NO. 1 AND 1B ANNOUNCEMENT SYSTEMS
TIME OF DAY SERVICE
METHOD OF TRACING ALARMS

1. GENERAL

1.01 This section outlines the method of tracing the following alarms on announcement supply equipment for announcement desk, intermediate and terminating office circuits.

Amplifier Alarm
Switch Alarm
Line Alarm
Power Supply Alarm

1.02 Since the time announcement equipment is located in a building with central office equipment, the alarms are arranged for connection to the regular central office alarm system. Fuse alarms of the usual type are provided for the various circuits.

2. APPARATUS

2.01 One Test Receiver (No. 528 or equivalent) equipped with Cords and Test Clips.

3. METHOD

Amplifier Alarm

3.01 This alarm functions when a failure occurs in the filament or plate battery supply circuits and indicates the amplifier at fault by lighting the FIL ALM lamp on the amplifier panel.

Note: In the case of a transmitting amplifier, this alarm will also cause the out of service lamps OS and OS1 of the associated desk circuit at the time bureau to be lighted.

3.02 When this alarm is brought in due to a trouble condition in the filament or plate battery circuits, it is desirable to hold the amplifier out of service. This may be accomplished as follows:

(a) Terminating and Intermediate Offices: Operate the transfer switch for the associated incoming distributing and alarm circuits and restore the transfer switch to NORMAL of the other distributing and alarm circuit. The audible alarm should be retired and the FIL ALM lamp extinguished.

(b) Announcement Desk (Transmitting Office): The operator at the announcement desk should transfer the transmitter plug and the operator's telephone set plug to the other desk circuit. The alarm may be retired by operating the A key which should extinguish the FIL ALM lamp.

3.03 The condition under which this alarm functions is usually no current flow through the filament or plate of the vacuum tubes or the ballast lamp.

Switch Alarm

3.04 This alarm functions to indicate when the transfer switches of the incoming distributing and alarm circuits are operated improperly.

3.05 When answering this alarm, at the relay rack note if the transfer switches of the incoming distributing and alarm circuits are properly operated. The transfer switch for the circuit being in service should be NORMAL and the transfer switch for the circuit not in service should be OPERATED.

Line Alarm

3.06 This alarm functions to indicate when incoming, distributing and alarm circuits have failed to receive battery and ground from the associated outgoing distributing circuit.

3.07 When answering this alarm, at the relay rack test the tip and ring conductors for battery and ground, announcement or tone with a test receiver.

3.08 If this test indicates the presence of battery and ground, the trouble may be due to improper operation of the transfer switches of the incoming distributing and alarm circuits in the office where the alarm occurred.

3.09 If the test does not indicate the presence of battery and ground, there may be open, ground or short in the conductor loop, or that the keys may be improperly operated in the distant office.

3.10 When this alarm is brought in due to a trouble condition outside of the office it is desirable to hold the circuit out of service. This may be accomplished

by operating the LINE ALM key. The audible alarm should be silenced, the alarm lamp should be extinguished and the guard lamp should be lighted.

3.11 The recurrence of the audible alarm and the alarm lamp, with the LINE ALM key operated, indicates that the trouble outside the office has been cleared and that the incoming, distributing and alarm circuit has been restored to service.

3.12 Restore the LINE ALM key to normal.

Power Supply Alarm

3.13 This alarm functions to indicate a failure in the rectifier current output or the operating of a discharge fuse on the fuse panel at the power plant.

3.14 When answering this alarm note whether the + 130V BAT FUSE or BAT GUARD lamp is lighted at the power supply equipment located on the relay rack.

3.15 If the + 130V BAT FUSE lamp is lighted it indicates an operated fuse on the fuse panel.

3.16 If the BAT GUARD lamp is lighted it indicates a power or rectifier failure. Observe the voltmeter to see that the 130 volt supply load has been transferred to the reserve batteries.

3.17 The audible alarm may be retired by operating the ALM TRNS key from position 1 to position 2.

3.18 When the alarm is brought in due to a trouble condition on the rectifier, check the power supply voltage and frequency to see that the service is within the required limits. The output may be brought back to normal in accordance with the section applying to the rectifier. These equipments which may contribute to operation failure, should be thoroughly inspected.

3.19 The recurrence of the audible alarm with the ALM TRNS key in position 2 indicates that the trouble in the rectifier has been cleared and that the rectifier current is flowing.

3.20 Restore the ALM TRNS key to normal.

4. REPORTS

4.01 Any required record of alarms should be entered on the proper form.