CIRCUIT DESCRIPTION

CD-66910-01
ISSUE 2D
APPENDIX 1D
DWG ISSUE 6D

PBX SYSTEMS
NO. 756A
AUXILIARY POSITION CIRCUIT
FOR REMOTE ANSWERING OF TRUNKS AND
INWARD COMPLETION BY ANY STATION

CHANGES

D. Description of Changes

D.1 The rating of this circuit is changed from AT&TCo Standard to A&M Only.

BELL TELEPHONE LABORATORIES, INCORPORATED

DEPT 3224-WVS-RVL

Printed in U.S.A.

PBX SYSTEMS
NO. 756A
AUXILIARY POSITION CIRCUIT
FOR REMOTE ANSWERING OF TRUNKS AND INWARD COMPLETION BY ANY STATION

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SECTION I - GENERAL DESCRIPTION

1. PURPOSE OF CIRCUIT

1.01 This circuit enables any PBX station to answer an incoming central office trunk call when the attendant places the PBX on remote trunk answer operation. It also enables the answering station to complete the trunk call to another PBX station.

2. GENERAL METHOD OF OPERATION

2.01 In the following general and detailed description the auxiliary position circuit is referred to as the auxiliary circuit.

2.02 The attendant at a 6-button key telephone set position places the PBX on remote trunk answer operation by operating the remote answer key at the telephone set. If no key telephone set position is provided, the attendant at a console position places the PBX on remote trunk operation by removing the headset or handset cord plugs from the console jacks. Any PBX station can then answer an incoming central office trunk call in the following manner.

2.03 An incoming trunk call causes the auxiliary circuit to activate externally mounted visual and/or audible signals to indicate that a call is waiting to be answered. Any PBX station may answer the call by dialing the universal line circuit trunk code assigned to the auxiliary circuit.

2.04 The PBX establishes a connection between the answering station and the trunk call through the auxiliary circuit, and the externally mounted signals restore to normal.

2.05 The answering station becomes the controlling station for subsequent progress

of the trunk call. The control station may terminate the call or complete the call to another station.

2.06 To terminate the call the control station places the receiver on the switchhook. This action releases the auxiliary circuit which is ready to serve another trunk call.

2.07 To complete the call to another station, the control station flashes the switchhook once. This action causes the PBX to return dial tone to the control station. The control station dials the called station and the PBX rings the called station.

2.08 A connection is established between the two stations when the called station answers. The control station determines whether the trunk call is to be completed to the called station, and if it is, places the receiver on the switchhook.

2.09 This action causes the PBX to connect the called station to the trunk call and to release the auxiliary circuit. After a trunk call is answered through the auxiliary circuit and the control station hangs up, it is not possible to again gain access to that call through the auxiliary circuit.

2.10 The control station can return to the trunk call when call-blocked conditions are encountered (busy line, no answer, etc) by flashing the switchhook once. This action causes the PBX to release the destination to which the control station is connected and return the control station to the trunk call.

2.11 When using the flexible night connection feature of the trunks, the attendant must set up the night connections before placing the PBX on remote answer operation. Incoming calls to night-connected trunks will not activate the remote answer signal.

2.12 If the PBX establishes a connection between the auxiliary circuit and a station when the PBX is not on remote answer, busy tone is returned to the station.

SECTION II - DETAILED DESCRIPTION

1. ATTENDANT ESTABLISHES REMOTE ANSWER CONNECTIONS FOR CENTRAL OFFICE TRUNKS (SC1)

1.01 When the PBX is not provided with a 6-button key telephone set attendant position, the attendant at a console position places the PBX on remote answer by removing the headset or handset cord plugs from the console jacks. When the PBX is provided with a key telephone set position and attendant operation has been transferred to it, the attendant at the key telephone set position places the PBX on remote answer by operating the remote answer key.

1.02 Placing the PBX on remote answer operation causes the transfer of a group of position circuit leads to the auxiliary circuit and disables the flexible night connection feature of the trunks that the attendant has not placed on night connections.

1.03 The action of the attendant placing the PBX on remote answer connects ground to lead RA to operate relay RA.

1.04 Relay RA operated operates relay RAC and prepares the operate path for relay SIG.

1.05 Relay RAC operated:

(a) Operates relay BN.

(b) Transfers leads TT, TR, and ACG to the auxiliary circuit to transfer control of incoming trunk calls from the console to the auxiliary circuit.

(c) Prepares the operate paths for the LO-relays by connecting battery to their windings.

(d) Prepares the operate path for relay LOE.

(e) Prepares a path to connect ground to lead H toward the console.

(f) Opens one path between leads HD and HD1.

(f) Opens one path between leads HD and HD1.

(g) Prepares paths to operate the COSA and COSB relays in the marker.

(h) Opens the paths that supply busy tone from lead BT to stations connected to the auxiliary circuit when the PBX is not on remote answer.

(i) Prepares its own locking path so it will remain operated if a call is in progress through the auxiliary circuit when the attendant again takes control of incoming trunk calls and relay RA releases.

1.06 Relay BN operated opens the operate paths for relays NC and trunk relays N1. This disables the flexible night connection feature of the trunks that the attendant has not previously placed on night connections.

2. INCOMING CALL TO A CENTRAL OFFICE TRUNK (SC2)

2.01 When the central office trunk for an incoming call, the trunk signals the auxiliary circuit which operates externally mounted signals to notify the PBX that a call is waiting.

2.02 An incoming call causes trunk relays R and SR to operate. The operation of these

relays connects ground to the LO- lead associated with that trunk. Each LO- lead provides the operating path for the corresponding LO- relay. These relays determine which trunk will be served first and insure that only one trunk will be served at a time. Assuming that the only trunk requesting this circuit is trunk 0, the ground connected to lead LOO operates relay LOO.

2.03 Relay LOO operated:

(a) Operates relay SIG.

(b) Prepares a path to operate trunk relay ACA through lead ACAO.

(c) Opens the path supplying battery to the windings of all other LO relays. Corresponding contacts on the other LO relays are so arranged that the operation of any LO relay will open the path supplying battery to the windings of all higher numbered LO relays.

(d) Prepares its own locking path so it will remain operated after the call is answered; the trunk removes ground from lead LOO. Corresponding contacts on the other LO relays are so arranged that only the highest numbered LO relay operated will remain operated after the call is answered.

(e) Prepares a locking path for relay ON.

(f) Prepares the operate path for relay RTK.

2.04 Relay SIG in operating closes paths to operate externally mounted signals to notify the PBX that a call is waiting.

3. CALLING PARTY DISCONNECTS BEFORE CALL IS ANSWERED (SC3)

3.01 Trunk 0, relay SR, releases if the party calling the PBX disconnects before the call is answered. Relay SR released removes ground from the LOO lead allowing relay LOO to release. Relay LOO released releases relay SIG which restores the externally mounted signals to normal.

4. INCOMING CALL ANSWERED FROM A PBX STATION (SC4)

4.01 The universal line circuit trunk code assigned to the auxiliary circuit is dialed from any station in the PBX to answer a trunk call. After the marker establishes a connection between the PBX station and the auxiliary circuit, the auxiliary circuit signals the trunk to complete a connection between the trunk and the auxiliary circuit through the cordless position circuit. The auxiliary circuit completes a loop to trip central office ringing and completes the talking path between the answering station and the trunk call.

4.02 When the trunk answering code is dialed from a PBX station, the marker establishes the call in the normal manner and relay A operates through the loop from the station apparatus. Relay A supplies talking battery to the answering station.

4.03 Relay A operated:

(a) Operates relay B.

(b) Provides an additional open in the operate path for relay C.

(c) Closes the dial pulse repeating contacts in the loop to leads TT and TR.

4.04 Relay B operated:

(a) Closes the locking path through lead S2 for line relay OT-- to hold relay OT-- operated after the marker releases. Relay OT-- operated maintains the connection to the answering station.

(b) Operates relay ON.

(c) Provides an additional open in the relay F operate path.

(d) Prepares the operate path for relay H.

(e) Opens the path across the relay A dial pulse repeating contacts in the loop to leads TT and TR.

(f) Opens the operate path via thermistor RL for relay RL.

4.05 Relay ON operated:

(a) Operates relay LOE.

(b) Closes a locking path for relay LOO. The locking circuit of the LO- relays is so arranged that only the highest numbered LO- relay operated will be held operated.

(c) Opens the operate path for relay SIG. Relay SIG releases and restores the externally mounted signals to normal.

(d) Supplements the locking path for relay RAC.

(e) Provides an additional ground path to lead S2 to hold the connection to the answering station when relay B releases during switchhook flashes.

(f) Provides an off-normal ground for this circuit.

(g) Prepares the operate path for relay C.

(h) Prepares the path that supplies busy tone to a station connected to the auxiliary circuit when the PBX is not on remote answer operation.

4.06 Relay LOE operated:

(a) Opens the operate paths of the LO-relays.

(b) Closes through the path between leads AG and ACAO to operate trunk relay ACA.

4.07 Relay ACA operated completes the paths from the tip and ring of the central office end of the trunk to leads TT and TR of the auxiliary circuit through the cordless position circuit. Central office ringing is tripped through the loop formed by the A repeat coil across leads TT and TR. The A repeat coil completes the talking path between the answering station and the trunk call. The answering station becomes the controlling station for further progress of the call.

5. CONTROL STATION DISCONNECTS TO TERMINATE CALL WITHOUT TRANSFER (SC5)

5.01 If the control station determines that the call is not to be completed to another station, the control station can terminate the call by placing the receiver on hook. This action drops the connection to the control station and signals the trunk to release the connection to the cordless position circuit.

5.02 The operation of the switchhook when the control station hangs up opens the loop from the station and thus releases relay A.

5.03 Relay A released:

(a) Starts the slow-release of relay B.

(b) Opens the loop across leads TT and TR toward the central office end of the trunk.

(c) Operates relay C.

5.04 Relay C operated:

(a) Closes an additional locking path for relay LOO.

(b) Closes a path across its secondary winding to increase its release time.

(c) Prepares the operate path for relay F.

(d) Closes a path across the A repeat coil windings and resistor A in loop toward leads TT and TR.

(e) Prepares its own locking path.

(f) Opens the discharge path of the A capacitor through the A relay.

Functions (c), (d), and (e) are not necessary to this sequence of operations.

5.05 Relay B released:

(a) Starts slow-operation of relay RL via thermistor RL.

(b) Closes the loop across leads TT and TR toward the central office end of the trunk.

(c) Opens the operate path for relay ON. Relay ON remains locked operated under control of relay LOO.

(d) Opens the original locking path for line relay OT--. Relay OT-- remains locked operated to lead S2 under control of relay ON.

(e) Operates relay F.

5.06 Relay F operated performs no useful function in this sequence of operations. Relay RL operates after a time interval determined by thermistor RL.

5.07 Relay RL operated:

(a) Starts the slow-release of relay C.

(b) Provides an additional ground path to lead S2.

(c) Closes a path across thermistor RL to allow it to cool.

(d) Opens the loop across leads TT and TR toward the central office end of the trunk. This causes the trunk to release in a manner similar to that which occurs when the attendant disconnects after answering an incoming call signal.

(e) Supplements the original operate path for relay LOE.

(f) Opens the original locking path for relay LOO. Relay LOO remains locked operated under control of relay C.

(g) Prepares the operate path for relay H.

(h) Prepares the operate path for relay RTK.

(i) Opens the path between leads HD and HD1.

Functions (g), (h), and (i) are not necessary to this sequence of operations.

5.08 Relay C released releases relays F and LOO. Relay LOO released releases relay ON and opens the path between leads ACG and ACAO, allowing trunk 0, relay AC to release.

5.09 Trunk relay AC released causes the trunk to disconnect the tip and ring of the central office end of the trunk from the cordless position circuit. Relay ON released releases relay RL.

5.10 Relay RL released:

(a) Opens the ground path to lead S2 allowing line relay OT-- to release. This releases the connection to the control station.

(b) Releases relay LOE.

5.11 Relay LOE released reconnects the LO relays to their corresponding trunks and the auxiliary circuit is again ready to receive an indication of another trunk call.

6. CONTROL STATION ESTABLISHES DIAL TONE CONNECTION (SC6)

6.01 After a trunk call has been answered through the auxiliary circuit and the control station has determined that the call is to be completed to another station, the control station obtains a dial tone connection by flashing the switchhook once. When this signal is received, the auxiliary circuit signals the cordless position circuit which seizes the marker through the trunk. The marker connects a register to the trunk, establishing a dial tone connection to the control station through the crossbar switches, the trunk, the cordless position circuit, and the auxiliary circuit.

6.02 Depressing the switchhook opens the station loop releasing relay A. Relay A released:

(a) Starts the slow-release of relay B.

(b) Operates relay C.

(c) Opens the loop through leads TT and TR toward the central office end of the trunk.

6.03 Relay C operated prepares the operate path for relay F. Relay B is slow to release so that it will not release when relay A releases and operates during dial pulsing.

6.04 Relay B released:

(a) Operates relay F.

(b) Closes the loop through leads TT and TR toward the central office end of the trunk.

(c) Starts the slow-operation of relay RL via thermistor RL.

6.05 Relay F operated:

(a) Prepares the operate path for relay H.

(b) Closes its own locking path to off-normal normal ground under control of relay C.

6.06 Releasing the switchhook closes the station loop, operating relay A.

6.07 Relay A operated:

(a) Operates relay B.

(b) Starts the slow-release of relay C.

(c) Prepares a path to repeat dial pulses to the register in the loop to leads TT and TR.

6.08 Relay B operated:

(a) Operates relay H.

(b) Opens the operate path for relay RL via thermistor RL. Relay RL will not operate during the interval in which the relay B is released as the result of a switchhook flash.

6.09 Relay H operated:

(a) Operates cordless position circuit relay H via lead H.

(b) Provides an additional open in the locking path for relay C.

(c) Provides an additional locking path for relay LOO.

Functions (b) and (c) are not necessary to this sequence of operations.

6.10 Cordless position circuit relay H operated causes the trunk to disconnect the loop across leads TT and TR from the central office end of the trunk and to hold the trunk call. Relay C is slow-released to allow time for relays in the trunk and cordless position circuit to operate.

6.11 Relay C released releases relay F; relay F released releases relay H; relay H released releases cordless position circuit relay H.

6.12 Cordless position circuit relay H released causes the trunk to seize the marker and the marker establishes a connection between the register and the line end of the trunk. Register relay L operates through the loop completed by the A repeat coil to leads TT and TR. Dial tone from the register is transmitted to the control station through the A repeat coil.

7. CONTROL STATION DIALS AN IDLE STATION (SC7)

7.01 The control station dials the called station after receiving dial tone as described in the preceding section. The auxiliary circuit repeats the dial pulses to the register. When dialing is completed, the register seizes the marker. The marker establishes a connection between the trunk and the called station and releases the register connection to the trunk. The trunk applies ringing current to the called station and audible ringing feedback is transmitted to

the control station as an indication that the called station is being rung.

7.02 Relay A releases and reoperates as the station loop is opened and closed by the control station dial. Relay A releasing and reoperating opens and closes the loop to leads TT and TR. This loop provides the operate path for register relay L which follows the dial pulses. Relay C operates when relay A releases at the start of the first dial pulse of the digit dialed. Slow-release relay C remains operated during the interval between further dial pulses of the digit dialed, short-circuits the windings of the A repeat coil and the A resistor in the pulsing loop, and opens the discharge path of the A capacitor through the A relay.

8. CALLED STATION ANSWERS AND CONTROL STATION TRANSFERS CALLED STATION TO TRUNK CALL (SC8)

8.01 When the called station answers, a talking path is completed between the called station and the control station through the auxiliary circuit. If the control station determines that the called station is to be transferred to the trunk call, the control station hangs up. This action causes the auxiliary circuit to signal the trunk which completes the trunk call to the called station through the trunk. The auxiliary circuit releases the connection to the control station and is ready to receive an indication of another incoming trunk call.

8.02 Trunk relay RT operates when the called station answers. Trunk relay RT operated opens the operate path for relay RTK to prevent the release of the called station connection when the control station hangs up. Trunk relay RT operated releases trunk relay RS. Trunk relay RS released completes the talking path between the called station and the control station through repeat coil A.

8.03 The control station hangs up if the trunk call is to be completed to the called station. This action opens the station loop, releasing relay A. Relay A released operates relay C and opens the operate path for slow-release relay B. Relay C operated closes an additional locking path for relay LOO and prepares the operate path for relay F.

8.04 Relay B released closes ground through to thermistor RL to start release timing.

8.05 Relay RL operates after a time interval determined by thermistor RL. Relay RL operated opens the operate path for slow-release relay C. Relay C released releases relay LOO.

8.06 Relay LOO released releases relay ON and opens the path between leads ACG and ACAO, allowing trunk 0, relay AC to release.

8.07 Trunk relay AC released connects the line end of the trunk (called station) to the central office end of the trunk (trunk call). The trunk functions to disconnect from and release the cordless position circuit.

8.08 Relays ON, RL, and LOE release and function as described in the section covering disconnect of control station without transfer.

9. CONTROL STATION RETURNS TO TRUNK CALL (SC9)

9.01 The control station returns to the trunk call by flashing the switchhook once if, while attempting to transfer to another station, a call-blocked condition (busy tone, no answer, etc) is encountered; or if, after the called station answers, it is determined that trunk call completion to that station is not required.

9.02 Relay A is released by depressing the switchhook. Relay A released starts the slow-release of relay B and operates relay C. Relay C operated prepares the operate path for relay F.

9.03 Relay B released operates relay F. Relay F prepares the operate path for relay H.

9.04 Releasing the switchhook reoperates relay A. Relay A operated starts the slow-release of relay C and operates relay B.

9.05 Relay B operates relay H. Relay H operates cordless position circuit relay H.

9.06 Relay C released releases relay F, relay H, and cordless position circuit relay H in that order.

9.07 The operation and release of cordless position circuit relay H causes the PBX to release the connection to the line end of the trunk and to again complete the talking path between the control station and the central office end of the trunk.

10. CONTROL STATION DISCONNECTS WITHOUT RELEASING LINE END TRUNK CONNECTION (SC10)

10.01 If the control station encounters a call-blocked condition while attempting to transfer the trunk call the control station should return to the trunk call to advise the calling party of the call-blocked condition. If in error the control station hangs up the auxiliary circuit functions to cause the release of the destination connected to the line end of the trunk, to disconnect from the trunk, and to release the connection to the control station. It is not possible to again gain access to this trunk call through the auxiliary circuit.

10.02 The release of the switchhook when the control station hangs up opens the loop from the station apparatus releasing relay A.

10.03 Relay A released starts the release of slow-release relay B and operates relay C.

10.04 Relay C operated:

(a) Closes an additional locking path for relay LOO.

(b) Prepares the operate path for relay F.

(c) Prepares its own locking path.

10.05 Relay B released starts the operation of relay RL via thermistor RL and operates relay F.

10.06 Relay F operated prepares the operate path for relay H and locks operated to off-normal ground under control of relay C.

10.07 Relay RL operates after a time interval determined by thermistor RL and performs the following functions:

(a) Operates relay RTK from ground supplied by trunk relay HM operated.

(b) Prepares the operate path for relay H.

(c) Opens the path between leads HD and HD1 to prevent the trunk from holding the trunk call when both registers are busy.

10.08 Relay RTK operated operates relay H and holds relay C operated.

10.09 Relay H operated:

(a) Grounds lead H to operate cordless position circuit relay H.

(b) Releases relay C.

(c) Provides an additional locking path holding relay F operated. Relay F released opens the operate path for relay H.

10.10 Relay C released releases relay F which releases relay H.

10.11 Relay H released releases relay LOO and cordless position circuit relay H.

10.12 The operation and release of cordless position circuit relay H causes the trunk to release the connection that had been established to the line end of the trunk.

10.13 Relay LOO released:

(a) Releases relay ON.

(b) Opens the path between leads ACG and ACAO allowing trunk O, relay AC to release.

(c) Releases relay RTK.

10.14 Trunk relay AC released causes the trunk to disconnect the tip and ring of the central office end of the trunk from the cordless position circuit. Relay ON released opens the operate path for relay RL.

10.15 Relay RL released:

(a) Opens the ground path to lead S2 causing the release of the connection to the control station.

(b) Releases relay LOE.

10.16 The auxiliary circuit is again ready to receive an indication of another trunk call.

11. ATTENDANT RELEASES REMOTE ANSWER CONNECTIONS (SC11)

11.01 When the attendant takes the PBX off remote trunk answer operation, the cordless position circuit removes ground from lead RA releasing relay RA. The auxiliary circuit either releases at this time or, if a call is in progress, releases when the control station hangs up.

11.02 If no call is in progress through the auxiliary circuit, relay RA released releases relays RAC and BN in sequence.

11.03 If a call is in progress through the auxiliary circuit, relay RAC releases when relay ON releases after the control station hangs up. Relay RAC released releases relay BN.

12. ATTENDNAT ESTABLISHES TRUNK FLEXIBLE NIGHT CONNECTION (SC12)

12.01 The attendant must establish any trunk flexible night connections that are required before placing the PBX on remote answer. The auxiliary circuit functions to open the incoming call signal path from the trunk to the auxiliary circuit as each night connection is set up. Incoming calls to night-connected trunks will not cause the auxiliary circuit to function to operate the associated signal equipment if the PBX is then placed on remote answer.

12.02 When the attendant places the PBX on night service, the PBX functions to open the ground path to lead NSA allowing relay NSA to release.

12.03 Relay NSA released prepares the operate paths for the NC0 through 9 relays. When the attendant establishes a night connection to a trunk, a ground path is closed to the ACA lead corresponding to that trunk. This path completes the operate path for trunk relay N1 and the corresponding NC relay in the auxiliary circuit.

12.04 Relay NC operated:

(a) Closes its own locking path under control of relay NSA.

(b) Opens the operate path of the correspondingly numbered LO- relay. This prevents the LO- relay from operating when the trunk is seized for an incoming call after the PBX is placed on remote answering.

13. CONTROL STATION DIALS A BUSY STATION

13.01 When the control station attempts to complete the trunk call to a busy station, the marker signals the trunk to return busy tone to the control station and not to camp-on the busy station.

13.02 Relay RAC operated prepares paths to operate the marker COSA and COSB relays to enable the marker to function as described above.

14. MISCELLANEOUS FEATURES

14.01 This circuit is not designed to complete an incoming central office call through a dial repeating tie trunk.

14.02 Option V provides for a continuous activation of the remote answer signal when incoming trunk calls are waiting to be answered and the auxiliary position circuit is busy.

14.03 Option T provides for the restoration of the remote trunk answer feature when power is restored after a power failure.

SECTION III - REFERENCE DATA

1. WORKING LIMITS

1.01 Maximum external loop resistance - A relay - 3300 ohms

1.02 Minimum insulation resistance - 10,000 ohms

1.03 Voltage Limits

Potential	Minimum	Maximum
-48 volts	-45 volts	-52 volts

2. FUNCTIONAL DESIGNATIONS

2.01 Relays

Designation	Meaning
A	Historical
B	Historical
BN	Block Night Connection
C	Historical
F	Flash
H	Hold
LO	Lockout
LOE	Lockout End
NC	Night Connection
NSA	Night Service Auxiliary
ON	Off-Normal
RA	Remote Answer
RAC	Remote Answer Connect
RL	Release
RTK	Release Trunk
SIG	Signal

3. FUNCTIONS

3.01 To receive indications of several simultaneous incoming trunk calls but serve them one at a time.

3.02 To enable an incoming trunk call to activate externally mounted signaling equipment to notify the PBX that a call is waiting.

3.03 To enable any station in the PBX (control station) to answer a trunk call by dialing the trunk code of the miscellaneous trunk termination assigned to this circuit.

3.04 To enable the control station to complete the trunk call to another PBX station.

3.05 To distinguish between control station dial pulses, switchhook flashes, and hang-up, and to use these indications to control the progress of the trunk call.

3.06 To restore the remote trunk answer feature after a power failure.

3.07 To provide continuous activation of the remote trunk answer signal when incoming trunk calls are waiting to be answered and the auxiliary position circuit is busy.

4. CONNECTING CIRCUITS

4.01 When this circuit is listed on a key sheet, the connecting information thereon should be followed.

(a) Line, Link, and Marker Circuit - SD-65741-01

(b) 756A PBX Cabling Diagram - SD-65746-01

(c) Two-Way Trunk Circuit to Central Office - SD-65752-01

(d) Cordless Position Circuit - SD-65757-01

(e) Alarm, Transfer, and Test Circuit - SD-66796-01

(f) 756A PBX Feature Cabling Diagram - SD-66920-01

(g) Power Supply Circuit - SD-81326-01

(h) Power Supply Circuit - SD-81600-01

5. MANUFACTURING TESTING REQUIREMENTS

5.01 This circuit shall be capable of performing all the service functions specified in this circuit description and of meeting all the requirements of the Circuit Requirements table.

6. TAKING EQUIPMENT OUT OF SERVICE

6.01 To take this equipment out of service, block the RA relay nonoperated and make the line circuit assigned to the auxiliary position circuit busy as specified in the circuit description covering the line, link, and marker circuit.

BELL TELEPHONE LABORATORIES, INCORPORATED

DEPT 3221-WVS-RGP

SECTION IV - REASONS FOR REISSUE

A. Changed and Added Functions

A.1 Provides for the continuous activation of the remote trunk answer signal when incoming trunk calls are waiting to be answered and the auxiliary position circuit is busy.

A.2 Provides for the restoration of the remote trunk answer feature when power is restored after a power failure.

B. Changes in Apparatus

B.1 Added

CW(0-9) diodes,
446F, App Fig. 1,
option V

D. Description of Changes

D.1 The apparatus index is revised to show diodes CW(0-9).

D.2 Options V and T are added to the option index.

D.3 Options V and T are added as Standard.

D.4 Option V is added to Circuit Note 102.

D.5 Circuit Note 104 is revised to reflect Issue 5D.