIES

- a. If calls handled through the local central office are not completed satisfactorily, or for assistance in calling, ask for the Supervisor, or dial "Operator," and explain the trouble being experienced, or the assistance you desire.
- b. If calls handled through Long Distance are not completed satisfactorily, or for special assistance in placing these calls, call the Long Distance Supervisor, or dial the code number for Long Distance and ask for the Supervisor.
- c. In case of poor transmission on inter-city calls, signal the operator in on the connection and report the trouble.
- d. Where, after having reported equipment troubles or service difficulties to the Telephone Company as previously outlined, prompt and satisfactory action is not obtained, you should then call the P.B.X. instructor, who will be glad to assist you in remedying the matter.

6. IMPORTANT SERVICE CONSIDERATIONS

In the rendering of a satisfactory grade of private branch exchange service particular attention should be devoted to the following points which materially affect the quality of such service from your employer's viewpoint, and also from the viewpoint of customers who transact business with your firm over the telephone.

a. The Use of the Voice

In order to represent your organization in a creditable manner you should not only learn to operate the switchboard speedily and accurately, but to handle the traffic in a courteous manner as well. Attention to the following features will help you to develop an attractive telephone personality and a more accurate and courteous service.

- (1) The transmitter should be about one-half inch from the mouth, at which distance words spoken in a normal tone of voice are more effectively transmitted.
- (2) Speak directly into the transmitter, clearly and distinctly,

IMPORTANT POINTS TO KEEP IN MIND - Continued

giving proper form to all the sounds which make up every word or number. Avoid giving any impression of being hurried or impatient.

- (3) Use a rising inflection on all phrases as, "What number, PLEASE?" "Thank YOU. One moment, PLEASE?" This serves to convey your personal interest and your desire to be of service. It also tends to encourage courtesy.
- (4) In order to make clear the correct manner of enunciating and repeating numbers and central office names so that they will be plainly understood over the telephone, the following examples are included for your information and study:

Pronounce digits as follows:

0 as OH..... - long O
 1 as WUN..... - strong W and N
 2 as TOO..... - strong T and long OO
 3 as TH-R-EE..... - slightly rolling R and long EE
 4 as FO-WER..... - long O and two syllables
 5 as FI-IV..... - first I long, the second I short, and strong V
 6 as SIKS..... - strong S and strong KS
 7 as SEV-VEN..... - two syllables
 8 as ATE..... - long A and strong T
 9 as NIYEN..... - one syllable, with strong N on end
 10 as TEN..... - strong N
 W as DUBBLE-YOO - give full value to each syllable
 J as JAY..... - strong J and AY
 R as AHR..... - strong R
 M as EM..... - short E and strong M

Pronounce numbers and central office names as follows:
 (Capital letters indicate emphasis).

39.....as Th-r-ee niyen
 136.....as WUN (pause) th-r-ee siks
 0004.....as Oh OH (pause) oh fo-wer
 2500.....as TOO FI-IV (pause) hundred
 Beacon 3000...as BEACON (pause) th-r-ee (pause) thousand
 Adams 1478.....as ADAMS (pause) wun FO-WER (pause) sev-ven ate
 Cedar 4375-J...as CEDAR (pause) fo-wer TH-R-EE (pause) sev-ven
 FI-IV jay

IMPORTANT POINTS TO KEEP IN MIND - (Cont'd)

b. Answer Incoming Calls Promptly

The prompt answering of trunk signals is fundamental in rendering good service. It is a matter of courtesy to the calling party to answer his call at once and not keep him waiting on the line.

c. Give Frequent Progress Reports

Incoming trunk calls destined for a particular extension or party are often delayed because the called extension is busy or slow in answering. In such cases it is very important that you voluntarily report to the waiting party at 30-second intervals the efforts you are making to complete his call. On long delays inquire if he will speak to someone else, or if he would care to leave a message.

d. Answer Recall ("Flashing") Signals Promptly

Prompt attention is required on recall signals, for they usually indicate unusual conditions or an unsatisfactory connection. A flashing supervisory signal should be given first preference in case other calls are waiting.

e. Disconnecting

(1) Disconnect signals should be watched closely and promptly attended to by restoring the keys involved in the connection. This is very important as a slow disconnect may result in a new incoming trunk call being placed on the connection involved, and if this happens the extension user will be rung. Such occurrences may result in confusion and annoyance, and should be avoided as serious handicaps to efficient service.

(2) Be careful not to cause cut-offs by releasing existing connections without having received disconnect signals.

f. Accurate Connections

Avoid connecting an incoming call to the wrong extension or party, and on outgoing calls asking for or dialing the wrong number either through error or having the wrong number in mind.

IMPORTANT POINTS TO KEEP IN MIND - (Cont'd)

g. Irregularities

Avoid failing to acknowledge or only partially acknowledging the calling party's order. Likewise, do not cut out too quickly in connection with progress reports on calls, answers to recall signals or answers to requests, or in any way display a lack of attention to the calls being handled.

EQUIPMENT TROUBLE

1. REPORTING EQUIPMENT OUT OF ORDER

- a. Report promptly any equipment trouble, either switchboard or extension, to Repair Service at the central office, dialing the code number for this service as listed in the introductory section of the telephone directory where the switchboard is connected to a Dial Central Office.

2. FAILURE OF BATTERY SUPPLY

- a. In case the battery supply to your switchboard should fail, indicated by failure of the switchboard signals to function, operate a trunk key and an attendant's key in an idle connecting path, as on an outgoing trunk call, and reach Repair Service. Report the trouble to the person answering.
- b. During the interval prior to restoration of the battery supply, incoming calls may be answered and outgoing calls delayed as little as possible by connecting all central office trunks to extensions in the manner previously outlined for establishing night connections, except, however, that the bottom attendant's key should NOT be operated downward to the night service position. With this key in the normal position, restoration of the battery supply will be indicated by the appearance of the supervisory signals associated with those connections on which no conversation is taking place.

3. FAILURE OF RINGING CURRENT SUPPLY

- a. In the event of a failure of the ringing current supply, as will become evident if you are unable to ring extensions, turn the key marked "Ringing" so that the arrow will point to "Hand." To ring an extension under this condition, turn the hand generator briskly while holding the proper ringing key operated.
- b. When ringing power is again available, restore the generator key to its normal position and ring in the usual manner.

4. ATTENDANT'S DIAL OUT OF ORDER

- a. If the dial on your telephone set (switchboard connected to a Dial Central Office) is found to be out of order, connect an idle trunk to a conveniently located extension equipped with a dial, dial the code number for Repair Service from this extension and report the trouble.

EQUIPMENT TROUBLE - (Cont'd)

5. PERMANENT SIGNALS

Occasionally line signals will appear at your switchboard to which you can receive no response upon answering. Before assuming that there is equipment trouble on such lines you should proceed in accordance with the following paragraphs:

a. Trunk Signals

On incoming calls, when no response is received, repeat your answer two or three times. Remain on the connection about a minute if your work will permit; otherwise dispose of other calls and come back to this connection, answering again.

- (1) If the central office operator answers with "Operator?", inquire if anyone is calling, and be guided by her response.
- (2) In case the central office operator answers with "Number, please?", or if your switchboard is connected to a Dial Office and you hear dial tone, release the trunk line immediately.
- (3) If no response, or dial tone, is received after a few minutes, report the line to Repair Service.

b. Extension Signals

Before reporting a false signal on an extension line, challenge from time to time for several minutes. If it does not come clear, arrange for some one to visit the station to assure that the receiver is not off the hook.