NO. 5 CROSSBAR (4-WIRE)

ALSTON 600 RECORDING SYSTEM

SYSTEM DESCRIPTION AND ASSIGNMENT PROCEDURES

TRAFFIC MANAGEMENT SYSTEMS

Contents Page

1. GENERAL

1.01 This section provides:

- A general description of the Alston 600 Individual Circuit Data Recorder
- Procedures for assigning CCSA (common control switching arrangement) intermarker trunks and access lines for the State of California and other customers that may purchase this equipment.

1.02 It is issued to convert the Pacific Telephone Dial Facilities Management Practice (DFMP) Division H, Section 1e(3), Supplement A1, December 1977, to the 9-digit Bell System Practices (BSPs) series. All references to DFMP numbers have been changed to reflect the appropriate 9-digit BSP numbers.

1.03 A flowchart providing details on the State of California CCSA/ATSS (Automated Telecommunication Switching System) Network — Alston Data System is shown in Chart A.

2. OPERATION OF ALSTON 600 RECORDING SYSTEM

2.01 *General:* The Alston 600 Individual Circuit Data Recorder is a traffic-gathering system that collects simultaneous usage, peg count and overflow data. The fully configured system accommodates 40 to 16,000 individual input leads from trunks or circuits to be monitored. Peg count, overflow and usage data are collected and stored from each lead, then grouped within the system. (Detailed operation information is contained in Section 252-133-900PT.)

2.02 *Output Capacity:* The system provides for programming up to 2,000 output groups each containing any number of inputs. All inputs holding the same group number are totaled under that groups' output.

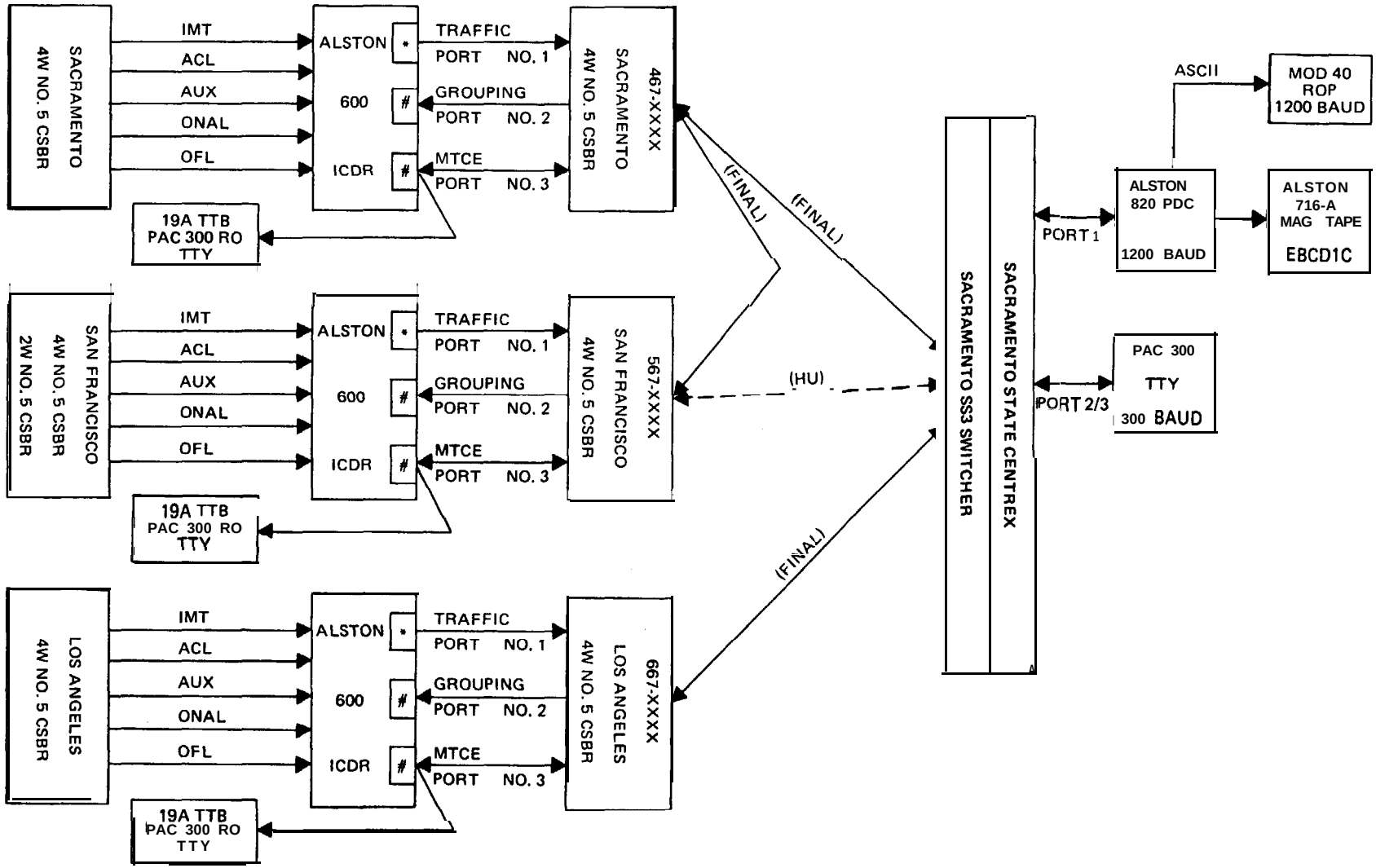
2.03 *Registers Associated With Input Groups:* Two registers are associated with each input group (one for peg count and usage, and one for overflow), thus a total of 2,000 registers may be accommodated. Peg count is determined by the number of times that a circuit was busy for a period between 20 and 320 milliseconds (ms). One-second usage data is obtained by a scanning technique that strobes the equipment once every second. Usage data collected is divided by 100 to obtain CCS (hundred call seconds).

2.04 *Input Capacity:* Each input board consists of 40 inputs. A fully equipped unit will serve 1,000 inputs. A maximum of 16 units (16,000 inputs)

Printed in U.S.A.

CHART A

STATE OF CALIFORNIA CCSA/ATSS NETWORK
ALSTON DATA SYSTEM



• = HIGH SPEEO DATA SET (1200 BAUD)
= LOW SPEED DATA SET 1300 BAUD)

may be provided per Alston 600 System. The input unit supplies a termination for trunks under study and supplies signals to the address memory unit to designate trunks in use. (See Fig. 1 for an illustration of the 16K System configuration.)

2.05 *Data Transmitted:* Data is transmitted over the DDD Network or a dedicated facility to readout devices located at the Customer's premise. The Alston 600 is physically located in the No. 5 crossbar central office.

2.06 *Cross-Connect Alston 600:* At the present time, there are three ways to cross-connect the Alston 600 to trunks, route relays and auxiliary circuits.

- Interface circuit PED-25030
- Cross-connect on main distributing frame (MDF)
- Cross-connect on TUR distributing frame (TUR-DF).

2.07 The assignment of the Alston 600 using the cross-connect methods listed in 2.06 are described in Parts 4, 5, and 6.

2.08 The Network Design Order (NDO) will describe the method of cross-connection used for the particular office.

2.09 *Alston 600-Ports:* The Alston 600 may be set to printout data automatically each hour, half hour or quarter hour. Data output and programming input is accomplished at three input/output ports.

(a) Port 1 is the primary dump for all accumulated stored data. This port may also send and receive grouping table data. The readout device associated with this port is located at the customer's premise.

(b) Port 2 is intended for grouping table management. It is used for loading the input grouping and is located at the customer's premise. The customer is responsible for grouping table management.

(c) Port 3 is used for maintenance study purposes. Individual lead totals, holding times and threshold data may be obtained from this port. This port may be provided at the customer's premise if requested.

3. RESPONSIBILITIES

3.01 The *Switching Administrator* will:

(a) Initially assign all CCSA intermachine trunks and access lines to the Alston 600 System.

(b) Continue to assign all connect, disconnect, changes, etc, as required per Trunk Orders (TOs) from the Area Trunk Assignment Bureau (ATAB) or Universal System Service Orders (USSOs) to the Alston 600 System.

(c) Maintain complete assignment records on Alston 600 System, as well as central office trunk assignments on peg count, overflow and usage.

(d) In a non-EADAS (Engineering and Administrative Data Acquisition System) environment, the local ADSM would be responsible for the Alston assignments and records.

(e) In an EADAS environment, the ADSM responsible for data at the EADAS Center would be responsible for the Alston assignments and records.

3.02 *Switching Maintenance Personnel* will:

(a) Observe installation of Alston 600 and maintain appropriate wiring diagrams.

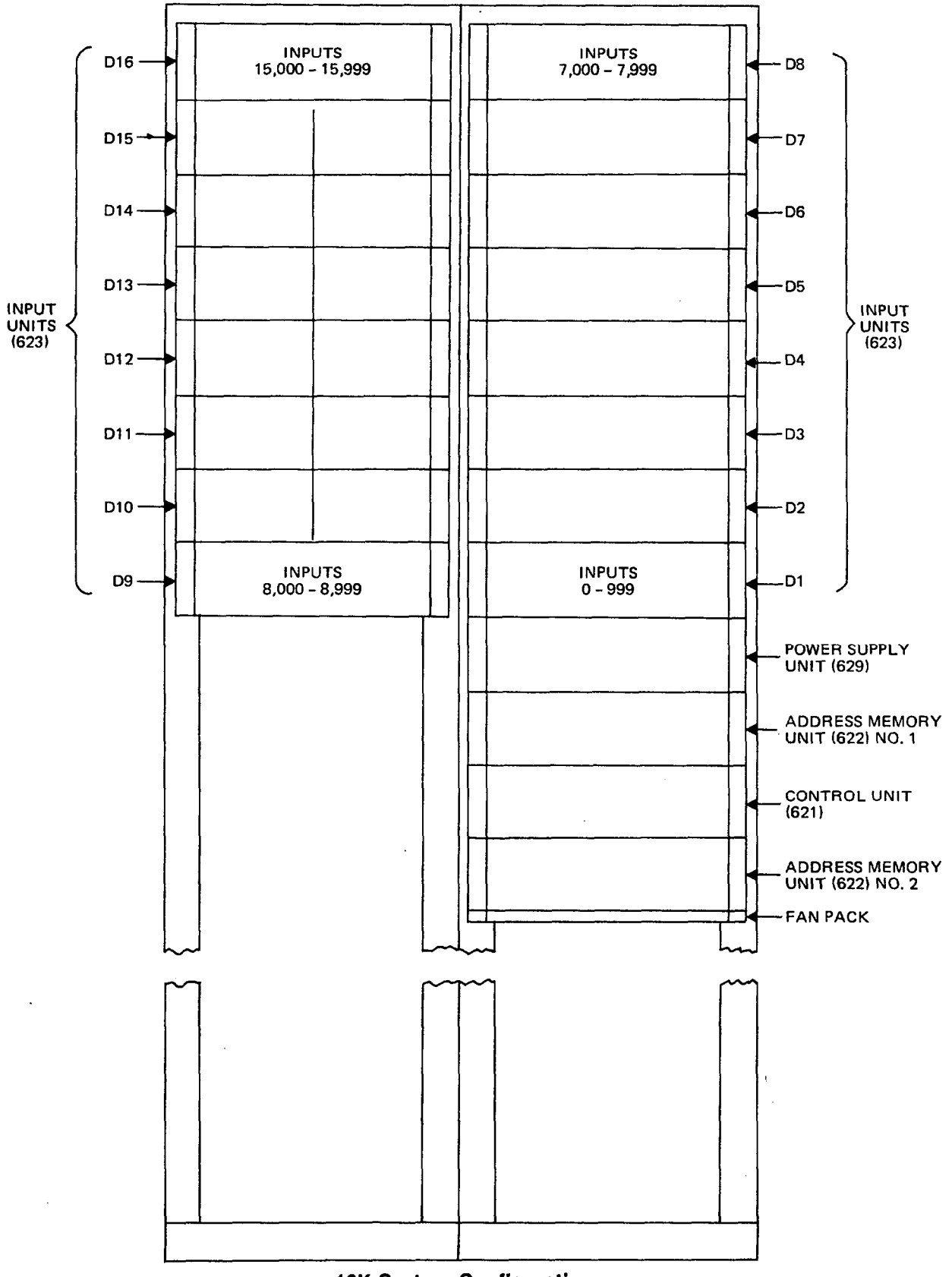
(b) Obtain instructions and/or training material for installation and maintenance of Alston 600 from Western Electric (WE) or CONRAC Corporation.

(c) Cross-connect assignment orders received from the Switching Administration.

(d) Maintain Alston 600 and associated equipment as required.

3.03 The *Switching Engineer* is responsible for:

(a) Originating NDO to install the Alston 600.



16K System Configuration
Fig. 1

(b) Coordinating material procurement with the supplier and coordinate storage and maintenance replacements.

(c) Numbering of each system and the placement of Alston 600 in the serving central office with associated equipment.

Example:

Alston Input No.	*Term No.*
D1	0-999
D2	1000-1999
D3	2000-2999

(d) Providing assignments where trunk leads appear on cross-connect terminals, etc.

3.04 *Network Operations* is responsible for the following:

(a) Trouble Reporting Procedures —

(1) The customer (State of California) will report all Alston troubles to the Sacramento Network Control Office (NCO).

(2) The Sacramento NCO will in turn refer Alston troubles to the Plant Control Office (PCO) and Serving Bureau (SVB) involved.

(3) The PCO/SVB will:

a. Test the message circuit(s) involved to assure that they are working.

b. If necessary, the PCO/SVB will refer the Alston Scanner trouble to the 4W No. 5 crossbar office for investigation and corrective activity.

(4) The Trouble Report will be returned along the same lines.

Note: In some cases Trouble Reports will not follow this reporting procedure (eg, trouble reports which have been escalated for various reasons). Additionally, failures that involve parts, chassis, etc, may not be made through the PCO/SVB or the NCO although feedback is certainly warranted.

(b) Maintains intermachine trunks and access lines.

(c) Schedules and completes trunk routines and daily maintenance on CCSA intermachine trunk and access lines.

(d) Interface with Switched Services Bureau (SSB), and Switching Offices.

(e) Inputs Trouble Ticket Data to Cleveland Data Processing Center.

3.05 *Marketing* will:

(a) Coordinate in-service date with customer.

(b) Obtain list of trunks to be assigned from customer and forward to the Switching Administrator. (List should include 1-way out, 2-way, etc.)

(c) Obtain Alston 600 input assignments from the Switching Administrator and forward to customer for grouping table.

(d) Issue USSO and/or M1031 as required to all departments.

(e) Normal order routine to connect, disconnect or change equipment. These changes must be coordinated with the Switching Administrator, Network Switching Engineer, ATAB and other departments as required.

3.06 *Business Services* will:

(a) Assign CCSA NNX telephone numbers, TGID, CG serial numbers, user codes, etc.

(b) Analyze data and refer problems to the Switching Administrator.

(c) Analyze data and make recommendation to customer on trunk quantities, network configurations, etc.

3.07 *The Customer (Alston Data System) is:*

(a) Responsible for loading input assignments and grouping table management.

(b) Responsible for analysis of data on intermachine CCSA trunks and access lines on the Alston 600 Data System.

4. ASSIGNMENT RECORD FOR THE CROSS-CONNECTION FIELD (PED-25030)

4.01 *Interface Circuit PED-25030:* Provides a cross-connection field for interfacing No. 5 crossbar trunk sleeves to the Alston 600 inputs units. This cross-connect field in its full configuration can store 2,880 trunks. Cables from the cross-connect field to the trunk sleeve leads and the PED circuit are furnished and installed by WE.

4.02 *NDO:* The Network Switching Engineer sends the NDO to the Switching Administrator.

4.03 *Assignment Procedures:*

1. Obtain wiring lists (see Exhibits 1A and 1B) via normal distribution from WE.

2. Enter all input numbers (eg, D1, D2, D3, etc) shown on the wiring list onto Form P 4301 (Fig. 2).

3. After all input numbers are posted on Form P 4301, divide the form into units of 40 (eg, 0-39, 40-79, 80-119, etc). Mark these units as UNIT 1, UNIT 2, UNIT 3, etc.

   Note: The customer will assign the input leads to the grouping table in order to read-out collected data as shown in Table D.

4. Assign each CCSA intermediate trunk group access line, and route relay on Form P 4301 as follows:

   a. *Peg Count and Usage* — One input per trunk number or access line.

      - *Two-Way Trunks and Access Lines (1-Way Out)* — One Input (Peg count and usage will be originating and through originating traffic.)

      - *Auxiliary Lines* — One Input (Peg count and usage will be originating and terminating traffic combined.)

      - *One-Way In Trunks* — May be assigned in originating office. If assigned in terminating office, assign one input.

   b. *Overflow* — One input per route relay. If more than one route relay is assigned per trunk group, each route relay may require an Alston input assignment. Each group would have to be reviewed individually.

      Note: Trunk groups do not have to be assigned in sequential order. Spare inputs should be reserved for future use when possible. The Traffic Trunk Forecast may be used as a guide for allowing spare trunk inputs.

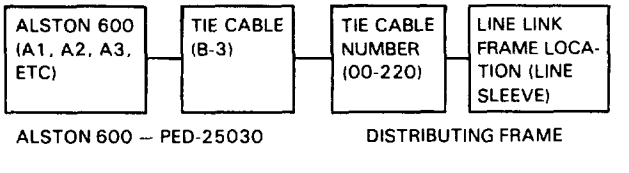
5. Form P 4301 will be used to cross-connect Alston 600 inputs to the actual trunk circuits on the relay rack. (See Fig. 3.)

Note: The NDO may show B1 and B2 as trunks and the type of trunk (ie, M78, K142, K110, A37, etc). B2 may be assigned to overflow or miscellaneous equipment. B4 may also be assigned to trunks and route relays. The arrangement will be assigned by the Switching Engineer and specified in the NDO.

4.04 *Spare Trunks and Route Relays:* These may be wired to the Alston 600 System even though they are not in use. These spare trunks are the type reserved for future use by CCSA customers. A WE job is required to add trunks or route relays to the Alston 600 System.

4.05 *Auxiliary Lines:* These lines can only be scanned when a cross-connect is made from the LS (line sleeve) of the assigned line link frame and the input to the Alston 600 System. Any change in line link frame equipment causes a change in auxiliary line records and the cross-connects to the Alston 600 System.

4.06 Assignments for auxiliary line circuits will be posted on Form P 4301 to include all necessary information. The Alston 600 inputs (A1, A2, etc) must be associated with the tie cable (B3), tie cable number (00-220, etc), the associated line link frame location, and CCSA NNX telephone number. Any tie cable may be assigned to any auxiliary line circuit.



4.07 *Alston 600 Assignment Forms (See Fig 4A and 4B):* After all assignments are completed on Form P 4301, a record of each trunk group, ID number, Alston 600 input and cross-connect must be posted on Form P 4301-2 (one trunk group per form).

4.08 On all Alston 600 assignments, the Switching Administrator will post circuit numbers, auxiliary lines overflow, and Alston 600 input number on Form P 4301-3 (see Fig. 5A and 5B). This is the only record of Alston 600 assignments provided by the Telephone Company via Marketing to the customer.

Marketing Account Manager
Sales and Service for The State of California
1925 "U" Street
Sacramento, CA 95818
Tel. No. (916) 452-8619

4.09 Ongoing activity will be posted on Forms P 4301, P 4301-2, and P 4301-3. Form P 4301 is the Switching Administrator's record and does not need to be reproduced. Form P 4301-2 will be reproduced for Switching Maintenance. Form P 4301-3 will be reproduced for the customer. (See Table A for assignment checklist.)

TABLE A

ASSIGNMENT CHECKLIST

FORM NO	NAME	INITIAL ASSIGN		UPDATE ASSIGN	
		MKTG	SW MTCE	MKTG	SW MTCE
P 4301	ALSTON 600 INPUTS DIAL ADMIN RECORD				
P 4301-2	ALSTON 600 CROSS-CONNECTS		X		X
P 4301-3	ALSTON 600 (CUSTOMER RECORD)	X		X	

5. ASSIGNMENT RECORD FOR CROSS-CONNECTION MAIN DISTRIBUTING FRAME

5.01 *Main Distributing Frame (MDF) Cross-Connect Field:* Provides a cross-connect field for interfacing No. 5 crossbar trunk sleeve leads, overflow and auxiliary line circuits to Alston 600 input units. Route relays (OF lead) are cabled from the completing markers to the horizontal side on the MDF. Each trunk (S lead) must have a relay rack, frame, circuit number and punching assigned to the Alston 600 unit. (See Fig. 6.)

5.02 *NDO:* The Switching Administrator receives the NDO from the Network Switching Engineer. Wiring lists will be provided by WE via normal distribution. Wiring lists which show relay rack assignments to MDF blocks will be drawing numbered TXXXX-M2-5269.

5.03 *Assignment Procedures:*

1. Obtain wiring lists via normal distribution from WE.

2. Enter all input numbers (eg, D1, D2, D3, etc) shown on the wiring list onto Form P 4301. (Fig. 7).

   Note: The NDO will specify the total number of scanner input leads in the Engineering and Installation Information Section (Exhibit 1C).

3. After all input numbers are posted on Form P 4301, divide the form into units of 40 (eg, 0-39, 40-79, 80-119, etc). Mark these units as UNIT 1, UNIT 2, UNIT 3, etc.

   Note: The customer will assign the input leads to the grouping table in order to read-out collected data as shown in Table D.

4. Assign each CCSA trunk group as follows:

   a. *Peg Count and Usage* — One input per trunk number and access line.

      - *Two-Way Trunks and Access Lines (1-Way Out)* — One Input (Peg count and usage will be originating and through originated traffic.)

ALSTON 600 INPUTS

P4301

ISSUE DATE _____
ISSUED BY _____ OFFICE SNFC CA 01 ZZZ PAGE 1 OF _____
DUE DATE _____ RESCHED. DATE _____ REASON INITIAL ASSIGNMENT OF
ORDER NO. _____ JOB NO. _____ ALSTON 600 - STATE OF CALIF.

	ACTION	TRUNK GROUP AND TRUNK NO.	D1 D2 D3 D4	INPUT NO.	A1 A2 A3 A4	TERM NO. V	TERM NO. H	B1 B2 B3 B4	TERM NO. V	TERM NO. H	RELAY RACK AISLE	FR	CKT	PCHG	TIE PAIR
UNIT 1			D1	00	A1	00	00								
				01			01								
				02			02								
				03			03								
				04			04								
				05			05								
				06			06								
				07			07								
				08			08								
				09			09								
				10			10								
				11			11								
				12			12								
				13			13								
				14		01	00								
				15			01								
				16			02								
				17			03								
				18			04								
				19			05								
				20			06								
				21			07								
				22			08								
				23			09								
				24			10								
				25			11								
				26			12								
				27			13								
				28		02	00								
				29			01								
				30			02								
				31			03								
				32			04								
				33			05								
				34			06								
				35			07								
				36			08								
				37			09								
				38			10								
				39			11								
UNIT 2				40			12								
				41			13								
				42		03	00								
				43			01								
				44			02								
				45			03								
				46			04								
				47			05								
				48			06								
				49			07								

C = CONNECT
D = DISCONNECT
R = REARRANGE

RETURN TO _____

COMPLETED BY _____

Alston 600 Inputs
Assignment Cross-Connect Field PED-25030
Fig. 2

ALSTON 600 INPUTS

P4301

ISSUE DATE 11-22-77
ISSUED BY WILMA
DUE DATE 12-15-77
ORDER NO.

OFFICE SNFC CA 01 ZZZ
RESCHED. DATE
JOB NO. 1958 E

PAGE 1 OF
REASON INITIAL ASSIGNMENT OF ALSTON 600 - STATE OF CALIF.

	ACTION	TRUNK GROUP AND TRUNK NO.	D1 D2 D3 D4	INPUT NO.		A1 A2 A3 A4	TERM NO. V	TERM NO. H	B1 B2 B3 B4	TERM NO. V	TERM NO. H	RELAY RACK AISLE	FR	CKT	PCHG	TIE PAIR
UNIT 7	C	LSAN CA 07 ZZZ 3GP2000-400	D1	2	00	A1	14	04	B1	31	07	403	00	02		
		401			01			05		43	00		12	07		
		402			02			06		39	01		09	05		
		403			03			07		38	04		10	07		
		404			04			08		19	05		26	10		
		405			05			09		31	08		00	03		
		406			06			10		13	07		12	07		
		407			07			11		38	06		09	01		
		408			08			12		43	03		14	01		
		409			09		↓	13		14	02		14	02		
		410			10		15	00		22	08		01	05		
		411			11			01		24	01		03	04		
		412			12			02		31	08		00	03		
		413			13			03		43	01		12	08		
	↓	414			14			04	↓	39	02	↓	09	06		
					15			05								
					16			06								
					17			07								
					18			08								
	C	MTRY CA 01 37A 3GX2000-130			19			09	B1	34	08	403	06	00		
		131			20			10		00	03	402	01	03		
		132			21			11		30	04	403	25	05		
		133			22			12		35	02	403	06	03		
		134			23		↓	13		05	03	402	09	00		
		135			24		16	00		50	02	418A	05	08		
		136			25			01		04	04	402	07	04		
		137			26			02		17	03	402	18	06		
		138			27			03		48	02	418A	03	02		
		139			28			04		35	04	403	06	05		
	↓	140			29			05	↓	00	01	402	01	01		
					30			06								
					31			07								
					32			08								
	C	AUX LINES 567-0210 208-02-94			33			09	B3	25	06					15
		567-0257 206-02-84			34			10		25	07					16
		567-0310 207-01-70			35			11		25	08					17
		567-0153 215-00-10			36			12		26	00					18
		567-0340 207-03-53			37		↓	13		26	01					19
		567-0250 205-01-03			38		17	00		26	02					20
		567-0251 207-03-43			39			01		26	03					21
		567-0494 208-00-92			40			02		26	04					22
		567-0187 206-01-31			41			03		26	05					23
		567-0490 215-00-74			42			04		26	06					24
	↓	567-0491 212-01-70			43			05	↓	26	07					25
					44			06								
UNIT 8					45			07								
	C	MTRY CA 01 37A RR 113			46			08	B3	12	03					
					47			09								
	C	LSAN CA 07 ZZZ - RR 41			48			10	B3	13	04					
	↓	RR 68	↓		49	↓	↓	11	↓	13	05					

C = CONNECT
D = DISCONNECT
R = REARRANGE

RETURN TO

COMPLETED BY

Fig. 3

ALSTON 600 – CROSS-CONNECTS TO CENTRAL OFFICE EQUIPMENT P4301-2

TRUNK GROUP NAME SNFC CA 01ZZZ (LOCATION "A") LSAN CA 07ZZZ (LOCATION "Z") ISSUE 1

ID NO. T6155-000 COORDINATE WITH 1985 E JOB PAGE 3 OF 20

DUE DATE 12-15-77

ACT	CIRCUIT & TRUNK NUMBER	ALSTON INPUT NO.	ALSTON TERM NO.	R. RACK AISLE	~~LLF~~ FR	~~VG~~ CKT	~~HG F~~ PCHG	TIE PR	VERT	TS BLK	TS ROW	TS PCHG
C	3GP 2000-400	A1-14-04	B1-3107	403	00	02						
	401	05	43-00		12	07						
	402	06	39-01		09	05						
	403	07	38-04		10	07						
	404	08	19-05		26	10						
	405	09	31-08		00	03						
	406	10	13-07		12	07						
	407	11	38-06		09	01						
	408	12	43-03		14	01						
	409	↓13	14-02		14	02						
	410	15-00	22-08		01	05						
	411	01	24-01		03	04						
	412	02	31-08		00	03						
	413	03	43-01		12	08						
	↓414	↓04	↓39-02	↓	09	06						
	OVERFLOW RR 41	A1-17-10	B3-13-04									
	↓RR68	A1-17-11	B3-13-05									

PREPARED BY: WILMA GILL TELEPHONE NUMBER 415-542-7000

Alston 600
Cross-Connects to Central Office Equipment
Fig. 4A

ALSTON 600 – CROSS-CONNECTS TO CENTRAL OFFICE EQUIPMENT P4301-2

TRUNK GROUP NAME AUX LINES ISSUE 1

LOCATION "A" LOCATION "Z"

ID NO. — COORDINATE WITH 1985 E JOB PAGE 4 OF 20

DUE DATE 12-15-77

ACT	CIRCUIT & TRUNK NUMBER	ALSTON INPUT NO.	ALSTON TERM NO.	~~R. RACK AISLE~~	LLF ~~FR~~	VG ~~CKT~~	HG-F PCHG	TIE PR	VERT	TS BLK	TS ROW	TS PCHG
C	AUX LINES 567-0210	A1-16-09	B3-25-06		208	02	9-4	15				
	567-0257	10	07		206	02	8-4	16				
	567-0310	11	08		207	01	7-0	17				
	567-0153	12	26-00		215	00	1-0	18				
	567-0340	13	01		207	03	5-3	19				
	567-0250	A1-17-00	02		205	01	0-3	20				
	567-0251	01	03		207	03	4-3	21				
	567-0494	02	04		208	00	9-2	22				
	567-0187	03	05		206	01	3-1	23				
	567-0490	04	06		215	00	7-4	24				
	567-0491	05	07		212	01	7-0	25				

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Fig. 4B

ALSTON 600 — TRUNK SUMMARY

P4301-3

ISSUE 1
PAGE 3 OF 20

TRUNK GROUP NAME SNFC CA 01 ZZZ (LOCATION "A") LSAN CA 07 ZZZ (LOCATION "Z")

CIRCUIT GROUP NUMBER ZZ 712-032

ORDER NO. _____

ACTION*	CIRCUIT NUMBER	ALSTON 600 INPUT NUMBER	REMARKS
C	3 GP 2000- 400	D1- 200	
↓	401	201	
↓	402	202	
↓	403	203	
↓	404	204	
↓	405	205	
↓	406	206	
↓	407	207	
↓	408	208	
↓	409	209	
↓	410	210	
↓	411	211	
↓	412	212	
↓	413	213	
↓	414	214	
C	OVERFLOW - RR 41	D1 - 248	
↓	↓ RR 68	↓ 249	

* C = CONNECT D = DISCONNECT R = REARRANGE

PREPARED BY: WILMA GILL TELEPHONE NUMBER 415-542-7000

Alston 600 — Trunk Summary
Fig. 5A

ALSTON 600 – TRUNK SUMMARY

P4301-3

ISSUE 1
PAGE 4 OF 20

TRUNK GROUP NAME SNFC CA 01 ZZZ (LOCATION "A") SNFC 04 56G (LOCATION "Z")

CIRCUIT GROUP NUMBER AUXILIARY LINES

ORDER NO.

ACTION*	~~CIRCUIT NUMBER~~ AUX LINES	ALSTON 600 INPUT NUMBER	REMARKS
C	567 - 0210	D1 - 233	
↓	0257	234	
↓	0310	235	
↓	0153	236	
↓	0340	237	
↓	0250	238	
↓	0251	239	
↓	0494	240	
↓	0187	241	
↓	0490	242	
↓	0491	243	

* C = CONNECT D = DISCONNECT R = REARRANGE

PREPARED BY: WILMA GILL TELEPHONE NUMBER 415-542-7000

Fig. 5B

- *Auxiliary Lines* — One input (One input for originating and terminating traffic.)

- *One-Way In Trunks* — May be assigned in originating office. If assigned in the terminating office, assign one input.

b. *Overflow* — One input per route relay. If more than one route relay is assigned per trunk group, each route relay may need an Alston input assignment. Each group would need to be reviewed individually.

Note: Trunk groups and access lines do not have to be assigned in sequential order. Spare inputs should be reserved for future use if at all possible. The Traffic Trunk Forecast may be used as a guide for allowing spare trunk inputs.

5. Form P 4301 will be used to cross-connect Alston 600 inputs to the actual trunk circuits on the relay rack. Each input (0-2999) will be associated with a relay rack, frame, circuit number, and punching. The route relays will be associated with an RR OF LEAD numbered the same as the route relay.

5.04 *Spare Trunks and Route Relays:* These may be wired to the Alston 600 System even though they are not in use. These spare trunks are the type reserved for future use by CCSA customers. A WE job is required to add trunks or route relays to the Alston 600 System.

5.05 *Auxiliary Lines:* These lines can only be scanned when a cross-connect is made from the LS (line sleeve) of the assigned line link frame and the input to the Alston 600 System. Any change in line link equipment or assignments causes a change in auxiliary line records and the input to the Alston 600 System. Each auxiliary line circuit has a line link frame location and a CCSA NNX telephone number which must be assigned to the Alston 600 input number on Forms P 4301 and P 4301-2.

5.06 *Alston 600 Assignment Forms (see Fig. 8A and 8B):* After all the assignments are completed on Form P 4301, a record of each trunk group, ID number, Alston 600 input and cross-connect must be posted on Form P 4301-2, one trunk group per form.

5.07 On all Alston 600 Assignments, the Switching Administrator will post circuit numbers, auxiliary lines, overflow, and Alston 600 input number on Form P 4301-3 (see Fig. 9A and 9B). This is the only record of Alston 600 assignments provided by the Telephone Company via Marketing to the customer. (Refer to 4.08 for address of Marketing Account Manager.)

5.08 Ongoing activity will be posted on Forms P 4301, P 4301-2, and P 4301-3. Form P 4301 is the Switching Administrators record and does not need to be reproduced. Form P 4301-2 will be reproduced for Switching Maintenance. Form P 4301-3 will be reproduced for the customer. (See Table B for assignment checklist.)

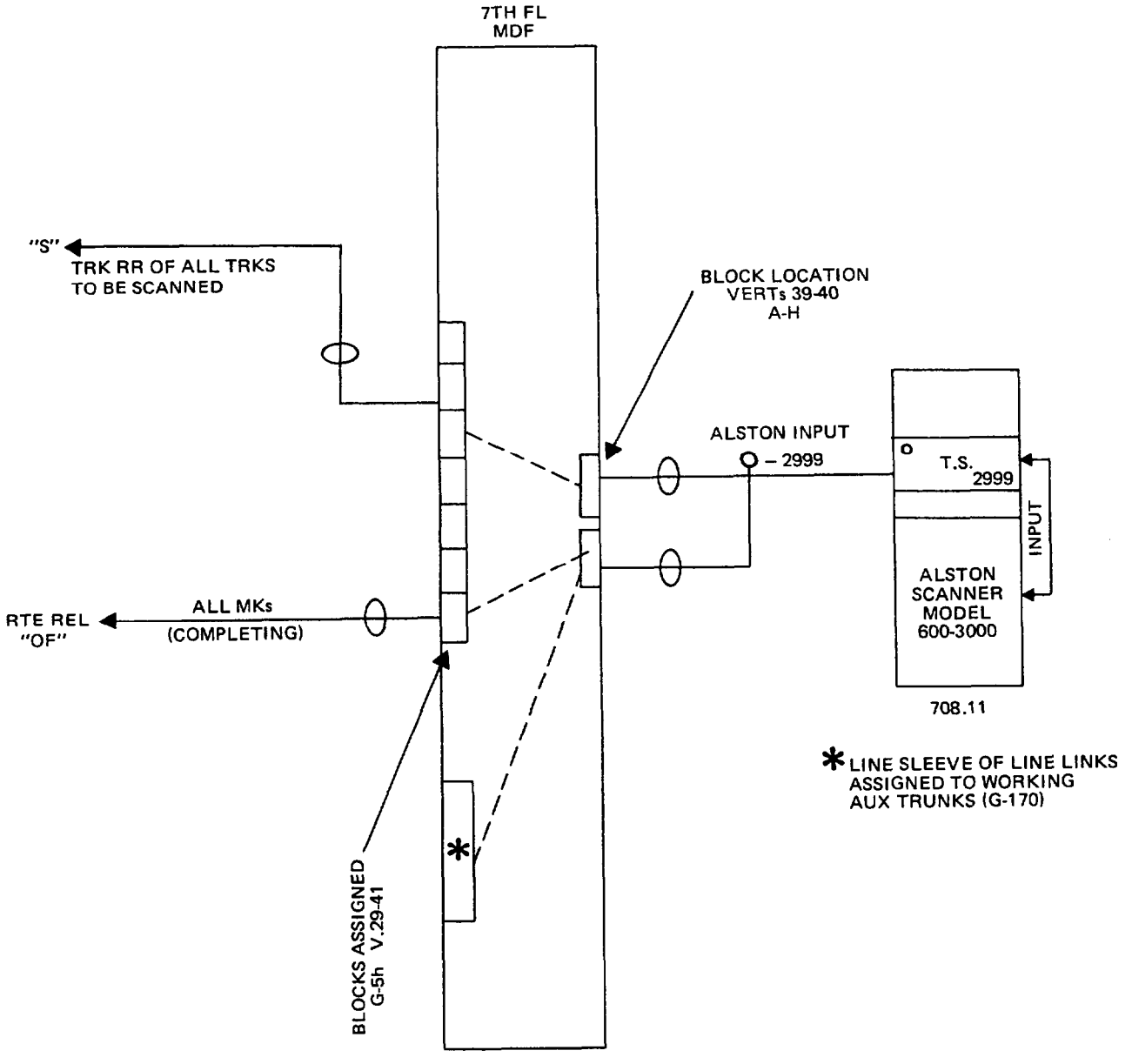
TABLE B

ASSIGNMENT CHECKLIST

FORM NO	NAME	INITIAL ASSIGN		UPDATE ASSIGN	
		MKTG	SW MTCE	MKTG	SW MTCE
P 4301	CROSS-CONNECTS TO ALSTON 600 INPUTS DIAL ADMIN RECORD				
P 4301-2	ALSTON 600 CROSS-CONNECTS (BY TRUNK GROUP)		X		X
P 4301-3	ALSTON 600 (CUSTOMER RECORD)	X		X	

6. ASSIGNMENT RECORD FOR CROSS-CONNECTION — TURDF

6.01 *TURDF Cross-Connect Field:* TURDF provides a cross-connect field for interfacing



MDF Layout
Fig. 6

ALSTON 600 INPUTS

P4301

ISSUE DATE 11-22-77
ISSUED BY B. HUNT OFFICE SCRM CA 01 ZZZ PAGE 1 OF 25
DUE DATE 12-15-77 RESCHED. DATE REASON
ORDER NO. JOB NO. 287 B

	ACTION	TRUNK GROUP AND TRUNK NO.	D1 D2 D3 D4	INPUT NO.	A1 A2 A3 A4	TERM NO. V	TERM NO. H	B1 B2 B3 B4	TERM NO. V	TERM NO. H	RELAY RACK AISLE	FR	CKT	PCHG	TIE PAIR
UNIT 1	C	CRCY NV 01 56C 3GP1000-400	D1	00							837	10	02	938	
		401		01							837	18	03	967	
		402		02							837	03	00	1018	
		403		03							707	04	04	446	
		404		04							702	07	05	396	
		405		05							707	10	00	466	
		406		06							708	12	00	784	
		407		07							632	30	00	1343	
		408		08							632	12	05	1258	
		409		09							837	03	04	1022	
	↓	↓ 410	↓	10							707	32	01	559	
				11											
				12											
				13											
	C	CHIC CA CS 560 3GP1000 - 764	D1	14							708	18	06	814	
		765		15							706	33	18	286	
		766		16							707	29	09	702	
		767		17							708	00	06	742	
		768		18							706	20	00	081	
		769		19							707	07	08	175	
		770		20							707	22	01	519	
		771		21							707	07	05	604	
		772		22							706	29	07	266	
		773		23							707	22	05	523	
		3GP1000 78		24							837	17	07	1074	
		79		25							707	29	11	704	
		80		26							706	18	10	079	
		81		27							706	07	09	176	
		82		28							708	04	06	758	
	↓	↓ 83	↓	29							708	20	07	823	
				30											
				31											
				32											
				33											
	C	AUX LINES-467-1021 01-02-20	D1	34											
		1022 02-02-20		35											
		1023 03-02-20		36											
		1024 04-02-20		37											
		1025 05-02-20		38											
		1026 06-02-21		39											
UNIT 2		1027 07-02-20		40											
		1028 08-02-20		41											
		1029 09-02-05		42											
	↓	1030 09-05-20	↓	43											
				44											
				45											
	C	CRCY NV 01 56C - RR 62	D1	46											
				47											
	C	CHIC CA CS 560 - RR 12	D1	48											
	C	↓ 158	↓	49											

C = CONNECT
D = DISCONNECT
R = REARRANGE

RETURN TO
COMPLETED BY

Fig. 7

ALSTON 600 – CROSS-CONNECTS TO CENTRAL OFFICE EQUIPMENT P4301-2

TRUNK GROUP NAME SCRM CA 01 ZZZ (LOCATION "A") CRCY NV 01 56C (LOCATION "Z") ISSUE 1

ID NO. T6000-001 COORDINATE WITH 287B JOB PAGE 1 OF 25

DUE DATE 12-15-77

ACT	CIRCUIT & TRUNK NUMBER	ALSTON INPUT NO.	ALSTON TERM NO.	~~R. RACK~~ AISLE	~~LLF~~ FR	~~VC~~ CKT	~~HC E~~ PCHG	TIE PR	VERT	TS BLK	TS ROW	TS PCHG
C	3GP 1000-400	D1-00		837	10	02	938					
↓	401	01		837	18	03	967					
	402	02		837	03	00	1018					
	403	03		707	04	04	446					
	404	04		702	07	05	396					
	405	05		707	10	00	466					
	406	06		708	12	00	784					
	407	07		632	30	00	1343					
	408	08		632	12	05	1258					
	409	09		837	03	04	1022					
	↓ 410	10		707	32	01	559					
↓	OVERFLOW-RR62	↓ 46										

PREPARED BY: B. HUNT TELEPHONE NUMBER 916-486-0001

Fig. 8A

ALSTON 600 – TRUNK SUMMARY

P4301-3

ISSUE 1
PAGE 1 OF 25

TRUNK GROUP NAME SCRM CA 01 ZZZ (LOCATION "A") CRCY NV 01 56C (LOCATION "Z")

CIRCUIT GROUP NUMBER T6000 - 001

ORDER NO. _____

ACTION*	CIRCUIT NUMBER	ALSTON 600 INPUT NUMBER	REMARKS
C	3 GP 1000- 400	D1 - 00	
↓	401	01	
↓	402	02	
↓	403	03	
↓	404	04	
↓	405	05	
↓	406	06	
↓	407	07	
↓	408	08	
↓	409	09	
↓	↓ 410	↓ 10	

* C = CONNECT D = DISCONNECT R = REARRANGE

PREPARED BY: B. HUNT TELEPHONE NUMBER 916- 486-0001

Fig. 8B

ALSTON 600 – TRUNK SUMMARY

P4301-3

ISSUE 1
PAGE 2 OF 25

TRUNK GROUP NAME SCRM CA 01 ZZZ
LOCATION "A" LOCATION "Z"
CIRCUIT GROUP NUMBER AUXILIARY LINES

ORDER NO.

ACTION*	~~CIRCUIT NUMBER~~ AUX LINES	ALSTON 600 INPUT NUMBER	REMARKS
C	467-1021	D1-34	
↓	1022	35	
↓	1023	36	
↓	1024	37	
↓	1025	38	
↓	1026	39	
↓	1027	40	
↓	1028	41	
↓	1029	42	
↓	↓ 1030	↓ 43	

* C = CONNECT D = DISCONNECT R = REARRANGE

PREPARED BY: B. HUNT TELEPHONE NUMBER 916-482-0001

Fig. 9A

ALSTON 600 – CROSS-CONNECTS TO CENTRAL OFFICE EQUIPMENT P4301-2

TRUNK GROUP NAME SCRM CA 01 ZZZ (LOCATION "A") (LOCATION "Z") ISSUE 1

ID NO. AUXILIARY LINES COORDINATE WITH 287 B JOB PAGE 1 OF 25

DUE DATE 12-15-77

ACT	~~CIRCUIT & TRUNK NUMBER~~	ALSTON INPUT NO.	ALSTON TERM NO.	R. RACK AISLE	LLF ~~FR~~	VG ~~CKT~~	HG-F ~~PCHG~~	TIE PR	VERT	TS BLK	TS ROW	TS PCHG
C	467-1021	D1-34			01	02	20					
	1022	35			02	02	20					
	1023	36			03	02	20					
	1024	37			04	02	20					
	1025	38			05	02	20					
	1026	39			06	02	21					
	1027	40			07	02	20					
	1028	41			08	02	20					
	1029	42			09	02	05					
	1030	43			09	05	20					

PREPARED BY: B. HUNT TELEPHONE NUMBER 916-486-0001

Fig. 9B

No. 5 crossbar trunk sleeve leads, overflow and auxiliary lines to the Alston 600 input units. Route relays are cabled from the completing markers to the TURDF. Each trunk will be assigned an aisle, frame and circuit numbers on the TURDF. Cross-connects will be made from the vertical side of the TURDF to the TU2W lead of the trunk Link Frame for peg count and usage.

6.02 *NDO:* The Switching Administrator receives a NDO from the Network Switching Engineer. Wiring lists (TXXXX-M2-156) will be provided by WE via normal distribution.

6.03 *Assignment Procedures:*

1. Obtain wiring lists via normal distribution from WE.

2. Enter all input numbers (eg, D1, D2, D3, etc) shown on the NDO onto Form P 4301-1. The Number of Alston 600 inputs is assigned by the Switching Engineer. (See Exhibit 1D for Engineering Notes and Job Information.)

3. After all input numbers are posted on Form P 4301-1, divide the form into units of 40 (eg, 0-39, 40-79, 80-119, etc). Mark these units as UNIT 1, UNIT 2, UNIT 3, etc, as shown in Fig. 10.

   Note: The customer will assign the input leads to the grouping table in order to read-out collected data as shown in Table D.

4. Assign each CCSA trunk group, access line, and route relay on Form P 4301-1 as follows:

   a. *Peg Count and Usage* — One input per trunk number or access line.

      - *Two-Way Trunks and Access Lines (1-Way Out)* — One Input (Peg count and usage will be originating and through originating traffic.)

      - *Auxiliary Lines* — One Input (Peg count and usage will be originating and terminating traffic combined.)

      - *One-Way In Trunks* — May be assigned in originating office. If assigned in terminating office, assign one input.

   b. *Overflow* — One input per route relay. If more than one route relay is assigned per trunk group, each route relay may require an Alston input assignment. Each group would have to be reviewed individually.

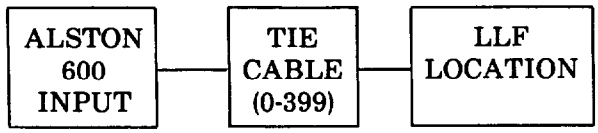
   Note: Trunk groups do not have to be assigned in sequential order. Spare inputs should be reserved for future use when possible. The Traffic Trunk Forecast may be used as a guide for allowing spare trunk inputs.

5. Form P 4301-1 will be used to cross-connect Alston 600 inputs to the actual trunk circuits on the aisle, frame, and circuit number which is wired to the TURDF. The route relays will be associated with an RR OF LEAD numbered the same as the route relay.

6.04 *Spare Trunks and Route Relays:* All spare trunks and route relays to be used for the CCSA customer (State of California) will be preassigned to the Alston 600 System. Any additional trunks or route relays that are needed will require a WE job.

6.05 *Auxiliary Lines:* These lines can only be scanned when a cross-connect is made from the LS (line sleeve) of the assigned line link frame and the input to the Alston 600 System. Any change in line link frame equipment or assignments causes a change in auxiliary line records and the input to the Alston 600 System.

6.06 Assignments for auxiliary line circuits will be posted on Form P 4301-1 to include all the necessary information. Alston 600 inputs must be associated with tie cable (0-399), line link frame location, and CCSA NNX telephone number. Any tie cable may be assigned to any auxiliary line circuit. Switching Maintenance personnel will provide tie cable assignments and return the form to the Switching Administrator upon completion of the cross-connect order.



6.07 *Alston 600 Assignment Forms:* After all assignments are completed on Form P 4301-1, a record of each trunk group, ID number, trunk number, Alston 600 input, and cross-connect must be posted on Form P 4301-2. One trunk group per form. (See Fig. 11A and 11B.)

6.08 On all Alston 600 assignments, the Switching Administrator will post circuit numbers, auxiliary lines, overflow, and Alston 600 input number on Form P 4301-3 (see Fig. 12A and 12B). This is the only record of Alston 600 assignments provided by the Telephone Company via Marketing. (Refer to 4.08 for the address of the Marketing Account Manager.)

6.09 Ongoing activity will be posted on Forms P4301-1, P 4301-2 and P 4301-3. Form P 4301-1 is the Switching Administrator's record and does not need to be reproduced. Form P 4301-2 is reproduced for Switching Maintenance personnel. Form P 4301-3 will be reproduced for the customer. (See Table C for assignment checklist.)

TABLE C

ASSIGNMENT CHECKLIST

FORM NO	NAME	INITIAL ASSIGN		UPDATE ASSIGN	
		MKTG	SW MTCE	MKTG	SW MTCE
P 4301-1	CROSS-CONNECTS TO ALSTON 600 INPUTS SWITCHING ADMIN RECORD				
P 4301-2	ALSTON 600 CROSS-CONNECTS (BY TRUNK GROUP)		X		X
P 4301-3	ALSTON 600 (CUSTOMER RECORD)	X		X	

ALSTON 600 INPUTS
TUR-DF

P4301-1

ISSUE DATE 11-22-77
ISSUED BY B. COLL
DUE DATE 12-15-77
ORDER NO.
OFFICE LSAN CA07 ZZZ
RESCHED. DATE
JOB NO. 250E
REASON INITIAL ASSIGNMENTS OF ALSTON 600 - STATE OF CALIF.
PAGE 1 OF 25

ACTION	TRUNK GROUP AND TRUNK NUMBER	D1 D2 D3 D4	INPUT NO.		AISLE	FR	CKT	VERT	TS BLK	TS ROW	TS PCH	NOTES
C	SCRM CA 01 ZZZ-ZZ 713 731-910	D1	1	00	310	08	05	12	B	5	6	
	911		1	01	310	29	10	12	D	36	5	
	912		1	02	307	50	00	11	A	31	1	
	913		1	03	311	01	00	13	A	19	1	
	914		1	04	310	01	01	13	A	19	2	
	915		1	05	311	02	02	13	A	19	3	
	916		1	06	311	27	03	13	B	43	4	
	917		1	07	311	27	04	13	B	43	5	
	918		1	08	311	27	05	13	B	43	6	
	919		1	09	311	29	00	13	B	41	1	
	920		1	10	311	51	05	13	B	19	6	
	921		1	11	311	51	06	13	B	18	1	
UNIT ↓	922	↓	1	12	311	51	04	13	B	19	5	
			1	13								
			1	14								
			1	15								
			1	16								
C	BKFD CA AB 560-ZZ 741000-1	D1	1	17	311	27	02	12	D	27	4	
	2		1	18		27	01	13	A	42	4	
	3		1	19		25	04	13	A	19	6	
	4		1	20		25	03	13	A	18	1	
	5		1	21		25	05	13	A	17	1	
	6		1	22		25	02	13	A	17	2	
	7		1	23		03	02	13	A	17	3	
	8		1	24		03	01	13	B	45	6	
	9		1	25		03	00	13	B	45	5	
	10		1	26		01	06	13	B	45	4	
	11		1	27		01	05	13	B	45	3	
	12		1	28		22	03	13	B	43	2	
↓	13	↓	1	29	310	39	03	13	B	43	3	
			1	30								
			1	31								
C	AUX LINES 667-2050-00-02-00	D1	1	32								0
	2051 00-05-00		1	33								1
	2052 00-06-00		1	34								2
	2053 01-02-00		1	35								3
	2054 01-05-00		1	36								4
	2055 01-06-00		1	37								5
	2056 02-02-00		1	38								6
	2057 02-05-00		1	39								7
	2058 02-06-00		1	40								8
	2059 03-02-00		1	41								9
UNIT ↓	2060 03-05-00	↓	1	42								10
			1	43								
			1	44								
C	BKFD CA AB 560-RR 125	D1	1	45								
↓	RR 162	↓	1	46								
			1	47								
C	SCRM CA 01 ZZZ-RR 184	D1	1	48								
			1	49								

C = CONNECT
D = DISCONNECT
R = REARRANGE

COMPLETED BY

RETURN TO

Fig. 10

ALSTON 600 – CROSS-CONNECTS TO CENTRAL OFFICE EQUIPMENT P4301-2

TRUNK GROUP NAME LSAN CA 07 ZZZ (LOCATION "A") SCRM CA 01 ZZZ (LOCATION "Z") ISSUE 1

ID NO. T6792 - 002 COORDINATE WITH 250 E JOB PAGE 1 OF 25

DUE DATE 12-15-77

ACT	CIRCUIT & TRUNK NUMBER	ALSTON INPUT NO.	ALSTON TERM NO.	R. RACK AISLE	~~LLF~~ FR	~~VG~~ CKT	~~HG F~~ PCHG	TIE PR	VERT	TS BLK	TS ROW	TS PCHG
C	ZZ 713731-910	D1 - 100		310	08	05			12	B	5	6
	911	101		310	29	10			12	D	36	5
	912	102		307	50	00			12	A	31	1
	913	103		311	01	00			11	A	19	1
	914	104		310	01	01			13	A	19	2
	915	105		311	02	02			13	A	19	3
	916	106		311	27	03			13	B	43	4
	917	107		311	27	04			13	B	43	5
	918	108		311	27	05			13	B	43	6
	919	109		311	29	00			13	B	41	1
	920	110		311	51	05			13	B	19	6
	921	111		311	51	06			13	B	18	1
	922	112		311	51	04			13	B	19	5
	OVERFLOW-RR184	D1 - 148										

PREPARED BY: B. COLL TELEPHONE NUMBER 213-639-0001

Fig. 11A

ALSTON 600 – CROSS-CONNECTS TO CENTRAL OFFICE EQUIPMENT P4301-2

TRUNK GROUP NAME LSAN CA 07 ZZZ (LOCATION "A") (LOCATION "Z") ISSUE 1

ID NO. AUXILIARY LINES COORDINATE WITH 250 E JOB PAGE 2 OF 25

DUE DATE 12-15-77

ACT	~~CIRCUIT & TRUNK NUMBER~~	ALSTON INPUT NO.	ALSTON TERM NO.	R. RACK AISLE	LLF ~~FR~~	VG ~~CKT~~	HG-F ~~PCHG~~	TIE PR	VERT	TS BLK	TS ROW	TS PCHG
C	667-2050	D1-132			00	02	00	0				
	2051	133			00	05	00	1				
	2052	134			00	06	00	2				
	2053	135			01	02	00	3				
	2054	136			01	05	00	4				
	2055	137			01	06	00	5				
	2056	138			02	02	00	6				
	2057	139			02	05	00	7				
	2058	140			02	06	00	8				
	2059	141			03	02	00	9				
↓	↓ 2060	↓ 142			03	05	00	10				

PREPARED BY: B. COLL TELEPHONE NUMBER 213-639-0001

Fig. 11B

ALSTON 600 – TRUNK SUMMARY

P4301-3

ISSUE 1
PAGE 1 OF 25

TRUNK GROUP NAME LSAN CA07 ZZZ (LOCATION "A") SCRM CA01 ZZZ (LOCATION "Z")

CIRCUIT GROUP NUMBER ZZ 713731

ORDER NO. _____

ACTION*	CIRCUIT NUMBER	ALSTON 600 INPUT NUMBER	REMARKS
C	ZZ 713731- 910	D1- 100	
↓	911	101	
	912	102	
	913	103	
	914	104	
	915	105	
	916	106	
	917	107	
	918	108	
	919	109	
	920	110	
	921	111	
↓	↓ 922	↓ 112	

* C = CONNECT D = DISCONNECT R = REARRANGE

PREPARED BY: B. COLL TELEPHONE NUMBER 213-639-0001

Fig. 12A

ALSTON 600 – TRUNK SUMMARY P4301-3

ISSUE 1
PAGE 2 OF 25

TRUNK GROUP NAME LSAN CA 07 ZZZ
LOCATION "A" LOCATION "Z"
CIRCUIT GROUP NUMBER AUXILIARY LINES
ORDER NO.

ACTION*	CIRCUIT NUMBER	ALSTON 600 INPUT NUMBER	REMARKS
C	667-2050	D1-132	
↓	2051	133	
	2052	134	
	2053	135	
	2054	136	
	2055	137	
	2056	138	
	2057	139	
	2058	140	
	2059	141	
↓	↓ 2060	↓ 142	

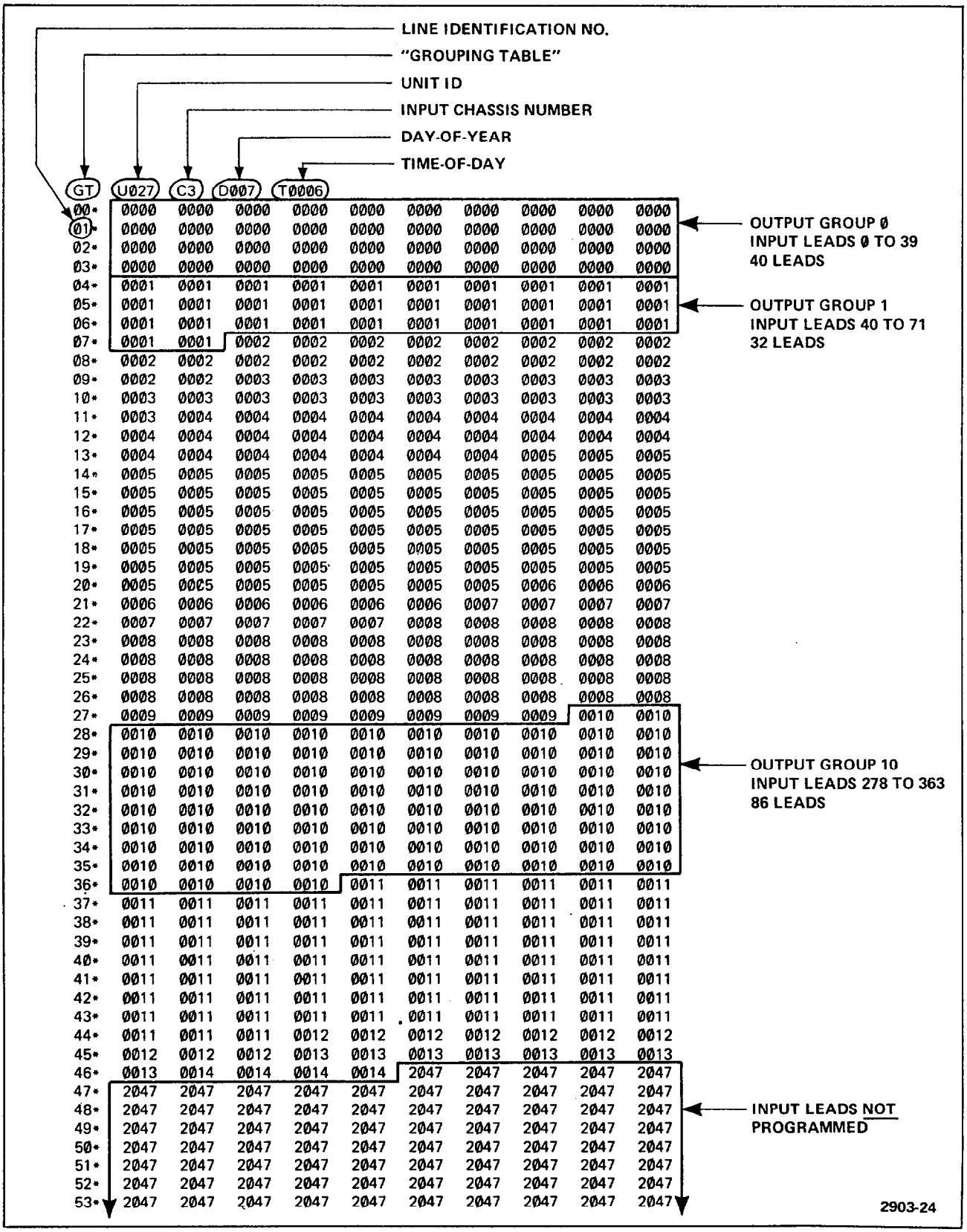
* C = CONNECT D = DISCONNECT R = REARRANGE

PREPARED BY: B. COLL TELEPHONE NUMBER 213-639-0001

Fig. 12B

TABLE D

SAMPLE GROUPING — PORT 2



CABLE TERMINATIONS

TABLE AA				
CONNECTOR NO. 1				A1 OR A2 OR A3
D1 OR D2 OR D3 INPUT NO.	ALSTON CABLE NO. 365252			WIRE TO TS
	CONN PIN NO.	COLOR		TERM NO.
				V M
0	A	W – BL		00 00
1	B	W – O		01
2	C	W – G		02
3	D	W – BR		03
4	E	W – S		04
5	F	R – BL		05
6	H	R – O		06
7	J	R – G		07
8	K	R – BR		08
9	L	R – S		09
10	P	BK – BL		10
11	R	BK – O		11
12	S	BK – G		12
13	T	BK – BR		13
14	U	BK – S		01 00
15	V	Y – BL		01
16	W	Y – O		02
17	X	Y – G		03
18	Y	Y – BR		04
19	Z	Y – S		05
20	1	BL – W		06
21	2	O – W		07
22	3	G – W		08
23	4	BR – W		09
24	5	S – W		10
25	6	BL – R		11
26	7	O – R		12
27	8	G – R		13
28	9	BR – R		02 00
29	10	S – R		01
30	11	BL – BK		02
31	12	O – BK		03
32	13	G – BK		04
33	14	BR – BK		05
34	15	S – BK		06
35	16	BL – Y		07
36	17	O – Y		08
37	18	G – Y		09
38	19	BR – Y		10
39	20	S – Y		11

TABLE AA				
CONNECTOR NO. 2				A1 OR A2 OR A3
D1 OR D2 OR D3 INPUT NO.	ALSTON CABLE NO. 365252			WIRE TO TS
	CONN PIN NO.	COLOR		TERM NO.
				V M
40	A	W – BL		02 12
41	B	W – O		13
42	C	W – G		03 00
43	D	W – BR		01
44	E	W – S		02
45	F	R – BL		03
46	H	R – O		04
47	J	R – G		05
48	K	R – BR		06
49	L	R – S		07
50	P	BK – BL		08
51	R	BK – O		09
52	S	BK – G		10
53	T	BK – BR		11
54	U	BK – S		12
55	V	Y – BL		13
56	W	Y – O		04 00
57	X	Y – G		01
58	Y	Y – BR		02
59	Z	Y – S		03
60	1	BL – W		04
61	2	O – W		05
62	3	G – W		06
63	4	BR – W		07
64	5	S – W		08
65	6	BL – R		09
66	7	O – R		10
67	8	G – R		11
68	9	BR – R		12
69	10	S – R		13
70	11	BL – BK		05 00
71	12	O – BK		01
72	13	G – BK		02
73	14	BR – BK		03
74	15	S – BK		04
75	16	BL – Y		05
76	17	O – Y		06
77	18	G – Y		07
78	19	BR – Y		08
79	20	S – Y		09

TABLE AA				
CONNECTOR NO. 3				A1 OR A2 OR A3
D1 OR D2 OR D3 INPUT NO.	ALSTON CABLE NO. 365252			WIRE TO TS
	CONN PIN NO.	COLOR		TERM NO.
				V M
80	A	W – BL		05 10
81	B	W – O		11
82	C	W – G		12
83	D	W – BR		13
84	E	W – S		06 00
85	F	R – BL		01
86	H	R – O		02
87	J	R – G		03
88	K	R – BR		04
89	L	R – S		05
90	P	BK – BL		06
91	R	BK – O		07
92	S	BK – G		08
93	T	BK – BR		09
94	U	BK – S		10
95	V	Y – BL		11
96	W	Y – O		12
97	X	Y – G		13
98	Y	Y – BR		07 00
99	Z	Y – S		01
100	1	BL – W		02
101	2	O – W		03
102	3	G – W		04
103	4	BR – W		05
104	5	S – W		06
105	6	BL – R		07
106	7	O – R		08
107	8	G – R		09
108	9	BR – R		10
109	10	S – R		11
110	11	BL – BK		12
111	12	O – BK		13
112	13	G – BK		08 00
113	14	BR – BK		01
114	15	S – BK		02
115	16	BL – Y		03
116	17	O – Y		04
117	18	G – Y		05
118	19	BR – Y		06
119	20	S – Y		07

TABLE AA				
CONNECTOR NO. 4				A1 OR A2 OR A3
D1 OR D2 OR D3 INPUT NO.	ALSTON CABLE NO. 365252			WIRE TO TS
	CONN PIN NO.	COLOR		TERM NO.
				V M
120	A	W – BL		08 08
121	B	W – O		09
122	C	W – G		10
123	D	W – BR		11
124	E	W – S		12
125	F	R – BL		13
126	H	R – O		09 00
127	J	R – G		01
128	K	R – BR		02
129	L	R – S		03
130	P	BK – BL		04
131	R	BK – O		05
132	S	BK – G		06
133	T	BK – BR		07
134	U	BK – S		08
135	V	Y – BL		09
136	W	Y – O		10
137	X	Y – G		11
138	Y	Y – BR		12
139	Z	Y – S		13
140	1	BL – W		10 00
141	2	O – W		01
142	3	G – W		02
143	4	BR – W		03
144	5	S – W		04
145	6	BL – R		05
146	7	O – R		06
147	8	G – R		07
148	9	BR – R		08
149	10	S – R		09
150	11	BL – BK		10
151	12	O – BK		11
152	13	G – BK		12
153	14	BR – BK		13
154	15	S – BK		11 00
155	16	BL – Y		01
156	17	O – Y		02
157	18	G – Y		03
158	19	BR – Y		04
159	20	S – Y		05

TABLE AA				
CONNECTOR NO. 5				A1 OR A2 OR A3
D1 OR D2 OR D3 INPUT NO.	ALSTON CABLE NO. 365252			WIRE TO TS
	CONN PIN NO.	COLOR		TERM NO.
				V M
160	A	W – BL		11 06
161	B	W – O		07
162	C	W – G		08
163	D	W – BR		09
164	E	W – S		10
165	F	R – BL		11
166	H	R – O		12
167	J	R – G		13
168	K	R – BR		12 00
169	L	R – S		01
170	P	BK – BL		02
171	R	BK – O		03
172	S	BK – G		04
173	T	BK – BR		05
174	U	BK – S		06
175	V	Y – BL		07
176	W	Y – O		08
177	X	Y – G		09
178	Y	Y – BR		10
179	Z	Y – S		11
180	1	BL – W		12
181	2	O – W		13
182	3	G – W		13 00
183	4	BR – W		01
184	5	S – W		02
185	6	BL – R		03
186	7	O – R		04
187	8	G – R		05
188	9	BR – R		06
189	10	S – R		07
190	11	BL – BK		08
191	12	O – BK		09
192	13	G – BK		10
193	14	BR – BK		11
194	15	S – BK		12
195	16	BL – Y		13
196	17	O – Y		14 00
197	18	G – Y		01
198	19	BR – Y		02
199	20	S – Y		03

TABLE AA				
CONNECTOR NO. 6				A1 OR A2 OR A3
D1 OR D2 OR D3 INPUT NO.	ALSTON CABLE NO. 365252			WIRE TO TS
	CONN PIN NO.	COLOR		TERM NO.
				V M
200	A	W – BL		14 04
201	B	W – O		05
202	C	W – G		06
203	D	W – BR		07
204	E	W – S		08
205	F	R – BL		09
206	H	R – O		10
207	J	R – G		11
208	K	R – BR		12
209	L	R – S		13
210	P	BK – BL		15 00
211	R	BK – O		01
212	S	BK – G		02
213	T	BK – BR		03
214	U	BK – S		04
215	V	Y – BL		05
216	W	Y – O		06
217	X	Y – G		07
218	Y	Y – BR		08
219	Z	Y – S		09
220	1	BL – W		10
221	2	O – W		11
222	3	G – W		12
223	4	BR – W		13
224	5	S – W		16 00
225	6	BL – R		01
226	7	O – R		02
227	8	G – R		03
228	9	BR – R		04
229	10	S – R		05
230	11	BL – BK		06
231	12	O – BK		07
232	13	G – BK		08
233	14	BR – BK		09
234	15	S – BK		10
235	16	BL – Y		11
236	17	O – Y		12
237	18	G – Y		13
238	19	BR – Y		17 00
239	20	S – Y		01

A

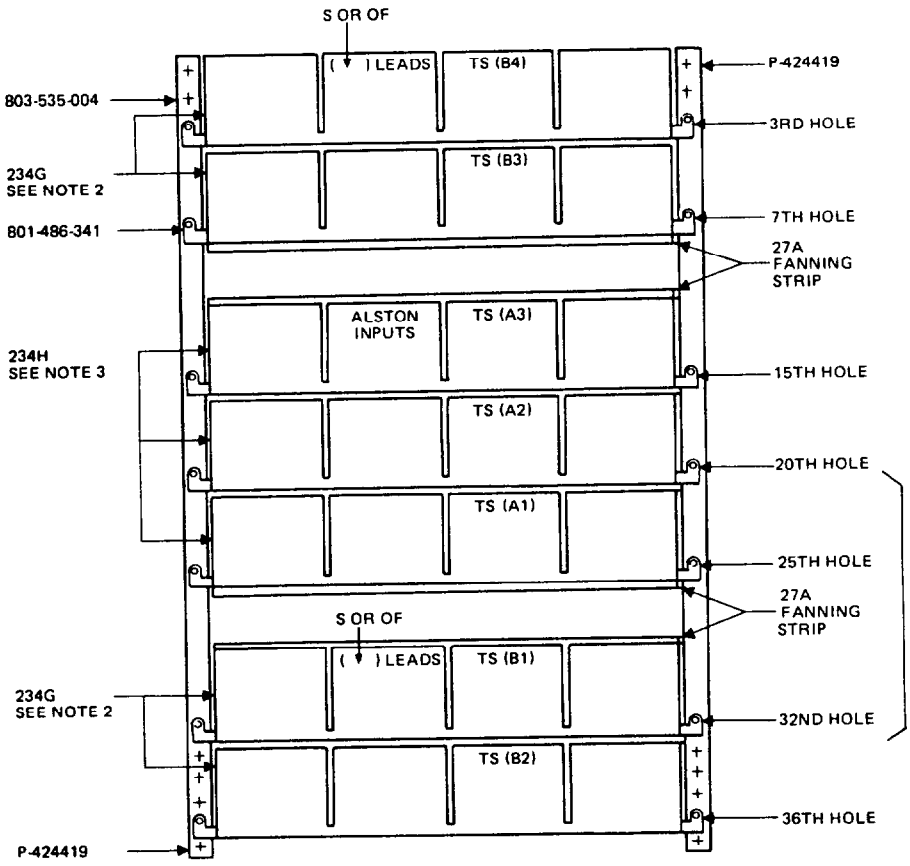
A

CROSS CONNECTION FIELD FOR USE WITH ALSTON 600 RECORDING SYSTEM	PED-25030-10
THE PACIFIC TEL. & TEL. CO. CENTRAL ADMINISTRATION ENGINEERING 6S	SHEET 4

PED-25030-10

ISS A, SECTION 252-133-901PT

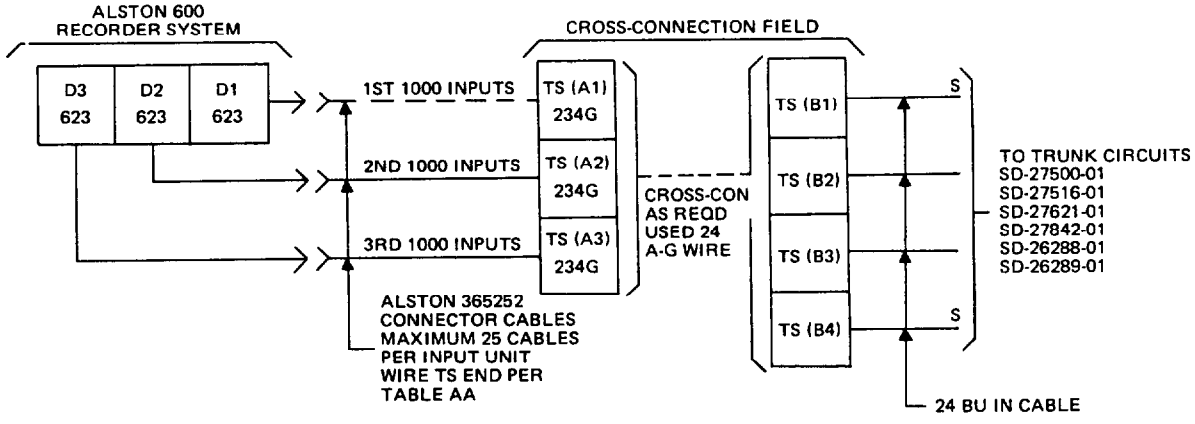
Cross-Connect Field PED-25030
Exhibit 1A



ENGINEERING NOTES:
51.

53. ENGINEERING SHALL ORDER IN ADDITION TO TABLE A SUFFICIENT NUMBER OF 365358 CABLES FROM THE ALSTON DIVISION CONRAC CORPORATION. A MAXIMUM OF 25 SUCH CABLES ARE REQUIRED FOR EACH ALSTON 623 UNIT INSTALLED. SPECIFY 8 FOOT LENGTHS. ONE CABLE 365358 PROVIDES FOR 40 INPUTS

CROSS-CONNECTION UNIT
FIG. 1



SYSTEM LAYOUT BLOCK DIAGRAM

FIG D

Exhibit 1B

ISSUE NO. ____ DATE _____

SPEC. 00287 SEC. A PAGE 2

APPX NO.1 PAGE3

ENGINEERING AND INSTALLING INFORMATION

1. INSTALL ALSTON SCANNER IN AISLE 708.11 ←#1
SPACE MARKED ON ATTACHED FLOOR PLAN.
PAGE 5 OF SPEC.

2. CABLE THE "S" LEADS OF ALL THE FOLLOWING
TRUNK TYPES TO THE 7TH FL. MD.F. MOUNT
THE TERMINAL STRIPS ON SHELF-G 29-41.
M78 & M81 SD 27500-01 PUNCHING 17 OF TS-A ON UNITS
K110 SD 27500-01 " " "
K142 SD 27621-01 " " "
A 37 SD 27501-01 " " "
K160 SD 27842-01 PCH 13 OF TS-A ON UNITS

3. EXTEND ALL COMPLETING MARKER ROUTE RELAY
"OF" LEADS TO BLOCKS ON HOR. SIDE OF ←#
7TH FL. MD.F. ←#

4. TERMINATE THE 3000 SCANNER INPUT ←#
LEADS FROM THE SCANNER ONTO TERMINAL ←#
STRIPS INSTALLED AT TOP OF SCANNER ←#1
FRAME. STENCIL AS 0-2999. ←#1
←#1
←#1
←#1

Exhibit 1C

REPLACES SEC. _____ PAGE _____ T. O. SPEC. 250 APPX #1, SEC. H, PAGE 4

T. O. SPEC. _____ WESTERN ELECTRIC CO., PAGE 1

ENGINEERING NOTES & JOB INFORMATION

1. PROVIDE ONE MISC. RELAY RACK, LOCATE AT R.R. 303.35. #1 *
2. INSTALL ALSTON 600 SCANNER EQUIPMENT

   ZZBG5 - MODEL 600-3000 (0-2999)

   370050 MEMORY MODULE
   370057 MAINTENANCE MODULE
   MKBD600-2 TEST AND MAINTENANCE EQUIP.
   MODEL 910 AUTOMATIC TEST SET

   ZZBG7

   383006 INPUT CIRCUIT BOARDS
   365358-25 INPUT CIRCUIT BOARDS

   ZZBH1

   381143-1 DATA SETS
   381017-1 " "

   #1 *
3. USE THE CONNECTORIZED CABLE PROVIDED BY ALSTON TO TERMINATE THE SCANNER LEADS ON THE H-TURDF. THESE LEADS SHOULD BE TERMINATED ON 211 AC TERMINAL STRIPS. THIS SHOULD REQUIRE 17 TERMINAL STRIPS AND SHOULD BE PROVIDED BY W. E. CO.
4. CABLE ALL THE ORIGINATING USAGE LEADS OF THE FOLLOWING TRUNK TYPES TO THE V-TURDF

TRUNK TYPE	CABLE FROM
A37	TERMINAL STRIP "A" PUNCHING 13
K84	TERMINAL STRIP "A" PUNCHING 17
K127	↓ ↓
K142	
K143	
M 77	
M 78	
M 80	
M 81	

5. CABLE THE "OF" PUNCHING OF ALL ROUTE RELAYS TO THE V-TURDF
6. PROVIDE 400 LEADS OF "E" CABLE FROM THE H-MDF TO THE V-TURDF. (0-399)

* = TELCO FURNISHED - SEE T- SECTION #1 (CONT'D)

Exhibit 1D