3

COMMON SYSTEMS
CONTROL AND ALARM CIRCUIT
ANNOUNCEMENT SYSTEM NO. 11A

CHANGES

D. Description of Changes

D.1 In FS 1, the normally operated relay ALM gives a false alarm condition on lead 5 to Panel Alarm Circuits and SXS Pilot Lamp Circuits when the control and alarm circuit is normal. This condition is corrected by changing relay ALM contact, 3M to 3B.

D.2 In FS 1, the connecting information for the T4, R4, ST, and ST1 leads which formally read "To KS-16765,L2 Announcement Set" is changed to read "To Announcement Circuit". This change is made to have connecting information the same as the title of the connecting circuit.

D.3 In CAD 1 the connecting information for leads ST and ST1 is changed to read "To Announcement Circuit" for reasons stated in item D.2.

D.4 In FS 1 and CAD 1 the dual F leads are changed to show a single F lead and the connecting information is combined to read "To Alarm Sending circuit or Alarm Transfer circuit".

D.5 In FS 1 the D section, transfer contacts of locking key AR terminals 1 and 3 are incorrectly designated. Break contact 3D is changed to break contact 1D and make contact 1 is changed to make contact 3. Terminal 2 is shown correctly.

D.6 For clarity, sheet notes are added on sheet 2 to indicate that locking key AR and relay ALM are normally operated.

D.7 Test values for relays ALM and ST in the Circuit Requirements Table are changed from 28.9 to 29.0. This change is made for more realistic meter readings.

BELL TELEPHONE LABORATORIES, INCORPORATED

DEPT 5822-ERW-WAM

XFF

COMMON SYSTEMS
CONTROL AND ALARM CIRCUIT
ANNOUNCEMENT SYSTEM NO. 11A

SECTION I - GENERAL DESCRIPTION

1. PURPOSE OF CIRCUIT

1.1 This circuit is for use in a central office for amplifying and controlling announcements to various intercept trunk circuit.

SECTION II - DETAILED DESCRIPTION

1. NORMAL OPERATION

When this circuit is seized by the trunk circuit relay ST will operate over the ST lead.

Relay ST operated:

(a) Closes the ST and ST1 leads to the announcement machine which starts to give announcements over the T4 and R4 leads.

(b) Grounds the ST lead to the voice alarm circuit which monitors the voice from the output of the amplifier over the T and R leads.

(c) Closes lead A and B and grounds lead C to the Busy Tone Circuit.

This circuit will now receive announcements from the announcement machine, amplify them and transmit them to the trunk circuits. The output level can be visually observed on the A volume indicator and monitored by means of the M jack and A monitoring receiver.

2. VOICE FAILURE

If for any reason voice fails or if the announcement machine is removed for recording, lead AL1 from the Voice Alarm Circuit will be grounded, releasing relay (AIM) which is normally operated.

Relay AIM released:

(a) Sends a major alarm to the Alarm Circuit.

(b) Opens the locking path of relay AIM.

(c) Lights the pilot lamp AIM.

(d) Transmits busy tone from the Busy Tone Circuit to the Trunk Circuits.

To retire the alarm the AUD RLS KEY is released. This silences the alarm and lights the GD lamp.

When voice is again restored key R is operated and held for a few seconds until the voice alarm circuit restores to normal and the ALM relay operates. Key AUD RLS is operated. The circuit is now normal. If this circuit goes to alarm and connection is made to the alarm sending circuit or alarm transfer circuit ground placed on the F lead will restore the circuit to normal if the voice is restored.

To busy all trunks the OS key is operated. This lights the OS lamp as an indication that the associated trunks are out of service.

Should a fuse operate the FA relay operates sounding a minor alarm and lighting the FA lamp.

3. OUTPUT ALIGNMENT

With the AIM relay blocked operated voice is monitored in the monitoring receiver. Place a dummy plug in the (OUT) jack.

The volume control in the KS-16754 L1 amplifier is adjusted until the average of the voice peaks read -1 VU on the A meter.

The ALM relay is now unblocked and the circuit is normal.

The OUT jack is used for the amplifier circuit in accordance with the BSP or KS specification on the amplifier.

SECTION III - REFERENCE DATA

1. WORKING LIMITS

1.1 None

2. FUNCTIONS

2.11 This circuit is arranged to receive a start signal from the associated trunk circuits when a trunk circuit is seized.

2.12 Provides means for starting the associated announcement machine.

2.13 Receives voice announcements from the announcement machine.

2.14 Amplifies the announcement and reduces its impedance via the amplifier circuit.

2.15 Provides means for indicating the voice level at all times.

2.16 Furnishes alarm signals to the office alarm system in case of a voice failure.

2.17 Provides lamps to indicate that there is a voice failure, fire alarm or trunks out of service.

2.18 Provides means for transmitting busy tone from the Busy Tone Circuit in case of voice failure.

2.19 Provides means to busy the associated trunk circuits.

2.20 Provides means for testing the associated amplifier circuit.

3. CONNECTING CIRCUITS

When this circuit is listed on a day sheet, the connecting information thereon shall be followed.

3.01 Trunk Circuit - SD-95966-01.

3.02 Voice Alarm Circuit - SD-95959-01.

3.03 Busy Tone Circuit - SD-95963-01.

3.04 KS-16754 L4 Amplifier Circuit - SD-95281-01.

3.05 KS-16765 L2 Announcement Machine - SD-95283-01.

3.06 Alarm Sending Circuit - SD-95417-01.

3.07 Alarm Transfer Circuit - SD-20836-01 (Typical).

3.08 No. 1 Crossbar Floor Alarm Frame Miscellaneous - SD-25047-01.

3.09 No. 5 Crossbar Alarm Circuit - SD-25671-01.

3.10 Panel BCA Miscellaneous and Auxiliary Alarm Circuit - SD-21203-01.

3.11 Panel G.C.O. Miscellaneous Alarm Circuit - ES-226189-01.

3.12 S X S Audible and Visual Alarm Circuit - SD-96188-01.

3.13 S X S Pilot Lamp Circuit - ES-30437-01.

3.14 S X S Audible Alarm Circuit - SD-31435-01.

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