INFORMATION DESK NO. 3

COMMON SYSTEMS

1. GENERAL

Scope

1.01 This specification, together with the supplementary information listed herein, covers the equipment design requirements for the framework, equipment, and circuits to be used for the manufacture and installation of the No. 3 Information Desk. Equipment included in this specification may be ordered by specifying the code and list numbers covered in part 4.

1.02 This specification is reissued to rearrange the turret to facilitate cabling to the key panel equipment, to introduce the adjustable directory rack, to eliminate the option of the 105T finish, and to make minor changes to bring the requirements up to date. The detailed reasons for reissue are covered at end of the specification.

Change in Status of Equipment

1.03 The following equipment has been replaced as indicated. The recommended equipments shall be used for additions or replacements to existing jobs and for all new jobs as covered below:

Former Equipment	Rating	Covered In Issue	Recommended Equipment
ED-91140-01, G2	Mfr. Disc.	4	ED-91140-01, G1
ED-91147-01, G2		4	ED-91147-01, G1
ED-91148-01, G2		4	ED-91148-01, G1
ED-90169-01, G3		4	-
ED-90169-01, G8-G13		4	ED-90169-01, G1-G7
ED-90171-01, G2		4	ED-90171-01, G1
ED-90172-01, G3,G4		4	ED-90172-01, G1,G2
ED-90173-01, G1-G20		4	ED-90915-01, G1-G8
ED-90174-01, G10-G18		4	ED-90174-01, G1-G9
ED-90175-01, G9-G16		4	ED-90175-01, G1-G8
ED-90310-01, G3,G4		4	ED-90310-01, G1,G2
J95401A		4	ED-91303-01, G1-G3
J95401B	Mfr. Disc.	3	J95401V
J95401C		3	J95401X
J95401G		3	J95401T
J95401J		3	Misc. Relay Rack Eqpt.
J95401K		3	J95401W
J95401L		3	J95401U
J95401P		3	See Note
J95401R		3	See Note
J95401S		3	J95401V

Note: The timing units covered by J95401P and J95401R and their control relays which were included with the Calls Waiting equipment per J95401K, and the "Slow Answer" register in the register cabinet are replaced by Multi-Line Answering Time Recording per J93809.

Capacity

1.04 The capacity of the No. 3 Information Desk is as follows:

Positions per team of operators	40
Local trunks per team of operators	120
Toll trunks per team of operators	As Req'd
Sequence storing circuits per group	20
Outgoing trunk groups	12 or 24
Incoming interposition trunks	6 or 0

Description

1.05 The No. 3 Information Desk is intended for use as a centralized information desk in large central office areas which may be either manual, dial or a combination of the two.

1.06 The No. 3 Information Desk provides for the automatic distribution of incoming calls to idle operators in the order in which they are received, except calls from toll operators which are handled on a preferred basis. Should all operators be busy, the equipment provides for the storing and sequence distribution of calls. The distributing equipment is so arranged that all calls in a group of 120 local trunks plus the required number of trunks incoming from toll can be distributed to a team of as many as 40 operators over a first choice path and in addition, by means of a second path at the operators' positions, calls on additional trunks associated with another team of

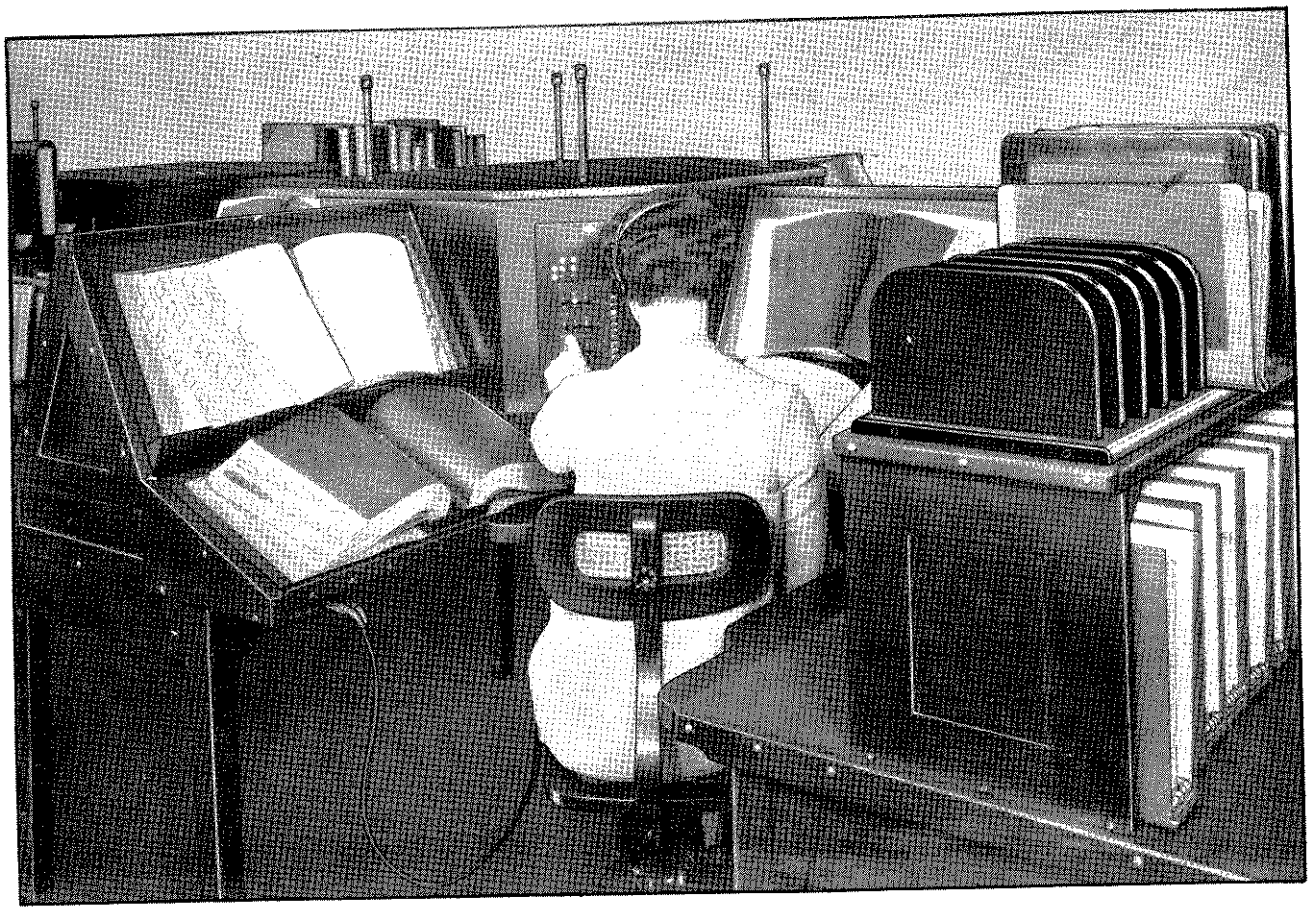

Fig. 1 - General View of a Position

operators may also be distributed to the first group.

1.07 The desk framework is so arranged that each operator occupies a recessed compartment and with directories and records arranged on three sides of the position as shown in Fig. 1 each operator is practically isolated from other operators at the desk by this arrangement.

1.08 Since operators at desks in large central office areas require access to more records than operators at desks in smaller areas, provision is made, by means of varying framework assemblies, for four sizes of desks. These are known as the Four-Book desk, the Three-Book desk, the Two-Book desk and the One-Book desk.

1.09 The Four-Book desk is the largest, and is shown in Fig. 2. This desk consists of (1) a transverse base supporting unit with an operators' cabinet in the center, flanked on either side by a toll directory rack, and (2) another transverse base supporting unit with two intermediate base supporting units upon which are mounted a 4-position octagonal turret flanked on four sides by double slope book shelves, with an operator's key panel as shown in Fig. 3 located in each corner face of the turret between the bookshelves. Thus are accessible to each operator a toll directory rack and two book shelves with capacity for two large local books each. The jacks for operators and supervisors telephone sets are located under the outer edge of the transverse bookshelf, and a supervisors call lamp for the position is mounted on a signal lamp standard on top of the turret above each key panel. For cases where directory space in excess of that provided above is required, supplementary directory racks may be mounted above each bookshelf.

1.10 The Three-Book desk is similar to the Four-Book arrangement except for the transverse book shelves, which are of the single low slope type. The operators cabinet and toll directory racks are omitted and replaced by a baffle board between adjacent operators. Toll directory racks may be located on top of the bookshelves when required. This arrangement provides access

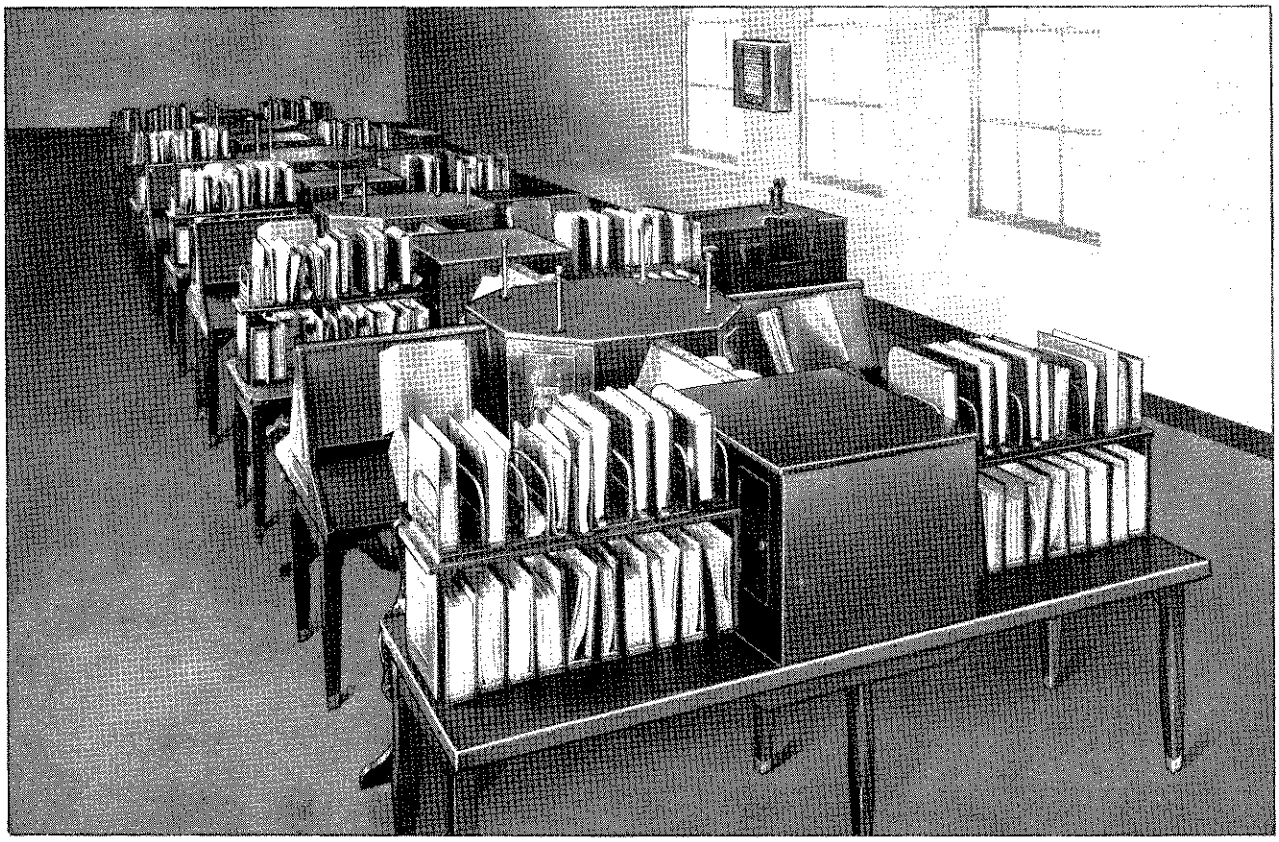

Fig. 2 - General View of 4-Book Desk

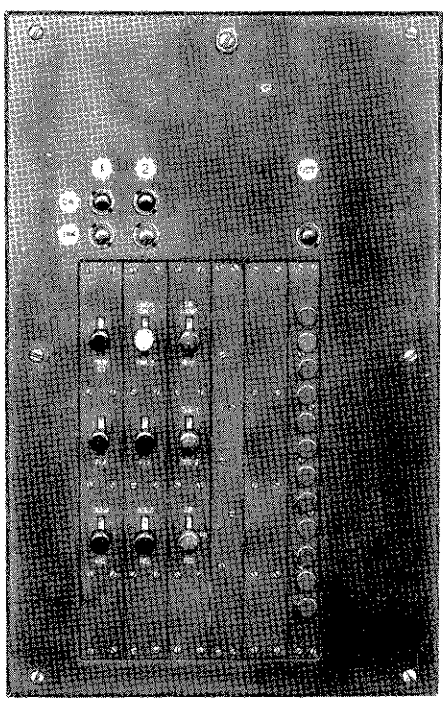

Fig. 3 - Operators' Key Panel

to three local books and toll directories above the bookshelves if desired.

1.11 The One and Two-Book desks differ from the desks described above in that (1) a smaller operators turret is used, and (2) the transverse bookshelves are replaced by toll directory racks. In the case of the Two-Book desk, two local books may be accomodated on the double-slope bookshelf before the operator, while in the case of the One-Book desk, the smallest, the double slope bookshelf is replaced by a single steep slope bookshelf for one local book. The One-Book desk is shown in Fig. 4.

1.12 In addition to the desk equipment in the operating room, a lamp signal cabinet as shown in Fig. 5 is located near the chief operator's desk to serve as a traffic guide and to indicate trouble conditions. A traffic register cabinet, shown in Fig. 6 is also furnished for recording the incoming call traffic. This cabinet is also usually located in the operating room.

1.13 To permit monitoring and observing on any desk position a wall mounted monitoring jack cabinet is available.

1.14 The No. 3 Information Desk framework together with its associated wall-

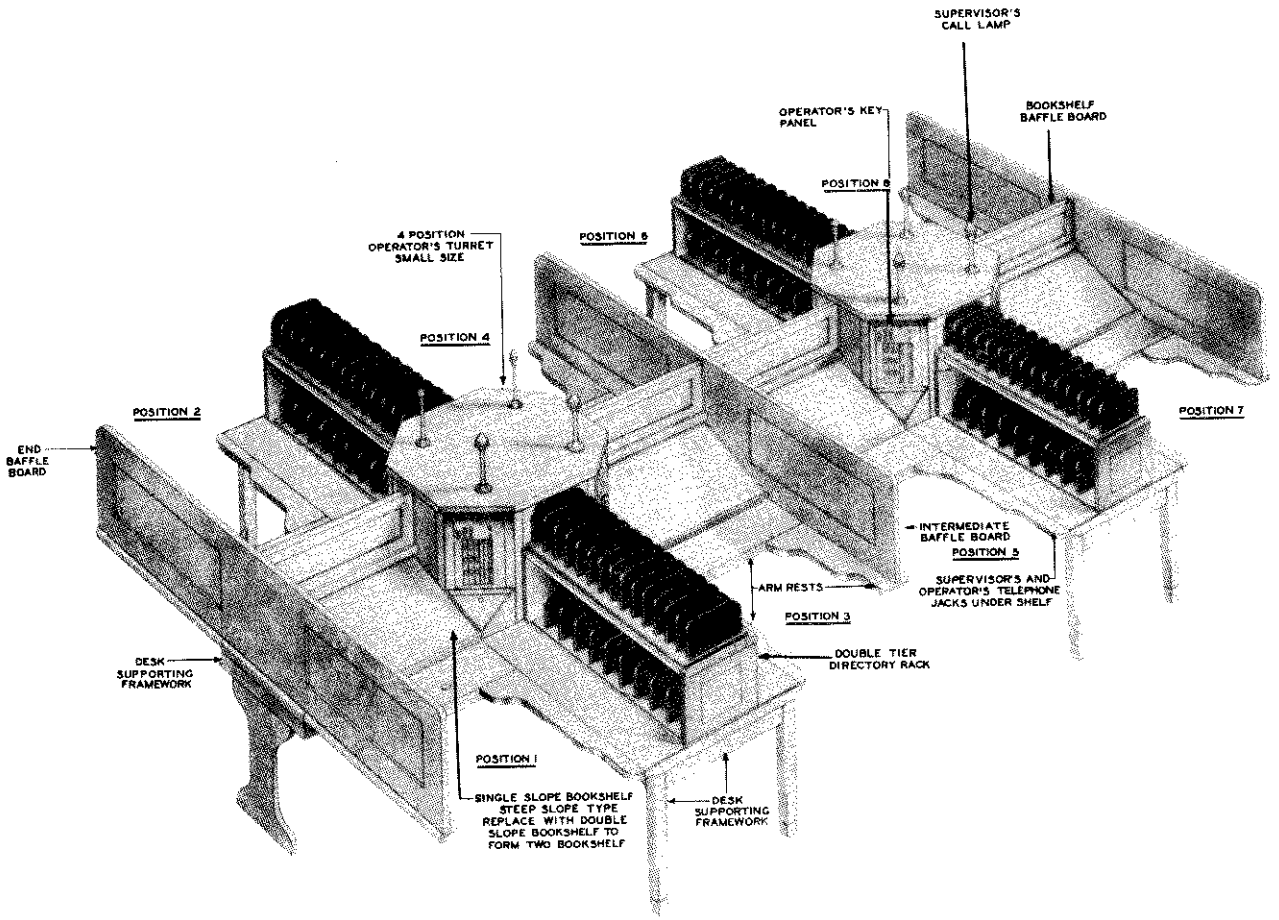

Fig. 4 - Perspective View of the One-Book Desk

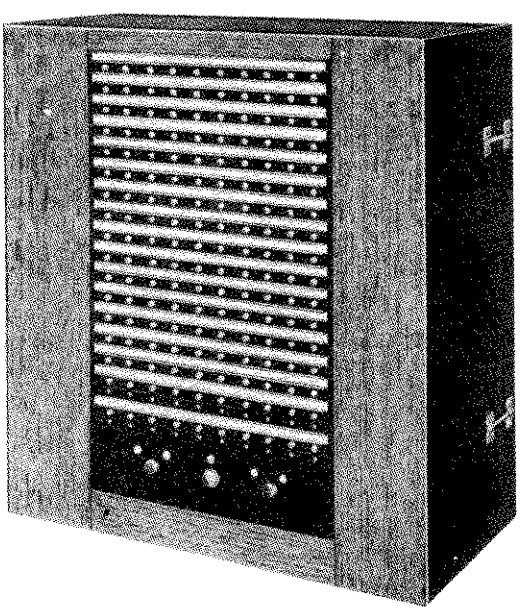

Fig. 5 - Lamp Signal Cabinet

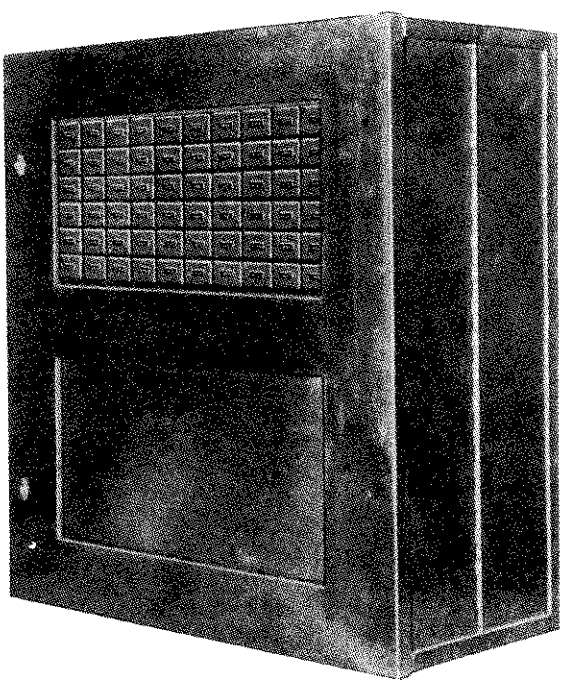

Fig. 6 - Traffic Register Rack

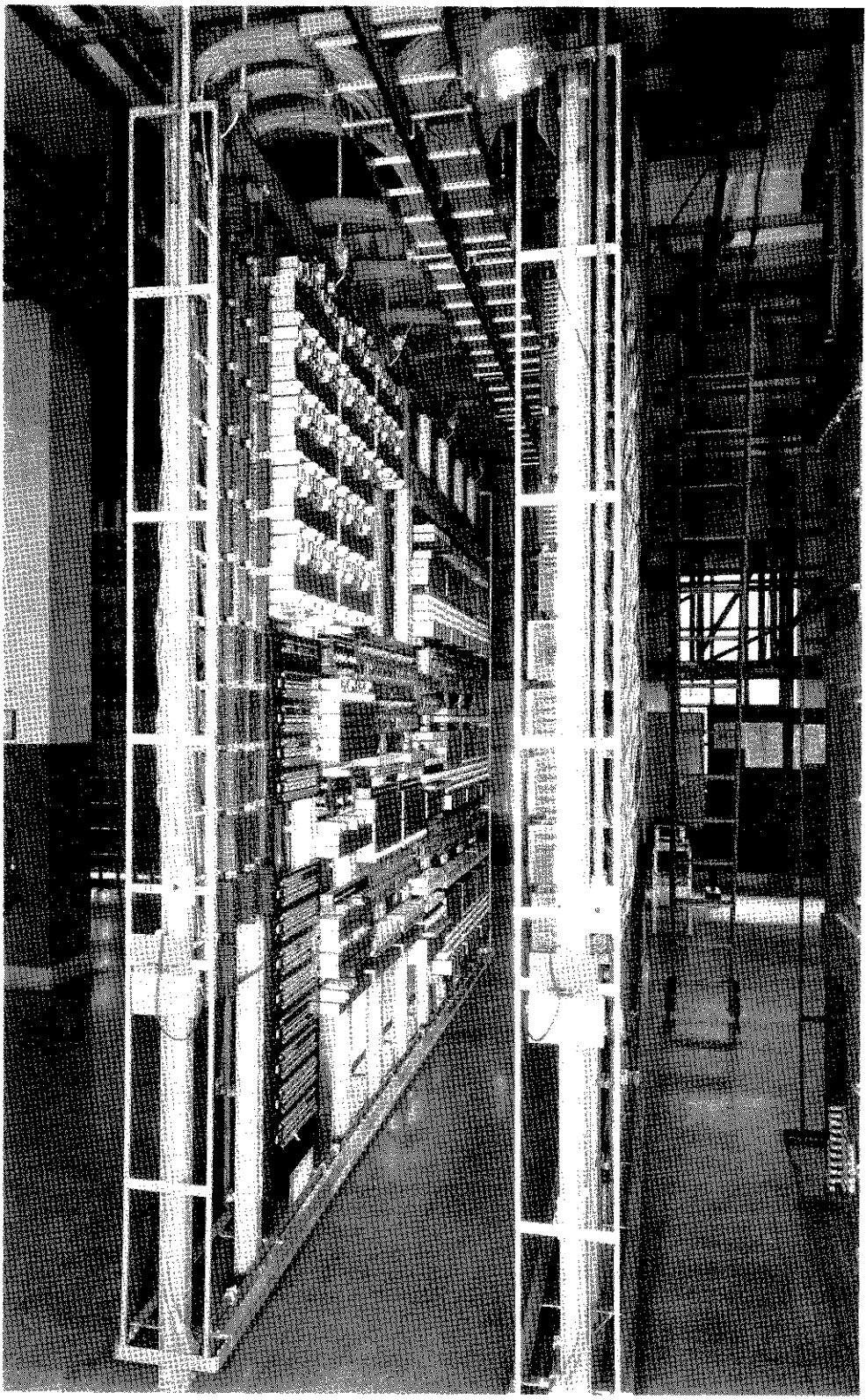

Fig. 7 - General View of Relay Rack

mounted cabinets, is furnished with the dull mahogany medium 105A finish to match the finish ordinarily used on central office switchboards and desks.

1.15 The relay equipment associated with the No. 3 Information Desk, composed of a number of different relay rack units, a bay of miscellaneous fuse panels, a small cross-connecting rack and miscellaneous relay equipment, is located on the relay rack in accordance with the typical drawing listed herein. A general view of this equipment is shown in Fig. 7.

Subdivisions of Equipment

ED-90169-01 - Base Supporting Framework
ED-90171-01 - Bookshelf - Double Slope Type
ED-90172-01 - Operators Cabinet
ED-90174-01 - End Panels and Other End Trimming Details
ED-90175-01 - Miscellaneous Desk Details
ED-90310-01 - Operators Turret - 4 Positions Three or Four-Book Desk
ED-90405-01 - Relay Rack Cross Connecting Rack
ED-90456-01 - Jack Cabinet for Monitoring Jacks
ED-90593-01 - Traffic Register Cabinet
ED-90753-01 - Lamp Signal Cabinet
ED-90915-01 - Directory Rack - Adjustable Partitions
ED-91140-01 - Bookshelf - Single Low Slope Type
ED-91147-01 - Operators Turret - 4 Position - One or Two Book Desk
ED-91148-01 - Bookshelf - Single Steep Slope Type
ED-91301-01 - Operator's Position Cabling Plan
ED-91303-01 - Operator's Key Panel
J95401D (AT&TCo Std.) - Trunk Alarm Unit
J95401E (AT&TCo Std.) - Allotter Unit
J95401F (AT&TCo Std.) - Start Unit
J95401H (AT&TCo Std.) - Position Unit - 2 Positions
J95401M (AT&TCo Std.) - Allotter Alarm Unit
J95401N (AT&TCo Std.) - Toll Start Applique Unit
J95401T (AT&TCo Std.) - Sequence Storing Unit
J95401U (AT&TCo Std.) - Outgoing Trunk Unit
J95401V (AT&TCo Std.) - Incoming Trunk Unit Not Arranged for Preference Service
J95401W (AT&TCo Std.) - Calls Waiting Signal Unit
J95401X (AT&TCo Std.) - Incoming Trunk Unit Arranged for Preference Service

2. SUPPLEMENTARY INFORMATION

AA128.006 - List of General Equipment Requirement Sections
J14709 - Supervisory and Timing Relay Testing Equipment
J92601 - Traffic Register Cabinet
J94707A - Incoming Trunk Test Set
J99208 - Lamp Cabinet
Floor Plan Data - Section 7.2, Sheets 22, 39, and 40

3. DRAWINGS

Circuits

SD-90201-01 - Keysheet of Circuits

Desk Framework, Equipment, and Cabling

ED-90169-01 - Base Supporting Unit
ED-90171-01 - Double Slope Bookshelf
ED-90172-01 - Operators' Cabinet
ED-90174-01 - End Panels and End Trimming Details
ED-90175-01 - Miscellaneous Desk Details
ED-90178-01 - Typical Assembly and Equipment of Four-Book Desk
ED-90233-01 - Perspective View of Four-Book Desk
ED-90310-01 - Four Position Turret for Three or Four-Book Desk
ED-90904-01 - Adjustable Book Rack
ED-90915-01 - Directory Racks - Adjustable Partitions
ED-91140-01 - Single Low Slope Bookshelf
ED-91143-01 - Perspective View of One-Book Desk
ED-91144-01 - Perspective View of Three-Book Desk
ED-91145-01 - Typical Assembly and Equipment of One or Two-Book Desk
ED-91146-01 - Typical Assembly and Equipment of Three Book Desk
ED-91147-01 - Four Position Turret for One or Two-Book Desk
ED-91148-01 - Single Steep Slope Bookshelf
ED-91301-01 - Desk and Position Cabling Plan and Local Cable
ED-91303-01 - Operator's Key Panel - Assembly and Equipment

Relay Rack Unit Framework

ED-90395-01 - Position Unit
ED-90395-02 - Incoming Trunk, Outgoing Trunk, Sequence Storing and Sequence Storing Timing Units
ED-90395-03 - Allotter and Start Units
ED-90405-01 - Cross Connecting Rack Assembly
ED-90782-01 - Trunk Alarm, Allotter Alarm, Toll Start Applique and Calls Waiting Signal Units

Relay Rack Equipment

ED-90176-01 - Typical Relay Rack Equipment
ED-90302-01 - Allotter Unit Equipment
ED-90304-01 - Start Unit Equipment
ED-90308-01 - Trunk Alarm Unit Equipment
ED-90312-01 - Cross-Connecting Rack Equipment
ED-90328-01 - Typical Fuse Panel Equipment
ED-90346-01 - Incoming Trunk Unit Equipment (from Toll)
ED-90404-01 - Allotter Alarm Unit Equipment
ED-90467-01 - Toll Start Applique Unit Equipment
ED-90676-01 - Sequence Storing Unit Equipment
ED-90698-01 - Outgoing Trunks Unit Equipment
ED-90758-01 - Position Unit Equipment

ED-90809-01 - Incoming Trunk Unit Equipment (not Arranged for Preferential Service)
ED-91141-01 - Calls Waiting Signal Unit Equipment

Relay Rack Cabling

ED-90299-01 - Incoming Trunk Unit
ED-90301-01 - Sequence Storing Unit
ED-90303-01 - Allotter Unit
ED-90305-01 - Start Unit
ED-90307-01 - Outgoing Trunk Unit
ED-90311-01 - Typical Relay Rack Cabling Plan
ED-90405-01 - Cabling of Cross-Connecting Rack
ED-90440-03 - Position Unit
ED-90757-03 - Trunk Alarm, Allotter Alarm and Calls Waiting Signal Unit

Miscellaneous

ED-90372-01 - Lamp Signal Cabinet Equipment
ED-90411-01 - Designation Cards
ED-90456-01 - Jack Cabinet - Assembly
ED-90593-01 - Traffic Register Cabinet - Assembly
ED-90630-01 - Traffic Register Cabinet - Cabling
ED-90753-01 - Lamp Signal Cabinet - Assembly and Cabling
ED-90755-01 - Traffic Register Cabinet - Equipment
ED-90784-01 - Jack Cabinet - Equipment
ED-91324-01 - Miscellaneous Terminal Strips

4. EQUIPMENT

Framework

ED-90169-01 - Desk Supporting Framework

Group 1 - Base for supporting the large turret with two bookshelves, the small turret with two directory racks, or the operators' cabinet with two directory racks.

Group 2 - Base for supporting one intermediate bookshelf for the four-book desk.

Group 4 - Base for supporting one bookshelf at end of one-or two-book desk.

Group 5 - Base for supporting two intermediate bookshelves for one- or two-book desk.

Group 6 - Base for supporting one bookshelf at end of three-book desk.

Group 7 - Base for supporting two intermediate bookshelves for three-book desk.

ED-90171-01 - Double Slope Bookshelf

Group 1 - Double slope bookshelf for supporting 4 books.

ED-90172-01 - Four Compartment Operators' Cabinet

Group 1 - Four compartment operators' cabinet for end of lineup.

Group 2 - Four compartment operators' cabinet for intermediate locations.

ED-90174-01 - End Panels and Other End Trimming Details

Group 1 - Two end panels for double slope bookshelf.

Group 2 - Two end panels for single low slope bookshelf.

Group 3 - Trimming for directory rack table at end of lineup.

Group 4 - Trimming for intermediate directory rack table.

Group 5 - Trimming for double slope bookshelf at directory rack end.

Group 6 - Trimming for single slope bookshelf at directory rack end.

Group 7 - Dummy key panels for turret at end of lineup.

Group 8 - Baffle board for use at intermediate locations.

Group 9 - Baffle board for use at end of lineup.

ED-90175-01 - Miscellaneous Desk Details

Group 1 - Arm rests for one position of four-book desk when directory rack is at right.

Group 2 - Arm rests for one position of four-book desk when directory rack is at left.

Group 3 - Arm rests for two adjacent positions of the three-book desk.

Group 4 - Arm rests for two opposite positions at end of lineup, three-book desk.

Group 5 - Arm rests for two adjacent positions of two-book desk.

Group 6 - Arm rests for two opposite positions at end of lineup, two-book desk.

Group 7 - Arm rests for two adjacent positions of the one-book desk.

Group 8 - Arm rests for two opposite positions at end of lineup, one-book desk.

ED-90310-01 - Four Position Operator's Turret for Three- or Four-Book Desk

Group 1 - Four position turret for end of lineup.

Group 2 - Four position turret for intermediate locations.

ED-90405-01 - Relay Rack Cross-Connecting Rack

Group 1 - One originating unit (23" relay rack)

Group 2 - One supplementary unit (23" relay rack)

ED-90456-01 - Jack Cabinet

Group 2 - Jack cabinet.

ED-90593-01 - Traffic Register Cabinet

Group 1 - Wall mounted traffic register cabinet with capacity for 10 1-3/4" mounting plates.

ED-90753-01 - Lamp Signal Cabinet

Group 2 - Wall mounted lamp signal cabinet 150 lamp capacity.

ED-90915-01 - Directory Racks with Adjustable Partitions

Group 3 - Double tier directory rack with 24 partitions, for mounting on base supporting framework.

Group 4 - Single tier supplementary directory rack with 12 partitions, for mounting on top of an outside double slope bookshelf.

Group 5 - Single tier supplementary directory rack with 12 partitions, for mounting on top of an intermediate double slope bookshelf.

Group 6 - Single tier supplementary directory rack with 12 partitions, for mounting on top of a single low slope bookshelf.

Group 7 - Single tier directory rack with 14 partitions, for mounting on base supporting framework.

Group 8 - Single tier supplementary directory rack with 12 partitions, for mounting on top of a single steep slope bookshelf.

ED-91140-01 - Single Low Slope Bookshelf

Group 1 - One single low slope bookshelf for two books.

ED-91147-01 - Four Position Operators' Turret for One- or Two-Book Desk

Group 1 - One four position operators' turret for intermediate locations.

ED-91148-01 - Single Steep Slope Bookshelf and Baffle Board

Group 1 - One single, steep slope bookshelf for two books.

Group 3 - Baffle board for top of single steep slope bookshelf.

Desk Mounted Equipment

ED-91303-01 - Operator's Key Panel (See Note A)

Group 1 - Framework and apparatus for one key panel, equipped with 12 OGT keys - not arranged for interposition or interoffice trunks.

Group 2 - Framework and apparatus for one key panel equipped with 24 OGT keys - not arranged for interposition or interoffice trunks.

Group 3 - Framework and apparatus for one key panel equipped with 12 OGT keys and 6 interposition or interoffice trunks.

Group 4 - Position terminal strip for two positions, arranged for 12 or 24 OGT circuits.

Group 5 - Position terminal strip for two positions, arranged for 12 OGT and 6 interposition or interoffice trunk circuits.

Note

A. The key panel equipment shown on ED-91303-01 is the same for all desks with exceptions noted in groups 1 to 3. Groups 4 and 5 include terminal strips located at each turret to care for interposition wiring which varies depending on the number of OGT and interposition or interoffice trunks.

Relay Rack Mounted Units

J95401D (AT&TCo Std.) - Trunk Alarm Unit

Equipment - ED-90308-01
Local Cable - ED-90757-03

List 1 - Framework, assembly, wiring, and equipment for 12 (TK) lamps and relays, and common timing equipment for the trunk alarm circuit.

	Wire	Equip
Framework ED-90782-01, Fig. 1	-	1

	Wire	Equip
Trunk Alarm Ckt. SD-90001-01, Fig. 2	12	12
Trunk Alarm Ckt. SD-90001-01, Fig. 1	1	1

J95401E (AT&TCo Std.) - Allotter Unit

Equipment - ED-90302-01
Local Cable - ED-90303-01 (See Note A)

List 1 - Framework, assembly, wiring, and equipment for one set of allotter circuits.

	Wire	Equip	See Note
Framework ED-90395-03	-	1	
Allotter Ckt. SD-90003-01, Figs. 1, D & E	1	1	B
Allotter Ckt. SD-90003-01, Fig. 2	2	2	
Allotter Ckt. SD-90003-01, Fig. 3	1	1	
Allotter Alarm Ckt. SD-90009-01 or SD-66282-01 (Keys, lamps & message register only	1	1	C

Notes

A. The ground for this unit will be obtained from a network of 20 gauge wire running from apparatus terminal to apparatus terminal, the first and last terminals on a mounting plate to be connected to corresponding first and last terminals on the plate below for all circuits on the unit. The network shall also continue above to the key panel and message register mounting plates. Feeders to this network shall be run to separate punchings on the unit terminal strip as follows: one feeder to the near end of the top plate, one to the far end of the third plate, one to the near end of the fifth plate and one to the far end of the bottom plate. Four 16 ESCB feeders shall be run from the unit terminal strips to the relay rack ground, in the usual manner. This system of punchings and loops cares for both the allotter and allotter alarm circuit grounds except the "Z" grounds for the selectors and the ringing grounds which are wired as specified on the circuit.

B. The pulsing and alarm equipment shown on SD-90003-01, Figs. A, B & C, will be furnished as specified for the local office equipment and located as miscellaneous equipment.

C. This unit shall be wired universally for the keys, lamps and traffic registers shown on the allotter alarm circuit and is used either with this information desk or the #3 Order Turret. (There is a duplicate key and lamp equipment on the circuit to be used with the No. 3 Order Turret. These duplicate keys and lamps are mounted at the supervisor's turret).

J95401F (AT&TCo Std.) - Start Unit

Equipment - ED-90304-01
Local Cable - ED-90305-01 (See Note A)

List 1 - Framework, assembly, wiring, and equipment for a unit for one set of start circuits.

	Wire	Equip	See Note
Framework ED-90395-03, Fig. 1	-	1	
Start Ckt. SD-90006-01, Figs. 1 & 2, "M" & "N" Wiring & Apparatus	1	1	B,C, D,E

Notes

A. The grounds for the start circuit unit should be arranged in network form as covered under the allotter unit, Note A, except that two feeders only will be required on this unit instead of four. The first feeder should be run to the near end of the top plate, the other to the far end of the bottom plate.

B. The pulsing and alarm equipment shown on SD-90006-01, Figs. A, B & C will be furnished as specified for local office equipment and located as miscellaneous equipment.

C. The (IO) lamp shown on SD-90006-01 appears once on the key panel of this unit with a multiple lamp in the lamp signal cabinet for the No. 3 Information Desk. For the No. 3 Order Turret, this lamp is designated (IA), and is not multipled.

D. The equipment designated "M" or "N2" is mounted on the start unit. The equipment designated "N1" is required for use with the No. 3 Order Turret, and is located in the supervisor's turret.

E. The equipment shown in Figs. 3 & 4 is required for desks having incoming trunks arranged for preference service. The key panel for this unit is drilled for the keys and lamp shown in Fig. 4, and provided with the number plates and apparatus blanks. The equipment for Figs. 3 & 4 together with the keys, lamp, lamp socket and lamp cap are included under unit code J95401N.

J95401H (AT&TCo Std.) - Position Equipment Unit

Equipment - ED-90758-01
Local Cable - ED-90440-03 (See Note A)

List 1 - Framework, assembly, wiring, and equipment common to two operator's positions (not including position equipment mounted in the desk or on the OGT units).

	Wire	Equip	See Note
Framework ED-90395-01	-	1	
Operator's Tel. and Trunk Ckt. SD-96103-01, Figs. 1, 2 & 3	2	0	B&C
Outgoing Trunk Ckt. SD-90011-01, Fig. 1	2	0	
Supervisor's Ckt. SD-90010-01, Fig. 2	2	0	

List 2 - Equipment required in addition to list 1 for one operator's position.

	Equip
Operator's Tel. and Trunk Ckt. SD-96103-01, Figs. 1, 2 & 3	1
Outgoing Trunk Ckt. SD-90011-01, Fig. 1	1
Supervisor's Ckt. SD-90010-01, Fig. 2	1

List 3 - Assembly and equipment required in addition to list 1 for one terminal strip per ED-90758-01, Fig. G for terminating "SP" leads of outgoing trunk circuits 1-12, for two positions. (See Note D)

List 4 - Assembly and equipment required in addition to list 1 for one terminal strip per ED-90758-01, Fig. H for terminating "SP" leads of outgoing trunk circuits 13-24, for two positions. (See Note D)

Notes

A. The wiring for this unit shall be 22 DSCL except for common battery and ground leads.

B. The (PC) keys, relays and registers associated with the operator's telephone and trunk circuit will be mounted in the traffic register cabinet.

C. The (T) condenser will consist of the two halves of the condenser strapped in parallel.

D. Terminal strips (Lists 3 & 4) are provided on this unit for terminating the "SP" leads associated with the outgoing trunk circuits which are brought from the key panel in the position cable. From the position unit, these leads will be run in switchboard cable to the cross-connecting rack as shown on the cross-connection diagram.

J95401M (AT&TCo Std.) - Allotter Alarm Unit

Equipment - ED-90404-01
Local Cable - ED-90757-03 (See Note A)

List 1 - Framework, assembly, wiring, and equipment for a unit for one set of allotter alarm circuits.

	Wire	Equip	See Note
Framework ED-90782-01, Fig. 1	-	1	
Allotter Alarm Ckt. SD-90009-01 (Except keys, lamps, and message registers)	1	1	B&C

Notes

A. The ground supply for this unit shall be run in network form as covered in Note A under unit J95401F. This does not include generator ground, which is run separately as indicated on the circuit drawing.

B. The wiring for the alarm equipment per Figs. A, B & C will be furnished as specified for the local office equipment and located as miscellaneous equipment.

C. Message registers, keys and lamps shown on this circuit are mounted on allotter unit J95401E.

J95401N (AT&TCo Std.) - Start Circuit Applique

Equipment - ED-90467-01
Local Cable - ED-90468-01 (See Note A)

List 1 - Framework, assembly, wiring, and equipment required in addition to the regular Start Circuit Unit J95401F for use with a No. 3 Information Desk having incoming trunks arranged for preference service.

	Wire	Equip	See Note
Framework ED-90782-01, Fig. 1	-	1	
Start Ckt. SD-90006-01, Fig. 3	2	2	A
Start Ckt. SD-90006-01, Figs. 4, and 4A, 4B or 4C	1	1	A

Note

A. This applique unit is mounted immediately below the regular start unit. The local cable for this applique has an arm extending to the start unit above, containing the leads to the keys, lamp, and start unit terminal strip. Terminal strips are provided on this applique unit

for termination of the leads which are required only for this additional equipment.

J95401T (AT&TCo Std.) - Sequence Storing Unit

Equipment - ED-90676-01
Local Cable - ED-90301-01

List 1 - Framework, assembly, wiring, and common equipment for a unit of 10 sequence storing circuits.

	Wire	Equip	See Note
Framework ED-90395-01	-	1	
Sequence Storing Ckt. SD-90004-01	10	10	A

Note

A. One (SB) lamp per circuit is mounted on this unit. The (EM) key and the other (SB) lamp per circuit are located in the lamp signal cabinet. The ground for the (EM) keys is brought from terminal 19 for the first circuit on the associated unit terminal strip and multipled at the keys.

J95401U (AT&TCo Std.) - Outgoing Trunk Unit

Equipment - ED-90698-01
Local Cable - ED-90307-01 (See Note A)

List 1 - Framework, assembly, wiring, and common equipment for a unit of 10 outgoing trunk circuits.

	Wire	Equip	See Note
Framework ED-90395-02	-	1	
Outgoing Trunk Ckt. SD-90011-01, Fig. 2	10	0	A

List 2 - Assembly and equipment required in addition to list 1 for one outgoing trunk circuit per SD-90011-01, Fig. 2.

Note

A. The outgoing trunk unit is divided into four sub-groups, circuits 1, 2 & 3 in the first, 4 and 5 in the second, 6, 7 & 8 in the third and 9 & 10 in the fourth. The 44 "SP" leads from each of these four groups are cabled to the cross-connecting rack. The selector bank wiring for this unit includes a set of 44 "T" & "R" leads to bank 10, multipled throughout all 10 circuits on the unit, and one set of 44 "SP" leads to each of selector banks 10, 8, 5 & 3. The "SP" leads of all selectors in a group of outgoing trunks associated with one call circuit key are strapped together at the cross-connecting rack.

J95401V (AT&TCo Std.) - Incoming Trunk Unit Not Arranged for Preference Service

Equipment - ED-90809-01
Local Cable - ED-90299-01

List 1 - Framework, assembly, wiring, and common equipment for a unit of 10 local incoming trunks from manual, manual tandem, panel, panel tandem, step-by-step, or crossbar offices, or from other desks.

	Wire	Equip	See Note
Framework ED-90395-02	-	1	
Incoming Trunk Ckt. SD-90000-01, Figs. 1, A, C, D, E & G & "W" Wiring	10	0	A & B

List 2 - Assembly and equipment per SD-90000-01, Figs. 1, A & G required in addition to list 1 for one trunk incoming from local manual, local or tandem step-by-step offices, or from final multiple of local panel offices, or from other desks.

List 3 - Assembly and equipment per SD-90000-01, Figs. 1, C, & G required in addition to list 1 for one trunk incoming from manual tandem office.

List 4 - Assembly and equipment per SD-90000-01, Figs. 1, D & G required in addition to list 1 for one trunk incoming from panel tandem office.

List 5 - Assembly and equipment per SD-90000-01, Figs. 1, E & G required in addition to list 1 for one trunk incoming from district or office multiple of a local panel office.

Notes

A. This unit is wired universally for Figs. 1, A, C, D, E & G, with "W" wiring and the leads to Figs. A, C, D & E connected to the optional relays as required.

B. The (TL) lamp is located in the lamp signal cabinet.

J95401W (AT&TCo Std.) - Calls Waiting Signal Unit

Equipment - ED-91141-01
Local Cable - ED-90757-03 (See Note B)

List 1 - Framework, assembly, wiring, and equipment for one calls waiting signal unit.

	Wire	Equip	See Note
Framework ED-90782-01, Fig. 1	-	1	

	Wire	Equip	See Note
Calls Waiting Signal Ckt. SD-90408-01, Fig. 1	1	1	A

Notes

A. The (OFL) register shown on the calls waiting signal circuit is mounted in the traffic register cabinet.

B. The grounds for this circuit shall be in network form as indicated in Note A of the Allotter Alarm unit J95401M.

J95401X (AT&TCo Std.) - Incoming Trunk Unit Arranged for Preference Service

Equipment - ED-90346-01
Local Cable - ED-90299-01

List 1 - Framework, assembly, wiring, and common equipment for a unit of 10 trunk circuits incoming from toll.

	Wire	Equip	See Note
Framework ED-90395-02	-	1	
Incoming Trunk Ckt. SD-96014-01, Fig. 1	10	0	A&B

List 2 - Assembly and equipment per SD-96014-01, Fig. 1 required in addition to list 1 for one incoming trunk from toll.

Notes

A. The (A) relays per Fig. 2 of SD-96014-01 are located on the relay rack as miscellaneous equipment.

B. The (TL) lamp is located in the signal lamp cabinet.

Miscellaneous Equipment

4.01 SD-90010-01 Supervisor's Telephone Circuit: One subscriber set is provided for each supervisor's division. This is located in the turret containing the first key panel of the division as shown on the desk equipment drawing. The tone of the gongs for the subsets are different for each division as follows: first division, 36A and 37A gongs, second division, 36B gongs, third division, 36D gongs and fourth division, 39A gongs. This arrangement of gongs will be repeated for each succeeding group of four divisions. The telephone equipment associated with this division is located on the relay rack as indicated on the typical relay rack equipment drawing ED-90176-01, Fig. B. The supervisor's call lamp is normally mounted on a 4H telegraph signal lamp standard as indicated on the assembly drawings for the 2-, 3- or 4-book arrangements. However, when the 4-book desk is provided with supplementary directory racks it is necessary to substitute lamp standard D-91320, which will raise the lamp so that it will not be obscured by the additional directories.

4.02 SD-90465-01 Interposition Trunk Circuit: The positions which are provided with files for special service are equipped with interposition trunks per SD-90465-01, as specified. The cable for the keys and lamps in the key panel is superimposed on the key panel cable. Relays associated with these trunks are mounted on the relay rack as miscellaneous equipment as shown on ED-90176-01, Fig. E. Lamps and relays are furnished only for equipped trunks.

4.03 SD-90408-01, Fig. 3 Night Alarm Circuit: The (NA) key for the night alarm circuit is located in the signal lamp cabinet. The subset for this circuit is located on the underside of the desk top of the first section as indicated on the equipment drawing.

4.04 SD-90475-01, Figs. 1 and 2 Make Busy Circuit for Trunks from Dial Offices: The (MB) key for the make busy circuits is located in the signal lamp cabinet. The resistances are furnished as required and located on the relay rack.

4.05 SD-90564-01 Monitoring and Observing Jacks: Monitoring equipment will be furnished as specified. This equipment consists of a monitoring jack per Fig. 1 for each operator's or supervisor's telephone circuit, an extension jack and associated condenser and repeating coil per Fig. 11, A set of telephone jacks per Fig. 13 and a patching cord per Fig. 8 per monitoring position. The monitoring and extension jacks and associated equipment are located in the monitoring position of a switchboard, or where a switchboard position is not available, this equipment is mounted in a jack cabinet per ED-90784-01 which is designed for either wall or table mounting. The telephone jacks are mounted at a desk position, adjacent to and toward the inside of the regular position telephone jacks as shown on desk assembly drawing.

4.06 SD-90005-01, Figs. 1, 2 or 3 Trunk Auxiliary Signal Circuit: The relays required when the second trunk path is provided are located on mounting plates as indicated on the relay rack equipment drawing. The "A" and "B" leads are wired to terminal strips on the relay rack cross-connecting rack and are there connected to trunk paths on the position units as specified.

4.07 SD-21450-01, SD-31477-01, SD-10463-01, Miscellaneous Alarm Circuits for Information Desk: Visual and audible alarms associated with the desk are connected to the alarm system of the office in which the desk is located and are arranged in the same general manner as other alarm equipment in the local office.

(a) In panel offices the alarms for the allotter and start circuits consist of a lamp on the floor alarm board associated with the d-c bell. The alarms for the trunk alarm and the toll start circuits each consist of a lamp on the floor alarm board associated with the a-c bell.

(b) In step-by-step offices, the alarms other than fuse alarms are located on the office alarm frame and are represented by a single pilot lamp associated with the d-c bell.

(c) In manual and toll offices, one lamp for each group of 120 local trunks plus the equipped number of trunks incoming from toll, is provided in the annunciator cabinet. The allotter and start circuit alarms operate the d-c bell, whereas the minor or a-c bell is operated by the trunk and toll start alarm circuits.

(d) The relay equipment for the fuse alarm and time alarm circuits, is located on the miscellaneous fuse board shown on the typical fuse board equipment drawing listed herein.

4.08 SD-90122-01, Fig. 1 Test Circuit Battery and Ground Terminals: Connecting blocks are shown on the relay rack equipment drawing for supplying test circuit battery and ground connections.

4.09 Interrupter for Time Alarm Circuits: A 160 or 165 type interrupter is required for the timing pulses for the various timing circuits when the desk is installed in a panel office. Where the necessary contacts are available on an existing interrupter they may be utilized for these circuits. Otherwise, it will be necessary to furnish an interrupter to be mounted on the miscellaneous interrupter frame. In step-by-step offices, pulsing relays and jacks are required in conjunction with the various synchronizing and timing circuits. These relays and jacks are part of the step-by-step office miscellaneous relay rack equipment.

4.10 Test Interrupter for Testing (T4) Relays: Test pulses for the (T4) relays in incoming trunks from manual offices are required at jacks on the relay rack in accordance with the specification listed herein. This equipment will be furnished as required. The jacks used with this circuit are shown on the typical relay rack equipment drawing.

4.11 A traffic register cabinet will be furnished for the equipment for one group of 120 local trunks plus any toll trunks required. The position peg count registers, relays, and keys shown on SD-90007-01, the (OVF) register shown on SD-90408-01 are mounted in this cabinet. The extra space in this cabinet shall be utilized for traffic registers for a second group of trunks when required.

4.12 A signal lamp cabinet is furnished, and located near the chief operator's desk as specified. It is used by the chief operator as a traffic guide and service observing indicator. This cabinet has capacity for 150 trunk lamps (TL) shown on SD-90000-01 and SD-96014-01, 20 sequence storing busy lamps (SB) and 20 emergency start keys shown on SD-90004-01, and one idle operator (IO) lamp shown on SD-90006-01. The make busy key (MB) for trunks from dial offices, SD-90478-01, Fig. 1 and the night alarm key (NA) SD-90408-01, Fig. 3 are also mounted in this cabinet.

4.13 Tone Circuit for OGT: The common equipment for furnishing the warning tone for the outgoing trunks per SD-90011-01, Fig. C, is mounted on the relay rack as shown on ED-90176-01, Fig. D.

4.14 SD-90011-01, Fig. 1 & 3 Outgoing Trunk Ckt. SD-90007-01, Fig. 1, 2, 3 & 8 Wiring Operator's Tel. & Trunk Ckt. SD-90010-01, Fig. 2 (Keys, lamps & jacks) Supervisor's Ckt. SD-90408-01, Fig. 2 Calls Waiting Signal Ckt. (CW-1 & CW-2): The wiring for these circuits from the apparatus on each key panel to terminal strips in the turret, to the position unit on the relay rack and to the telephone equipment shall consist of switchboard cables, the key panel end of which are butted and formed in the shop and the other by the installer. This form also contains such local wires as are necessary to interconnect apparatus on the key panel. Enough slack is left in each of the cables to permit locating the form at the key panel in the proper position. The arrangement of the cable in the desk is shown on ED-91301-01. The size of the cable to the position unit will vary depending on whether 12 or 24 outgoing trunk keys are required. Both ends of these cables are terminated by the installer.

5. GENERAL NOTES

5.01 The local incoming trunks are mounted as 10 trunk units and are arranged for cross-connection of the "ST", "TT" and "OP" leads at the cross-connecting rack, to the allotter and sequence storing groups as specified.

5.02 The 206 selectors on the various circuits require a battery supply which will isolate from talking circuits the electrical disturbances setup by their operation. For this purpose signal battery is used. Where signal battery is not provided in the office the feeder for the selectors shall be obtained from the battery fuse panel on the battery side of the talking battery filters.

5.03 Desk ground is supplied by a No. 6 gauge flameproof wire per KS-5482 from the

ground terminal on the miscellaneous fuse board through the lineup per Figure 12 of ES-223264, with 16 ESCB taps at each position per Figure 13 of ES-223264. The lead from the punching on the terminal strip to the ground punching on the key panel is run with the switchboard cable to the key panel.

5.04 Ferrules on the legs of the base supporting frameworks are provided with lugs for fastening the desk to the floor when specified.

5.05 The typical drawings for the signal lamp cabinet, traffic register cabinet, jack cabinet, cross-connecting rack, fuse panel and relay rack show an arrangement of equipment for the ultimate of a team of operators for a group of 120 local trunks.

5.06 The arrangement shown on the typical relay rack drawing for the fuse board, allotter, start, trunk alarm, allotter alarm and sequence storing units is desirable for maintenance reasons and should be followed on specific jobs insofar as applicable. Where conditions are such as to prevent rigid adherence to this layout, special attention should be given to the arrangement of these units so that they, together with as many local or tandem trunks as possible will be located in one lineup. The other equipment should then be distributed to the best advantage.

5.07 The operator's position circuits are so arranged that they may be cross-connected to any position equipment. It is recommended that the initial cabling provide for the ultimate requirements, particularly in the case of the (CW1) and (CW2) lamps, traffic registers, signal lamps and monitoring and observing jacks.

5.08 The cross-connecting rack which is provided with each desk may be connected to a second, or succeeding rack by means of tie cables which will permit interconnections between the relay rack equipment of one unit and the desk positions of another unit. The terminal strips for these tie cables are not shown on the equipment drawing, but they may be located in any convenient position.

5.09 The "ST", "TT" and "OP" leads of each local or tandem incoming trunk are cross-connected at the cross-connecting rack, so as to group these trunks as specified. The position trunk path leads "T", "R" and "TS" from the multiple banks of the incoming trunks are also arranged for cross-connection as specified. These leads, which are not directly assigned to positions, are multipled at the cross-connecting rack to terminals which are assigned to positions. The lowest numbered spare path is connected to the lowest numbered working path.

5.10 The outgoing trunk unit is divided into four subgroups, with circuits 1, 2 and 3 in the first, 4 and 5 in the second, 6, 7 and 8 in the third and 9 and 10 in the fourth. The 44 "SP" leads from each of these four groups per unit are cabled to the cross-connecting rack where they are cross-connected to form trunk groups as specified. Any trunk group may be sub-divided into two or more trunk subgroups, but each subgroup is considered as a separate group when cross-connecting these "SP" leads. The "ST" and "BY" leads for these trunk groups are also arranged for cross-connection. The selector bank wiring for these trunks consists of a set of 44 "T" and "R" leads which are multipled through all outgoing trunk units, and which are not arranged for cross-connection. The unequipped terminals shall be multipled to the equipped working terminals at the cross-connection in the same manner as for incoming trunks.

5.11 The "TO" and "TO1" leads from the start circuit unit are terminated on a terminal strip on the cross-connecting rack, where they may be connected to the "TO" leads from the position units. The terminals on the start circuit side are strapped in a group of 80 terminals (two sets from 40 positions). Leads "TO" and "TO1" are run from the first and last terminals in the group to the start unit which is associated with that desk group, or unit. When a trunk path of one unit is associated with a start circuit of another unit it will be necessary to run these cross-connections to the corresponding terminal strip of the other unit.

5.12 The "A" and "B" leads of the trunk auxiliary signal circuit are wired to terminal strips on the cross-connecting rack, where they are connected to the trunk paths on the position units as specified.

5.13 Miscellaneous terminal strips have been located on the typical relay rack equipment drawing and on the various desk equipment drawings. These terminal strips are used as bunching points for combining miscellaneous wires or a number of small cables into one single cable. The punching assignments for these miscellaneous leads are shown on ED-91324-01.

6. POWER PLANT EQUIPMENT

6.01 The desk circuits are fused at a fuse board adjacent to the relay bays. The power supply to this fuse board is obtained from the power plant in the office in which the desk is located.

REASONS FOR REISSUE

1. To rate "Manufacture Discontinued" all desk frameworks having the dull mahogany walnut 105T finish, in line with the trend away from the use of mahogany wal-

nut finish on woodwork which appears in terminal and operating rooms where other equipment is likely to have a medium mahogany finish such as the 105A or 104E.

2. To provide for the omission of the swinging terminal strip gate under the operator's turret and to remove the position terminal strips. In their place one terminal strip is furnished per two operator's key panels for terminating common leads which multiple through all positions. The other leads are cabled directly from the apparatus in the key panel to the position unit on the relay rack. This results in a more economical cabling arrangement.

3. To specify the use of the adjustable directory rack per ED-90915-01 in place of the racks with fixed location of partitions per ED-90173-01.

4. To specify, where possible, the use of large cables instead of several small cables from relay rack equipment.

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