

SHEET INDEX

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| FS 1 STATION AUXILIARY RELAY CKT | 3 | 1 | 1 | 3 | 3 | 5 | 6 | 7 | 7 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 3 |
| FS 2 REGISTER AUXILIARY RELAY CKT | 4 | 1 | 1 | 3 | 3 | 3 | 6 | 6 | 6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 4 |
| APP FIG. 1-5 | 5 | 1 | 1 | 3 | 3 | 5 | 6 | 7 | 7 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 5 |
| SC 1 STATION TO STATION CALL USING DIRECT STATION SELECTION | 6 | 1 | 1 | 3 | 3 | 3 | 6 | 7 | 7 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 6 |
| SC 2 STATION TO STATION CALL USING DIRECT STATION SELECTION TWO STATIONS WITH REGISTER ATTACHED ATTEMPT CALL SIMULTANEOUSLY | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CKT REQ TABLE | 7 | 1 | 1 | 3 | 3 | 3 | 6 | 7 | 7 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 7 |
| CAD 1,2,3 | 8 | 1 | 1 | 3 | 3 | 5 | 6 | 7 | 7 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 8 |
| CAD 4,5,6 | 9 | 1 | 1 | 3 | 3 | 3 | 6 | 7 | 7 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 9 |
| CAD 7,8,9 | 10 | 1 | 1 | 3 | 3 | 3 | 6 | 7 | 7 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 10 |

SUPPORTING INFORMATION

| CATEGORY | NO. |
|------------------------------------|---|
| 756A PBX CABLING 756A PBX EQUIP | SD-65746-01 J58829AA-() J58829AB-() |

| DWG ISSUE | CD | DATE ISSUED | DRWN | APP'D |
|-----------|--------|-------------|------|-------|
| 1 | 1 | 10-25-61 | RAH | AFG |
| 2D | 2D | 1-25-62 | JTS | TEB |
| 3D | 2D | 4-10-62 | R.T. | WHE |
| 4D | APP 1D | 4-10-62 | M.S. | MEH |
| 5A | 2D | 4-10-62 | R.T. | PB |
| 6B | 3B | 10-18-66 | BCM | MEH |
| 7B | 3B | 1-23-67 | ROZ | RHB |
| 8D | 3B | 2-26-74 | GDI | WAS |

SHEET INDEX NOTES

- WHEN CHANGES ARE MADE IN THIS DRAWING, ONLY THOSE SHEETS AFFECTED WILL BE REISSUED.
- THIS SHEET INDEX WILL BE REISSUED AND BROUGHT UP TO DATE EACH TIME ANY SHEET OF THE DRAWING IS REISSUED, OR A NEW SHEET IS ADDED.
- THE ISSUE NUMBER ASSIGNED TO A CHANGED OR NEW SHEET WILL BE THE SAME ISSUE NUMBER AS THAT OF THE SHEET INDEX.
- SHEETS THAT ARE NOT CHANGED WILL RETAIN THEIR EXISTING ISSUE NUMBER.
- THE LAST ISSUE NUMBER OF THE SHEET INDEX IS RECOGNIZED AS THE LATEST ISSUE NUMBER OF THE DRAWING AS A WHOLE.

ISSUE
8D

| | | |
|---|------|----------------------------|
| SD-65942-01 | 2J07 | ARM ONLY |
| PBX SYSTEMS | | |
| NO. 756A AUXILIARY RELAY CIRCUIT | | |
| FOR DIRECT STATION SELECTION FROM STATIONS | | |
| (AUX REL DSS) | | |
| BELL TELEPHONE LABORATORIES INCORPORATED | 6S | SD-65942-01-1 10 SHEETS |

CIRCUIT NOTES:

| DESIG | FUSE AMP | POTENTIAL | ONE PER |
|----------------|----------|---------------|---------|
| DSS | 1-1/3 | -48V | PBX |
| DSS | .100 | +48V | PBX |
| BATTERY SYMBOL | | VOLTAGE RANGE | |
| -48 | | 45-52V | |
| +48 | | 40-60V | |

| FEATURE OR OPTION | PROVIDE | |
|-----------------------|---------|---------------------------------------|
| | FIG. | QUANTITY |
| REGISTER AUXILIARY | 1 | ONE PER PBX |
| STATION CONNECTOR | 2 | ONE PER LINE ARRANGED FOR DSS |
| KEY RELAYS | 3 | ONE PER TWO LINES ARRANGED FOR DSS |
| UNITS AND TENS DIODES | 4 | ONE PER KEY PER LINE ARRANGED FOR DSS |
| KEY DIODES | 5 | ONE PER KEY PER LINE ARRANGED FOR DSS |

| NETWORK VALUES | | |
|----------------|--------------------|-------------------|
| NETWORK NO. | RESISTANCE IN OHMS | CAPACITANCE IN UF |
| | | |

| RECORD OF FIGURES, WIRING AND APPARATUS CHANGES | | | | | | |
|---|-------------------------------|----------------------|----------|----------------|-----|----|
| CHANGED ON ISS | IF JOB RECORDS DO NOT SPECIFY | THIS OPTION WAS FURN | SEE NOTE | USE IN CIRCUIT | | |
| | | | | STD | ADM | MD |
| 6B | Z OR Y | Z | | Y | | Z |
| 7B | X OR W | X | | W | | X |
| 7B | V | NONE | | V | | |

EQUIPMENT NOTES:

202. CROSS CONNECT WIRING TO BE DRESSED BACK TO PROVIDE A LOOP TO PERMIT REMOVAL OF DIODES (T-) AND (U-) ASSEMBLIES TO REPLACE DIODES IF NECESSARY.

INFORMATION NOTES:

301. UNLESS OTHERWISE SPECIFIED: RESISTANCE VALUES ARE IN OHMS, CAPACITANCE VALUES ARE IN MICROFARADS. VALUES PRECEDED BY THE SYMBOL + (PLUS) OR - (MINUS) ARE IN VOLTS.
302. CONNECT THE (T-) AND (U-) DIODES ASSOCIATED WITH A DSS KEY TO THE T0, T2-9 LEADS AND U0-U9 LEADS, RESPECTIVELY CORRESPONDING TO THE TENS AND UNITS DIGIT OF THE DIRECTORY NUMBER OF THE TRUNK OR STATION TO BE SELECTED BY THE KEY.

WORKING LIMITS
MAX RES OF CIRCUIT PATH FOR SATISFACTORY OPERATION OF RELAY SC IS 125 OHMS.

| | | |
|---|--|---------------|
| AUXILIARY RELAY CIRCUIT | | SD-65942-01-2 |
| BELL TELEPHONE LABORATORIES INCORPORATED | | |

| DRAWING ISSUE | |
|---------------|-----|
| 1 | VOG |
| 2D | HW |
| 3D | HW |
| 6B | HW |
| 7B | HW |

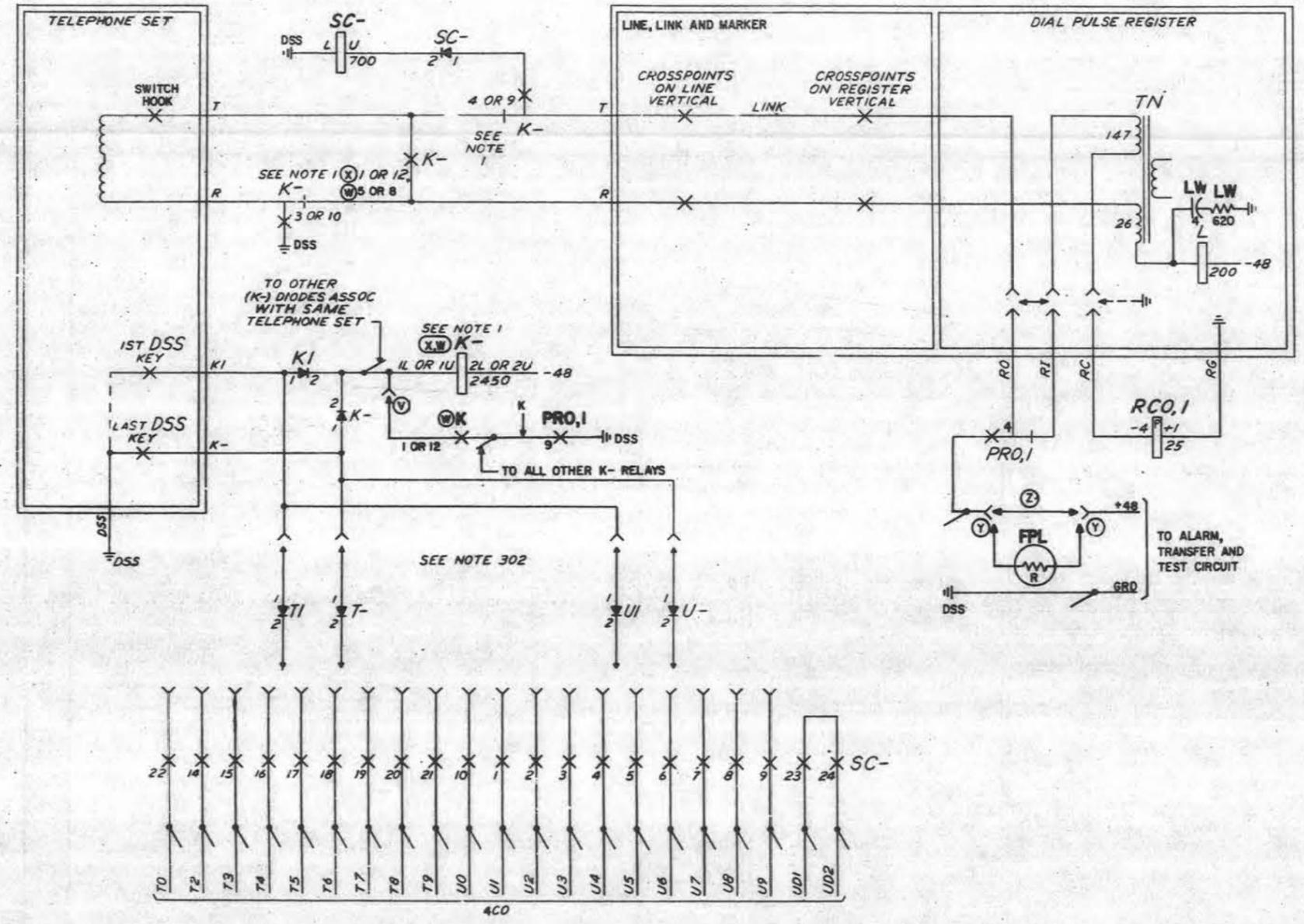
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SD-65942-01-2

FS I
STATION AUXILIARY RELAY CIRCUIT

| | |
|---------|-------|
| DRAWING | ISSUE |
| 1 | 1 |
| 3D | 1 |
| 5A | 1 |
| 6B | 1 |
| 7B | 1 |

A
B
C
D
E
F
G
H



SHEET NOTES:
1. SPRINGS 1-5 AND COIL TERMINALS 1L & 2L OF RELAY (K) ARE ASSOCIATED WITH THE EVEN NUMBERED CIRCUIT OF THE UNIT. SPRINGS 8 TO 12 AND COIL TERMINALS 1U & 2U ARE ASSOCIATED WITH THE ODD NUMBERED CIRCUIT OF THE UNIT.

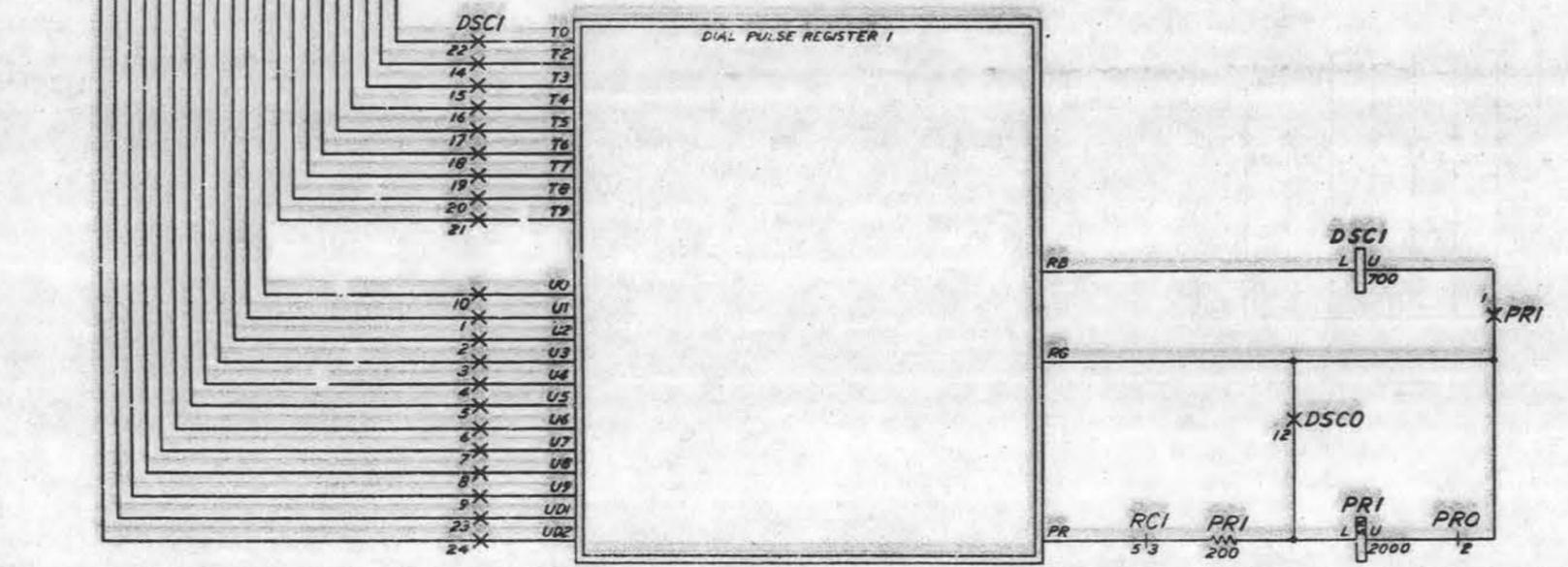
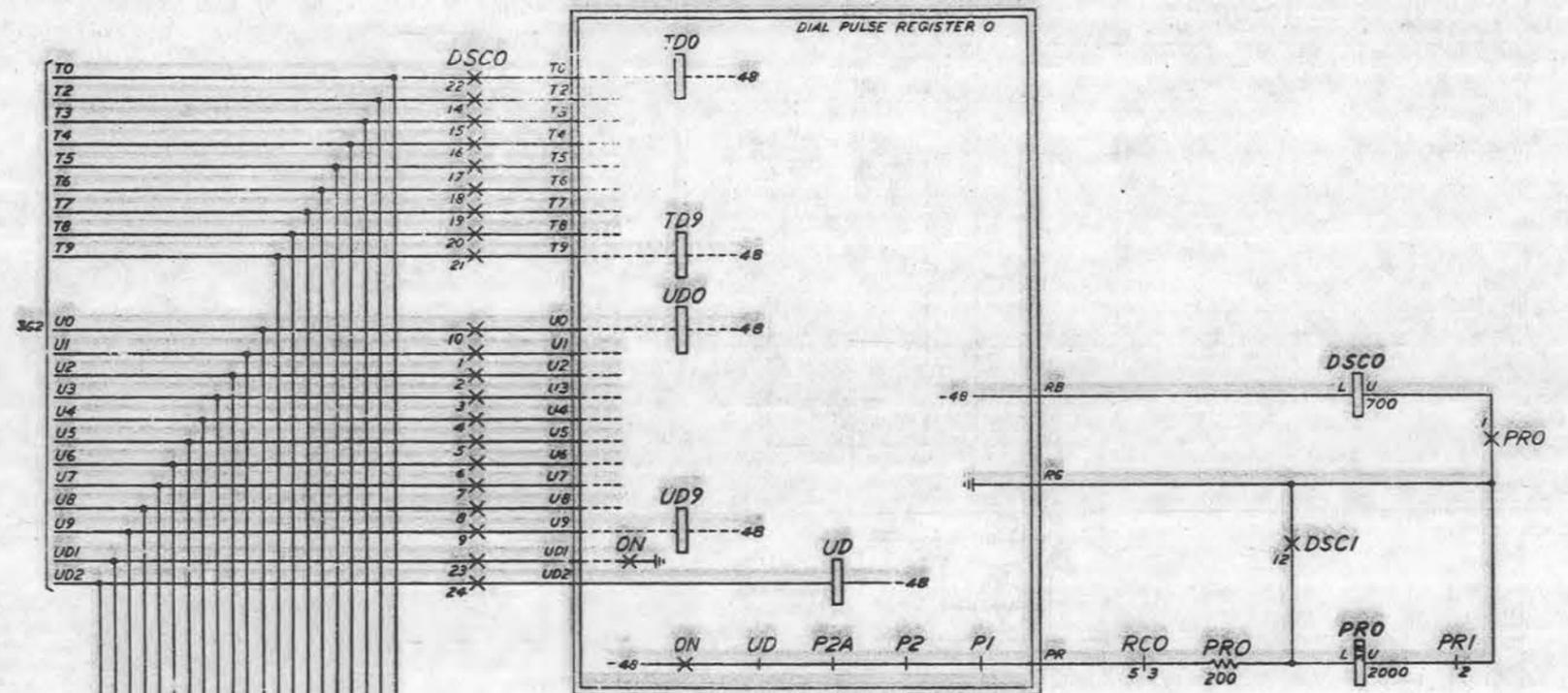
SD-65942-01-3

| | | |
|---|--|-------------------|
| AUXILIARY RELAY CIRCUIT | | 7 |
| BELL TELEPHONE LABORATORIES INCORPORATED | | SD-65942-01-3 |
| 6S | | PRINTED IN U.S.A. |

0 1 2 3 4 5 6 7 8 9

FS 2
REGISTER AUXILIARY RELAY CIRCUIT

| | |
|---------|---------|
| DRAWING | ISSUE |
| 1 | 1/17/70 |
| 3D | WV |
| 5B | PUS |
| | RNB |



AUXILIARY RELAY CIRCUIT
SD-65942-01-4
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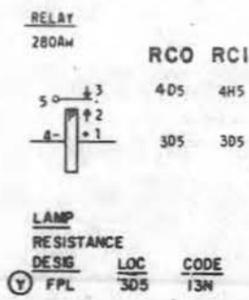
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(3)

APP FIG. 1

| RELAY | | | |
|--------|-------|-------|--|
| DESIG | DSC0 | DSC1 | |
| CODE | AJ202 | AJ202 | |
| OPTION | | | |
| 24 | 4A2 | 4E2 | |
| 23 | 4A2 | 4E2 | |
| 22 | 4A2 | 4E2 | |
| 21 | 4A2 | 4E2 | |
| 20 | 4A2 | 4E2 | |
| 19 | 4A2 | 4E2 | |
| 18 | 4A2 | 4E2 | |
| 17 | 4A2 | 4E2 | |
| 16 | 4A2 | 4E2 | |
| 15 | 4A2 | 4E2 | |
| 14 | 4A2 | 4E2 | |
| 13 | | | |
| 12 | 4G5 | 4D5 | |
| 11 | | | |
| 10 | 4A2 | 4E2 | |
| 9 | 4A2 | 4E2 | |
| 8 | 4A2 | 4E2 | |
| 7 | 4A2 | 4E2 | |
| 6 | 4A2 | 4E2 | |
| 5 | 4A2 | 4E2 | |
| 4 | 4A2 | 4E2 | |
| 3 | 4A2 | 4E2 | |
| 2 | 4A2 | 4E2 | |
| 1 | 4E2 | 4E2 | |
| COIL | 4C6 | 4F6 | |

| RELAY | | | | | | | |
|--------|------|------|-----|-----|-----|-----|-----|
| DESIG | PRO | PR1 | | | | | |
| CODE | A620 | A620 | | | | | |
| OPTION | | | | | | | |
| 12 | EMB | LRC | EMB | LRC | EMB | LRC | EMB |
| 11 | N | | N | | | | |
| 10 | EMB | | EMB | | | | |
| 9 | N | 3D2 | N | 3D2 | | | |
| 8 | EMB | | EMB | | | | |
| 7 | | | | | | | |
| 6 | EMB | | EMB | | | | |
| 5 | | | | | | | |
| 4 | EMB | 3D5 | EMB | 3D5 | | | |
| 3 | N | | N | | | | |
| 2 | EMB | 4D6 | EMB | 4D6 | | | |
| 1 | N | 4C6 | N | 4F6 | | | |
| COIL | 4D6 | 4D6 | 4H6 | | | | |



APP FIG. 2

| RELAY | | |
|--------|-------|--|
| DESIG | SC- | |
| CODE | AJ202 | |
| OPTION | | |
| 24 | 3F4 | |
| 23 | 3F4 | |
| 22 | 3F4 | |
| 21 | 3F4 | |
| 20 | 3F4 | |
| 19 | 3F4 | |
| 18 | 3F4 | |
| 17 | 3F4 | |
| 16 | 3F4 | |
| 15 | 3F4 | |
| 14 | 3F4 | |
| 13 | | |
| 12 | | |
| 11 | | |
| 10 | 3F4 | |
| 9 | 3F4 | |
| 8 | 3F4 | |
| 7 | 3F4 | |
| 6 | 3F4 | |
| 5 | 3F4 | |
| 4 | 3F4 | |
| 3 | 3F4 | |
| 2 | 3F4 | |
| 1 | 3F4 | |
| COIL | 3A1 | |

| DIODE | | |
|-------|-----|------|
| DESIG | LOC | CODE |
| SC- | 3A2 | 400J |

APP FIG. 3

| RELAY | | | | | | | |
|--------|-----|-----|------|------|-----|-----|-----|
| DESIG | K- | E- | K- | K- | | | |
| CODE | AK4 | AK4 | AK49 | AK49 | | | |
| OPTION | | | | | | | |
| 12 | EMB | LRC | EMB | LRC | EMB | LRC | EMB |
| 11 | | | | | | | |
| 10 | EMB | | EMB | | EMB | | EMB |
| 9 | EMB | 3B1 | EMB | 3B1 | EMB | 3B1 | EMB |
| 8 | EMB | 3B2 | EMB | 3B2 | EMB | 3B2 | EMB |
| 7 | | | | | | | |
| 6 | | | | | | | |
| 5 | EMB | | EMB | 3B2 | EMB | 3B2 | EMB |
| 4 | EMB | 3B2 | EMB | 3B2 | EMB | 3B2 | EMB |
| 3 | EMB | 3B1 | EMB | 3B1 | EMB | 3B1 | EMB |
| 2 | EMB | | EMB | | EMB | | EMB |
| 1 | N | 3B2 | N | 3D2 | | | |
| COIL | 3C2 | 3C2 | 3C2 | 3C2 | | | |

APP FIG. 4

| DIODES | | |
|--------|-----|------|
| DESIG | LOC | CODE |
| T- | 3E1 | 400J |
| U- | 3E3 | 400J |

APP FIG. 5

| DIODES | | |
|--------|-----|------|
| DESIG | LOC | CODE |
| K- | 3C1 | 400J |

SD-65942-01-5

AUXILIARY RELAY CIRCUIT

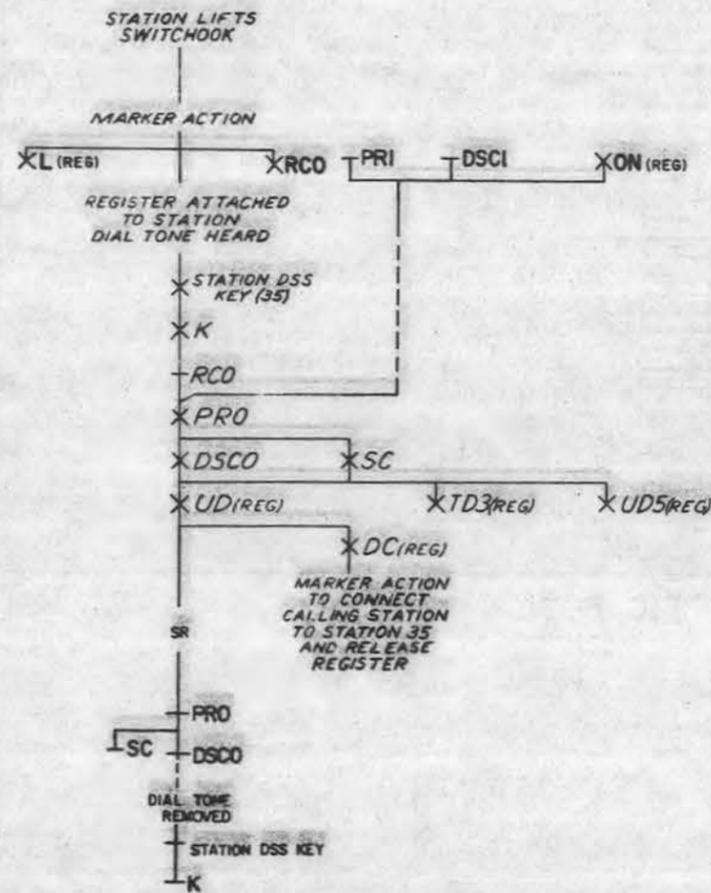
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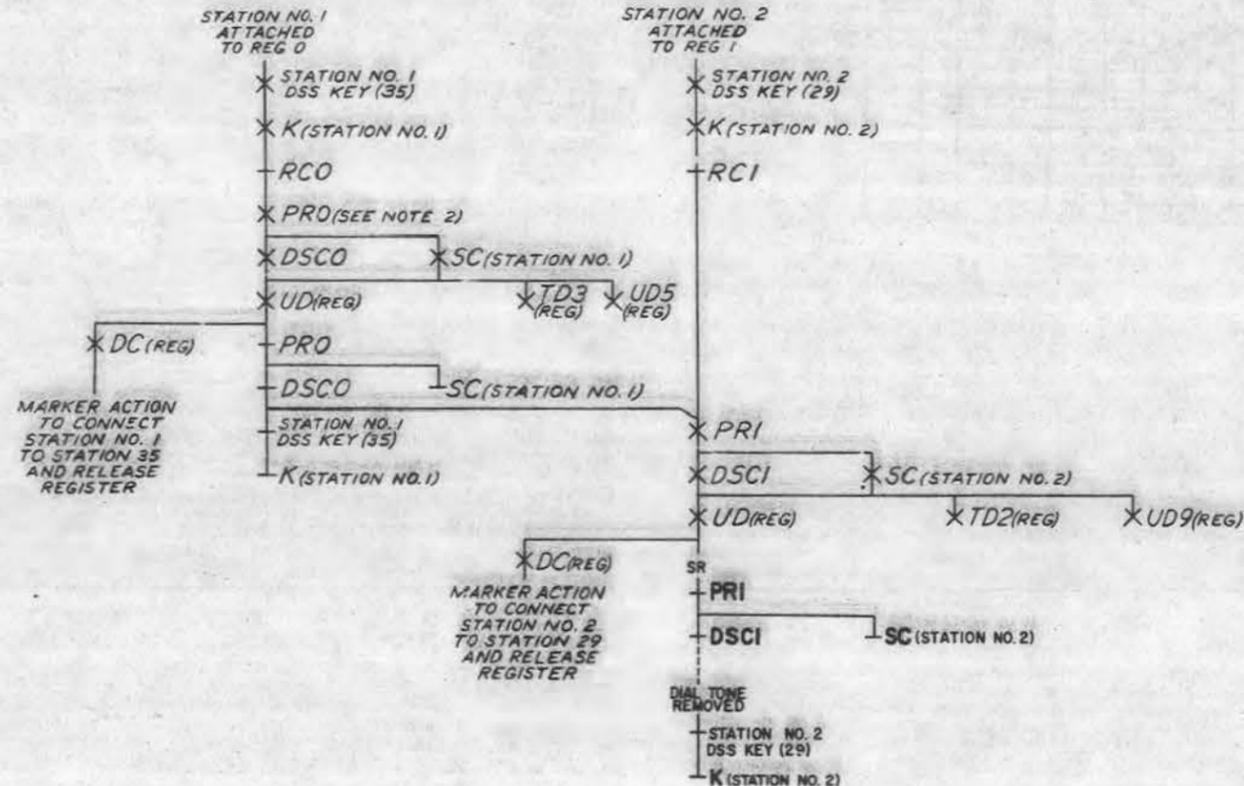
6S

7

SC 1
(SEE NOTE 1)
STATION TO STATION CALL USING
DIRECT STATION SELECTION



SC 2
STATION TO STATION CALL USING DIRECT STATION SELECTION
TWO STATIONS WITH REGISTERS ATTACHED ATTEMPT
CALL SIMULTANEOUSLY



SHEET NOTES:

1. SC 1 ASSUMES THAT STATION IS ATTACHED TO REGISTER D WHEN DSS KEY IS OPERATED AND NO OTHER STATION IS ATTEMPTING TO COMPLETE A CALL USING DIRECT STATION SELECTION.
2. IT IS ASSUMED THAT THE (PRO) RELAY OPERATED BEFORE THE (PRI) RELAY AND STATION NO. 1 WON PREFERENCE.

| DRAWING ISSUE | |
|---------------|-----|
| 1 | RAH |
| 3D | W/P |
| 6B | R/S |
| 7B | R/S |

7

| | |
|---|---------------|
| AUXILIARY RELAY CIRCUIT | SD-65942-01-6 |
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SD-65942-01-6

CIRCUIT REQUIREMENTS

NO. 759A DIAL COMMUNICATING SYSTEM AND NO. 756A AUXILIARY RELAY CIRCUIT

| APPARATUS | | | | MECH REQ | | | CIRCUIT PREPARATION | | | TEST SET PREP | SEE TEST NOTE | DIRECT CURRENT FLOW REQ | | | | | REMARKS |
|-----------|---------|-----|------|----------|-------------|------------|---------------------|----------------|----|---------------|---------------|-------------------------|----------|------------|------|-------------------|---------|
| DESG | CODE | OPT | FIG. | BSP FIG. | COHT PRESS. | ARM. TRVL. | BLOCK OR INSULATE | TEST CLIP DATA | | | | TEST WDG | TEST FOR | AFTER SOAK | TEST | READJ | |
| RELAYS | | | | | | | | | | | | | | | | | |
| COHN BAT. | | | | | | | | | | | | | | | | | |
| COHN GRD | | | | | | | | | | | | | | | | | |
| DSCD,1 | AJ202 | | 1 | 500 | | | | | U | REL TST | GRD | | 0 | 42.5 | 40.5 | | |
| K- | 1/2AK4 | X | 3 | 202 | | | | | 1U | REL TST | GRD | | 0 | 11.9 | 11.3 | FOR ODD NUMBERED | |
| K- | 1/2AK49 | W | 3 | 224 | | | | | 1U | REL TST | GRD | | 0 | 11.9 | 11.3 | CKT ON UNIT | |
| K- | 1/2AK4 | X | 3 | 202 | | | | | 1L | REL TST | GRD | | 0 | 11.9 | 11.3 | FOR EVEN NUMBERED | |
| K- | 1/2AK49 | W | 3 | 224 | | | | | 1L | REL TST | GRD | | 0 | 11.9 | 11.3 | CKT ON UNIT | |
| PRD,1 | AG20 | | 1 | 262B | | | | | L | REL TST | U | REL TST | B/G | 0 | 10.7 | 10.2 | |
| | | | | | | | | | | | | | H | 2 | 1.9 | | |
| | | | | | | | | | | | | | R | 0.9 | 1.1 | | |
| RCD,1 | 280AM | | 1 | B | | | | | 4 | REL TST | | | BAT. | 0 | -50 | 1.1 | |
| | | | | | | | | | | | | | | MO | -50 | 0. | |
| | | | | | | | | | | | | | | 0 | -50 | 12.5 | 12.8 |
| | | | | | | | | | | | | | | R | 50 | 5.4 | 5.7 |
| SC- | AJ202 | | 2 | 500 | | | | | U | REL TST | | | BAT. | 0 | 42.5 | 40.5 | |

DRAWING ISSUE
 1 RAN
 1/15 JTB
 7/29 RT
 3D WYH
 P.D.
 6B BCK
 PJS
 RHP
 RHP
 7B BCK
 PJS
 RHP

DRAWING ISSUE
 1 RAN
 1/15 JTB
 7/29 RT
 3D WYH
 P.D.
 6B BCK
 PJS
 RHP
 RHP
 7B BCK
 PJS
 RHP

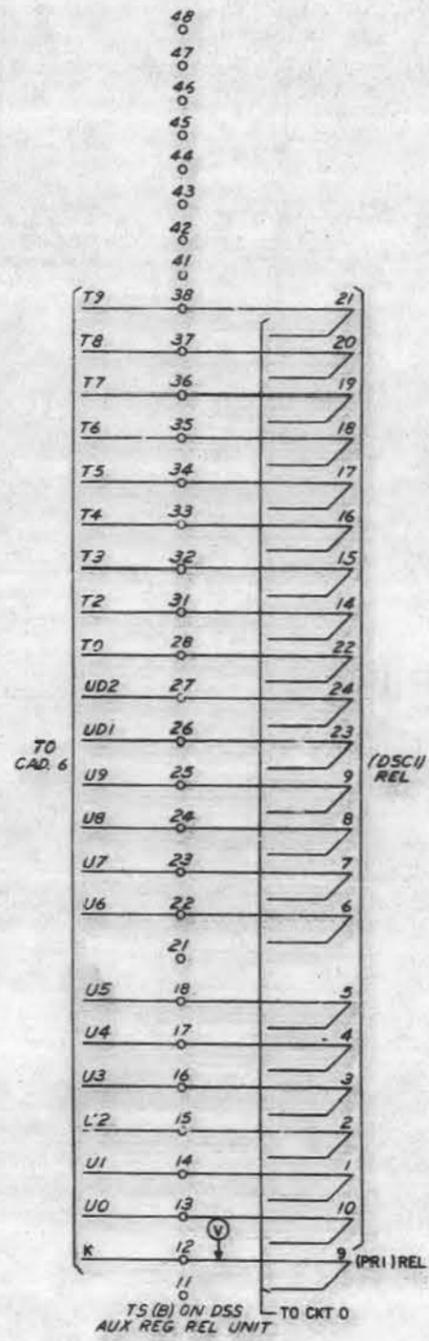
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AUXILIARY RELAY CIRCUIT
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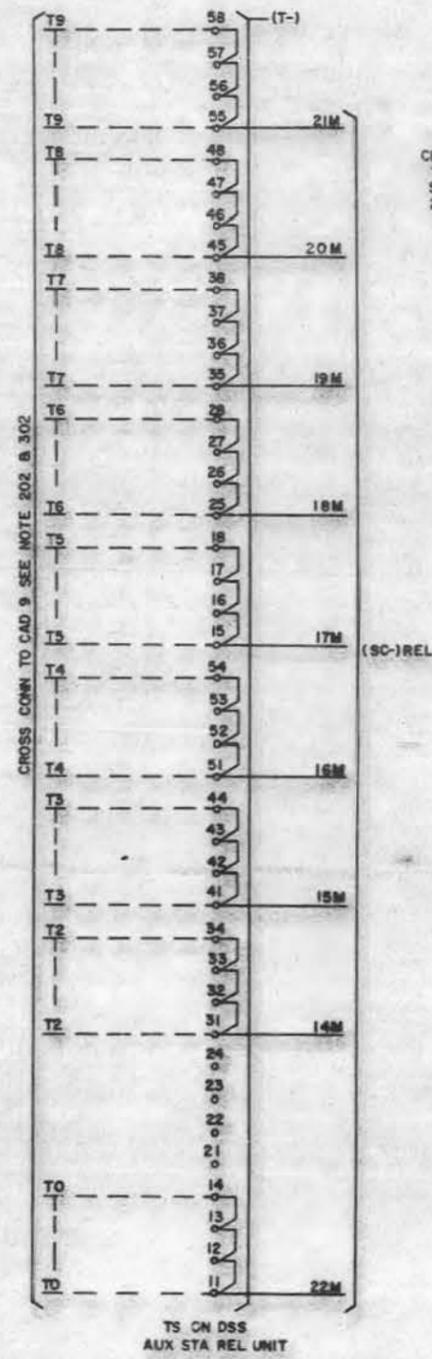
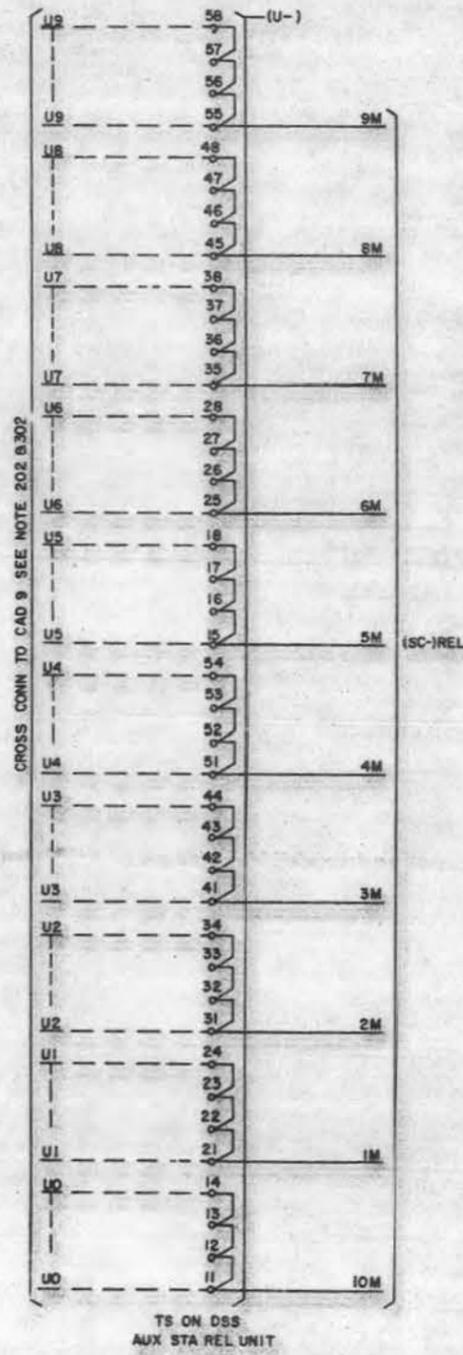
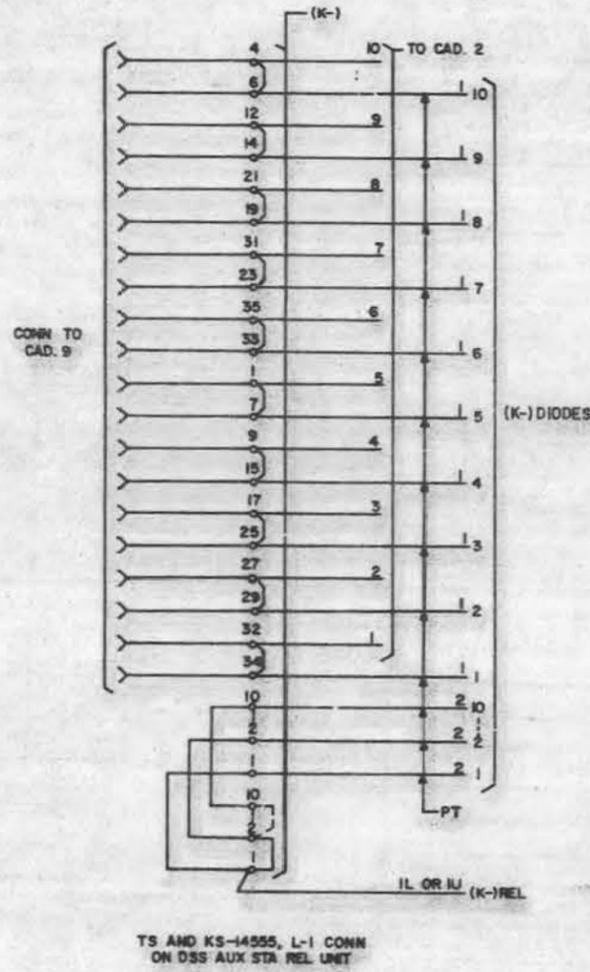
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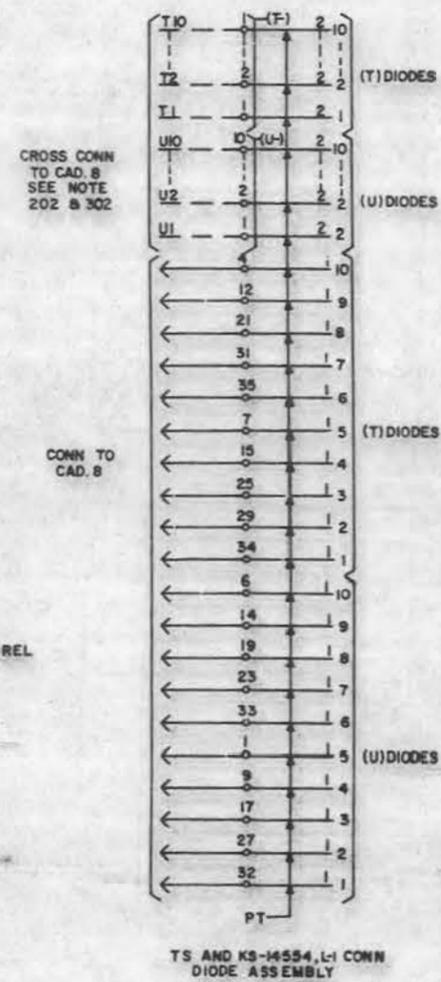
CAD. 7
(PART OF APP FIG. 1)



CAD 8
(PART OF APP FIG. 2)



CAD 9
(FOR APP FIG. 4)



| DRAWING ISSUE | |
|---------------|---------|
| 1 | 1/27/55 |
| 2 | 1/27/55 |
| 3D | 1/27/55 |
| 6B | 1/27/55 |
| 7B | 1/27/55 |

SD-65942-01-10

| | |
|---|----------------|
| AUXILIARY RELAY CIRCUIT | 7 |
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