COMMON SYSTEMS
MISCELLANEOUS CIRCUIT
FOR AUXILIARY SENDER LINK
AND
AUXILIARY SENDER LINK EXTENSION FRAMES

CHANGES

D. Description of Changes

D.1 On Sheet 1, Circuit Note 102, feature or option table, the pilot fuse and fuse alarm circuit is provided as a separate feature to facilitate changing to a modular fuse panel. This enables the miscellaneous circuit to provide for more than two auxiliary sender groups per frame on the auxiliary sender link.

D.2 Circuit Note 104 lists App Fig. 4 as "Standard".

D.3 Circuit Note 108 clarifies the application of App Fig. 4.

D.4 On Sheet 2, lamp FA, and resistors FA and PF are removed from App Fig. 1 and included in App Fig. 4 along with fuses 20A and PF.

D.5 On Sheet 13, CAD 1 is revised and on Sheet 14, CAD 1A is added.

BELL TELEPHONE LABORATORIES, INCORPORATED

DEPT 5615-RJG-TNL-RH

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MISCELLANEOUS CIRCUIT
FOR AUXILIARY SENDER LINK
AND
AUXILIARY SENDER LINK EXTENSION FRAMES

SECTION I - GENERAL DESCRIPTION

1. PURPOSE OF CIRCUIT

1.1 This circuit is designed for use in panel and No. 1 Crossbar Offices. It provides the miscellaneous apparatus mounted on the auxiliary sender link frame and the auxiliary sender link extension frame. The circuit includes a fuse alarm, a frame test battery, a frame line between frames, remote control jacks for sender test circuits, a spare jack and a link release alarm key and lamp. The link release is not provided on the extension frame.

SECTION II - DETAILED DESCRIPTION

1. FUSE ALARM - FS1 and FS2

1.1 The operation of the 20-amp feeder fuse followed by the operation of the parallel 1-1/3 amp pilot fuse or the operation of any 1-1/3 amp circuit fuse supplies battery through the resistors and FA lamp to ground in the floor alarm frame fuse and time alarm circuit. This lights the FA lamp. The lamp is extinguished when the operated fuse is removed.

1.2 The 20-amp feeder fuse must be replaced before the pilot fuse is replaced.

1.3 The 1075-ohm resistor is provided to prevent an open alarm circuit if the FA lamp is removed. The 220-ohm series resistors are provided to protect the alarm lead in case of a trouble ground.

2. FRAME TEST BATTERY - FS3

Test terminals are furnished on the frame to supply -48 volt battery, direct ground, and high resistance ground. Test battery jack A is provided to supply battery and direct ground for use with test sets.

3. FRAME LINE BETWEEN FRAMES - FS4

Communication may be established between frames by plugging operator telephone sets into the TEL jacks on the frames. Talking battery is supplied through the connecting circuit.

4. REMOTE CONTROL JACK FOR SENDER TEST CIRCUIT - FS5

Control leads from the originating and auxiliary sender test circuits in a No. 1 Crossbar Office or the subscriber sender test circuit in a panel office are brought out to the SDT jack on the auxiliary sender link frame. A 32A test set can be used for remote operation of the sender test frame. Provision is made for connection to a maximum of four sender test circuits.

5. SPARE JACK - FS6

Jack B is furnished for possible future requirements.

6. LINK RELEASE ALARM - FS7

When the auxiliary sender link circuit timed release relay LR operates, it closes ground over lead LRA to operate relay LRA, which locks to the AR key. Relay LRA operated lights the LR lamp, closes ground to an alarm or aisle pilot circuit over the "F or AG", "MW", and "W" leads thereby sounding the minor alarm, and closes ground to the miscellaneous circuit for originating and auxiliary sender test frame (No. 1 Crossbar) or the MF Adapter Circuit (Panel) over the "R" lead. This action releases auxiliary senders made busy by a particular auxiliary sender key on the test frame if the link circuit fails.

When provision is made for the transfer of alarms, the locking ground must be supplied by the alarm transfer circuit so that this alarm can be silenced from the remote location. The "F or A6" lead is transferred to the remote location in the alarm or aisle pilot circuit.

SECTION III - REFERENCE DATA

1. WORKING LIMITS

None.

2. FUNCTIONAL DESIGNATIONS

LRA - Link Release Alarm Relay.

3. FUNCTIONS

3.1 To provide a visual and audible alarm when a fuse operates.

3.2 To provide battery and ground terminals for testing purposes.

3.3 To provide a frame line for talking between frames.

3.4 To provide remote control jacks for a maximum of four sender test circuits.

3.5 To provide a spare jack for future requirements.

3.6 To provide a visual and audible alarm of an auxiliary sender link circuit timed release.

3.7 To provide an indication to the sender test facilities over the "R" lead when there is an auxiliary sender link timed release.

4. CONNECTING CIRCUITS

4.01 Power Battery Distributing Circuit - SD-80909-01.

4.02 Local Frame Line Circuit - SD-96379-01.

4.03 Originating and Auxiliary Sender Test Circuit - SD-25221-01 (No. 1 Crossbar).

4.04 Subscriber Sender Test Circuit - SD-21186-01 (Panel - typical).

4.05 Aisle Pilot Ckt. - SD-25087-01 (No. 1 Crossbar - typical).

4.06 Floor Alarm Board Misc. and Aux. Alarm Ckt. - SD-21203-01 (Panel).

4.07 Aud. Alarm Ckt. for Floor Alarm Board - SD-21819-01 (Panel).

4.08 Misc. Alarm Ckt. - SD-20241-01(Panel).

4.09 Alarm Transfer Ckt. - SD-25885-01 (No. 1 Crossbar).

4.10 Alarm Transfer Ckt. - SD-20733-01, SD-20736-01 (Panel).

4.11 Auxiliary Sender Link Circuit - SD-96483-01.

4.12 Miscellaneous circuit for originating and auxiliary sender test frame - SD-25174-01 (No. 1 Crossbar).

4.13 MF Adapter Circuit - SD-21971-01 (Panel).

SECTION IV - REASONS FOR REISSUE

A. CHANGED AND ADDED FUNCTIONS

A.1 The title of this circuit is changed and minor additions made as a result of the introduction of the auxiliary sender link extension frame.

D. DESCRIPTION OF CIRCUIT CHANGES

D.1 Sheet - 1
Title of circuit is changed from - Miscellaneous Circuit - Auxiliary Sender Link Frame to - Miscellaneous Circuit - Auxiliary Sender Link and Auxiliary Sender Link Extension Frames.

D.2 Sheet - 4 and CAD Fig. 4 added to Sheet Index.

D.3 Reference to Note 107 added in Circuit Note 102.

D.4 Circuit Note 107 added.

D.5 Equipment drawing J 95104D-( ) added to SUPPORTING INFORMATION
Sheet - 2.

D.6 Connection to auxiliary sender link extension frame information added to remote control jack for sender test circuit (FS5).
Sheet - 3.

D.7 Leads to auxiliary sender link extension frame added to CAD 1.
Sheet - 4.

D.8 CAD 4 added - This shows miscellaneous terminal strip and leads at auxiliary sender link extension frame.

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