

## TONES AND AUTOMATICALLY FLASHING SIGNALS

1. **Dial tone.** The steady humming sound provided at certain points in the dial system to assure you that the equipment is ready to receive your dial or keyset impulses. Learn whether the dial system trunk groups you use have dial tone and just where to expect it in the process of establishing connections. Then if you do not hear it when you should, wait until it comes on the line before dialing or setting up the number, or try to obtain it on another trunk.

2. **Order tone.** The order tone consists of one or more spurts of tone of uniform pitch. Most of them are of such short duration that they are best described by the word "zip." Whenever you hear an order tone, it means that the operator for whom you are waiting is ready to receive your order. Give it in accordance with the order tone you receive as follows, except when otherwise locally directed.

- a. **Single Order Tone.** A single spurt of about a half second duration means that you are to pass office name and number and that the operator who receives the order will advance the call to the called station.
- b. **Double Order Tone.** Two short spurts that sound like a hurried "zip-zip" mean that you are to pass the number only and that the operator who receives it will connect to the called station.
- c. **Triple Order Tone.** A series of three rapid "zips" means that you are to pass the called office name and numeral if any, the called place name, or the toll center for the called office, as shown by your routing instructions, and then wait for a second order tone or oral answer to pass the number to the terminating operator.

3. **Ringing signal.** An intermittent sound on the line which serves as a report to you and the customer that the called line is being rung. Where code ringing is involved it corresponds to the code being rung. Learn the trunk groups on which to expect ringing signal in your office, and whenever you fail to hear it when you cut in on a connection on which it should be received and the supervisory signal does not indicate that the called station has answered, take suitable action to investigate the case.

4. **Busy signal.** The busy signal is the flash or buzz recurring rapidly and regularly (generally <sup>120</sup>~~sixty~~ flashes per minute), that is used to indicate that the called line is busy. When tone is not provided the customer can not be expected to recognize the flash signal and it is necessary for you to give an oral report, but when the tone is provided, you may assume that the customer will recognize it and you will not cut in except to return the coin on a call from a prepayment coin station, when the customer obviously does not understand the tone, or when local conditions may require it as where substation registers are used. In some offices the only indication you receive is the tone when you supervise for any reason, and in such cases you need to take action only when you become aware of the condition.

A busy report is good only for the instant at which it is received from the called office, consequently, it should not be stressed too greatly and if the customer questions it to any extent, it is better to try the call again than to try to convince him that the previous busy signal still applies.

5. **Flashing recall signal.** A flashing supervisory signal indicates that the customer on the corresponding cord is trying to attract your attention. It is one of the most important signals you receive and for that reason precautions are given in other sections to assist you in caring for signals of this class.

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### 5. Continued

On some boards, the signal is synchronized with the receiver hook switch and the indication you receive is a lighted supervisory signal each time the hook is depressed. On other boards, the first flash by the customer starts the supervisory signal flashing regularly until you answer, and in some offices the flash is accompanied by a distinctly audible clacking sound. Some offices have a type of recall which gives a faint interrupted tone in your headset even though you are cut in on another connection. All these arrangements are provided to aid you to discover and respond to the signal quickly.

**6. Reorder and trunks busy signals.** Generally these signals are identical, appearing on the supervisory signal as a faster flash (120 per minute) than the busy, except in certain step-by-step systems where the signal is the same as a line busy, does not appear as a flash, and is not evident unless you listen on the connection between the dialing of successive digits. Handle them as follows when they are encountered while trying to establish connection but if a reorder signal appears after conversation has started, proceed at once as for restoring connections in Section 12.

- a. Disconnect the front cord as soon as you observe the appearance of the signal, as an overlap on other work if necessary, so that the customer will not mistake it for a busy signal. Then as soon as your other work permits, advance the order as on a new call, securing the number from the customer if necessary. If, however, he has hung up, discontinue work on the call unless you know both the calling and called numbers, in which case make another attempt to establish connection. If you reach the called station on this attempt, announce the call and ring back the calling party as on a delayed call, but if you do not reach the station successfully do not make any further attempt to complete unless it is a call subject to voluntary completion.
- b. If you receive the signal a second time, continue your efforts to establish the connection as on a no trunk condition.

**7. Master busy tone.** This is a steady humming sound you hear when you test the rim of a master busy jack of a trunk group or line group when all the trunks or lines in that particular subgroup of five jacks are busy. When you hear it, you can proceed at once to the master busy jack of the next subgroup in the prescribed order to be followed.

**8. Out of order tone.** This is the low-pitched humming sound you hear when you test the rim of a jack of a line which is being held for an out of order condition. When you hear it, proceed as for such a condition.

**9. Tandem overflow signal.** This signal is a flicker every two seconds on an otherwise steadily lighted signal after you have passed an order to a tandem operator. You may cut out and proceed with other work but continue to give the connection close attention because the signal should change to a reorder signal when a trunk becomes available, and should then be handled as in "6."

**10. Tandem master busy signal.** This signal is a series of two successive flickers every two seconds on an otherwise steadily lighted signal after you have passed an order to a tandem operator. It means that all trunks are busy, that calls are waiting, and that there may be a posted delay. Cut in and listen for the delay report during the long interval that the signal is lighted.

- a. If a posted delay is announced, give the report to the customer. If he does not volunteer further instructions, tell him you will call him at about the indicated time and proceed as for a delayed call to be tried at a specified time.
- b. If no posted delay is announced, proceed immediately as for a call delayed by a no trunk condition.

May 1, 1940.

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**11. No such number signal.** This may be one of two tones: (1) a "buzz-buzz" similar to the busy but with each third spurt omitted, so that it sounds "buzz - buzz - — - buzz - buzz - — - buzz - buzz"; or (2) a continuous tone, like dial tone but rising and falling in pitch over a noticeable range giving the effect of a continuous wail. It indicates that you have dialed an unused office code or a number in an unused series in a dial office. Disconnect at once, and if the number seems to be correct try again to reach the called station. If it is not, question it as in Section 3, 2e.

**12. Vacant position tone.** This is a steady, high pitched tone placed on straightforward trunks when the "B" position on which they terminate has been vacated. Disconnect at once and select another trunk in another part of the group. If the entire group is affected, notify your supervisor immediately.

**13. Class of service tones on community dial office trunks.** You may hear any one of several distinctive tones when you answer a special service trunk from a community dial office. The tones vary in pitch or in the number of spurts to designate calls from coin lines, from message rate lines, and from lines having restricted service, so that you may know when you answer a call that it should be handled in accordance with the practice for the class of service indicated.

Memorize the tones in use in the community dial offices you serve and be alert to recognize them when you answer a signal on such a trunk. If you are uncertain as to the presence of the tone, you may at any time disconnect from the trunk momentarily and listen again as you replug.

**14. Alarm signals from a community dial office.** Each community dial office is provided with an alarm signal or a series of such signals which you may encounter. It is expected that you know the different signals provided in your office and the action to be taken in each case as prescribed by local directions.

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15. VOICE RECORDER TONE. This signal is a spurt of high pitched tone occurring about every 15 seconds during the entire time that any customer on a connection has a voice recorder in operation on his line. The operator's only responsibility regarding it is to explain its significance to customers who inquire.