

OPERATING ROOM AND INFORMATION DESKS

2, 3, 4, 6, 7, 19, AND 23 TYPES

TRANSMISSION TESTS

1. GENERAL

1.01 This section describes a method of performing transmission tests on incoming trunks and telephone circuits associated with information and operating room desks.

1.02 This section is reissued to expand the coverage to other than 23-type desks. Since this reissue covers a general revision, arrows ordinarily used to indicate changes have been omitted.

1.03 The tests covered are:

A. Incoming Call Distributing Type Trunks to Information And Operating Room Desks:

This test describes a method of measuring the transmission loss of incoming trunks.

B. Incoming Key-Ended Trunks to Information and Operating Room Desks:

This test describes a method of measuring the transmission loss of incoming key-ended trunks.

C. Supervisor Telephone Circuit — Information and Operating Room Desks:

This test describes a method of measuring the transmission loss of the supervisor telephone circuits.

D. Operator Telephone Circuit — Information and Operating Room Desks:

This test describes the method of measuring the transmission loss of operator telephone circuits.

1.04 The transmission test requirements are usually shown on schematic diagrams (SDs), circuit layout cards, or local trunk records.

1.05 Incoming trunk tests will require action and verification at the originating office.

1.06 A busy test should be made before connecting to any working jack or trunk.

1.07 The tests should be made in periods of light traffic. The positions must be occupied for Tests A and B, vacant for Tests C and D.

1.08 Before performing the tests in this section, the transmission measuring set (TMS) should be calibrated in accordance with standard instructions.

1.09 Lettered Steps: A letter, a, b, c, etc, added to a step number in Part 3 of this section, indicates an action which may or may not be required depending on local conditions. The condition under which a lettered step or a series of lettered steps should be made is given in the ACTION column, and all steps governed by the same condition are designated by the same letter within a test. Where a condition does not apply, all steps designated by that letter should be omitted.

1.10 The figures listed show patching arrangements necessary to perform Tests A through D in relationship to the desk under test.

(a) Figure 1, desk No. 2.

(b) Figure 2, desk No. 3, 4, and 6 (centralized supervisory console not provided).

(c) Figure 3, desk No. 3, 4, and 6 (centralized supervisory console provided).

(d) Figure 4, desk No. 7 and 7A.

(e) Figure 5, desk No. 23A, 23B, and 23C (centralized supervisory console not provided).

(f) Figure 6, desk No. 23A, 23B, and 23C (centralized supervisory console provided).

(g) Figure 7, desk No. 19.

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2. APPARATUS

2.01 23A transmission measuring set (TMS)
J94023A.

2.02 82A test set.

2.03 52B head telephone set, or equivalent.

2.04 P3E cord, 6 feet long, equipped with a
310 plug at each end (3P7A cord).

3. METHOD

STEP

ACTION

VERIFICATION

A. Incoming Call Distributing Type Trunks to Information and Operating Room Desks

- | | | |
|-----|---|--|
| 1 | At originating end —
Originate a call to information or operating
room desk. | At operator desk —
Operator answers to acknowledge call. |
| 2 | Request that the call be transferred to a
supervisory telephone circuit. | |
| 3 | At supervisor telephone circuit —
Connect head telephone set to jacks specified
in Table A. | |
| 4 | At 23A TMS —
Connect one end of the P3E cord to MEAS
jack. | |
| 5 | Operate INPUT key to 900 position. | |
| 6 | Set DIAL MEAS SLV switch to MEAS. | |
| 7 | At supervisor telephone circuit —
Request originating end to send 1000-cycle,
0-db, 900-ohm test tone. | The 1000-cycle tone is heard. |
| 8 | Insert other end of P3E cord into jack speci-
fied on Table A. | The 1000-cycle test tone is terminated. |
| 9 | At 23A TMS —
Observe reading of meter. | TMS meter indicates transmission loss. |
| 10 | Remove P3E cord from 23A TMS. | |
| 11 | Connect the P3E cord to the 1000-0-900 jack. | |
| 12 | Request originating end to make transmis-
sion measurement. | At originating end —
TMS meter indicates transmission loss. |
| 13a | If no further tests are to be made —
At originating end operating room desk and
supervisory circuit —
Remove all cords and test equipment and
restore all keys to normal. | |

STEP	ACTION	VERIFICATION
B. Incoming Key-Ended Trunks to Information and Operating Room Desks		
1a	If transmission measurements are to be made to 23- or 7-type desks — At originating end — Direct call to a specific modified position.	At operator desk — Operator answers to acknowledge call.
2b	If transmission measurements are to be made to a 19-type desk — Direct call to a random position.	
3	At operator telephone circuit — Connect head telephone set to jacks specified in Table A.	
4a	If transmission measurements are to be made to 23- or 7-type desks — At 23A TMS — Connect one end of P3E cord to MEAS jack.	
5b	If transmission measurements are to be made to a 19-type desk — Connect other half of cord pair used to answer original call to 23A MEAS jack.	
	<i>Note:</i> The double-ended cord circuit SD-90532-01 is used in making trunk tests. By connecting one end of the cord to the 1000-0-900 jack and the other end to the No. 23A transmission measuring set with the talk key normal on the cord, the loss of the cord at 900-ohm may be determined. Thereafter, this loss should be deducted from the loss of the trunks measured through this cord. The method of making these tests is shown on Figure 7.	
6	Operate INPUT key to 900 position.	
7	Set DIAL MEAS SLV switch to MEAS.	
8	At operator telephone circuit — Request originating end to send 1000-cycle, 0-db, 900-ohm test tone.	1000-cycle test tone heard. At 19-type desk — 1000-cycle test tone terminated.
9a	If transmission measurements are to be made to 23- or 7-type desk — Insert other end of P3E cord into jack specified in Table A.	1000-cycle test tone terminated.
10	At 23A TMS — Observe reading of meter.	TMS meter indicates transmission loss.

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STEP	ACTION	VERIFICATION
11a	If transmission measurements being made from 23- or 7-type desks — Remove P3E cord.	
12b	If transmission measurements being made from 19-type desk — Remove cord of cord pair from 23A measuring set.	
13b	Connect cord pair to 1000-0-900 jack.	
14a	If transmission measurements are to be made to 23- or 7-type desks — Connect P3E cord to 1000-0-900 jack.	
15	Request originating end to make measurement.	TMS meter indicates transmission loss.
16c	If no further tests are to be made — At originating end and operating room desk — Remove all cords and test equipment and restore all keys to normal.	

C. Supervisor Telephone Circuit—Information and Operating Room Desks

1	At supervisor telephone circuit — Connect the 289B plug of the 82A test set to the jack specified in Table A.	
2	At 23A TMS — Connect 310 plug of 82A test set to MEAS jack of 23A TMS.	
3	Operate INPUT key to 600.	
4	Set DIAL MEAS SLV switch to MEAS.	
5	At supervisor telephone circuit — Connect one end of the P3E cord to jack specified in Table A and the other end to 1000-0-600 jack.	
6	At 82A test set — Operate T key.	
7	At 23A TMS — Observe reading of meter.	At 23A TMS — The meter indicates the transmission loss.
8	At 82A test set — Operate R key.	
9	At 23A TMS — Observe reading of meter.	At 23A TMS — The meter indicates the receiving loss.

STEP	ACTION	VERIFICATION
10a	If no further tests are to be made — Remove all cords and test equipment and restore all keys to normal.	
D. Operator Telephone Circuit—Information and Operating Room Desks		
1	At operator telephone circuit — Connect the 289B plug of the 82A test set to jacks A and B or C and D of operator telephone circuit specified in Table A.	
2	At 23A TMS — Connect the 310 plug of the 82A test set to the MEAS jack of 23A TMS.	
3	Operate INPUT key to 600.	
4	Set DIAL MEAS SLV switch to MEAS.	
5	At operator telephone circuit — Connect one end of P3E cord to MON jack and then the other end to 1000-0-600 jack.	
6	At 82A test set — Operate T key.	
7	At 23A TMS — Observe the reading of the meter.	At 23A TMS — The meter indicates the transmission loss.
8	At 82A test set — Operate R key.	
9	At 23A TMS — Observe reading of the meter.	At 23A TMS — The meter indicates the receiving loss.
10a	If no further tests are to be made — Remove all cords and test equipment and restore all keys to normal.	

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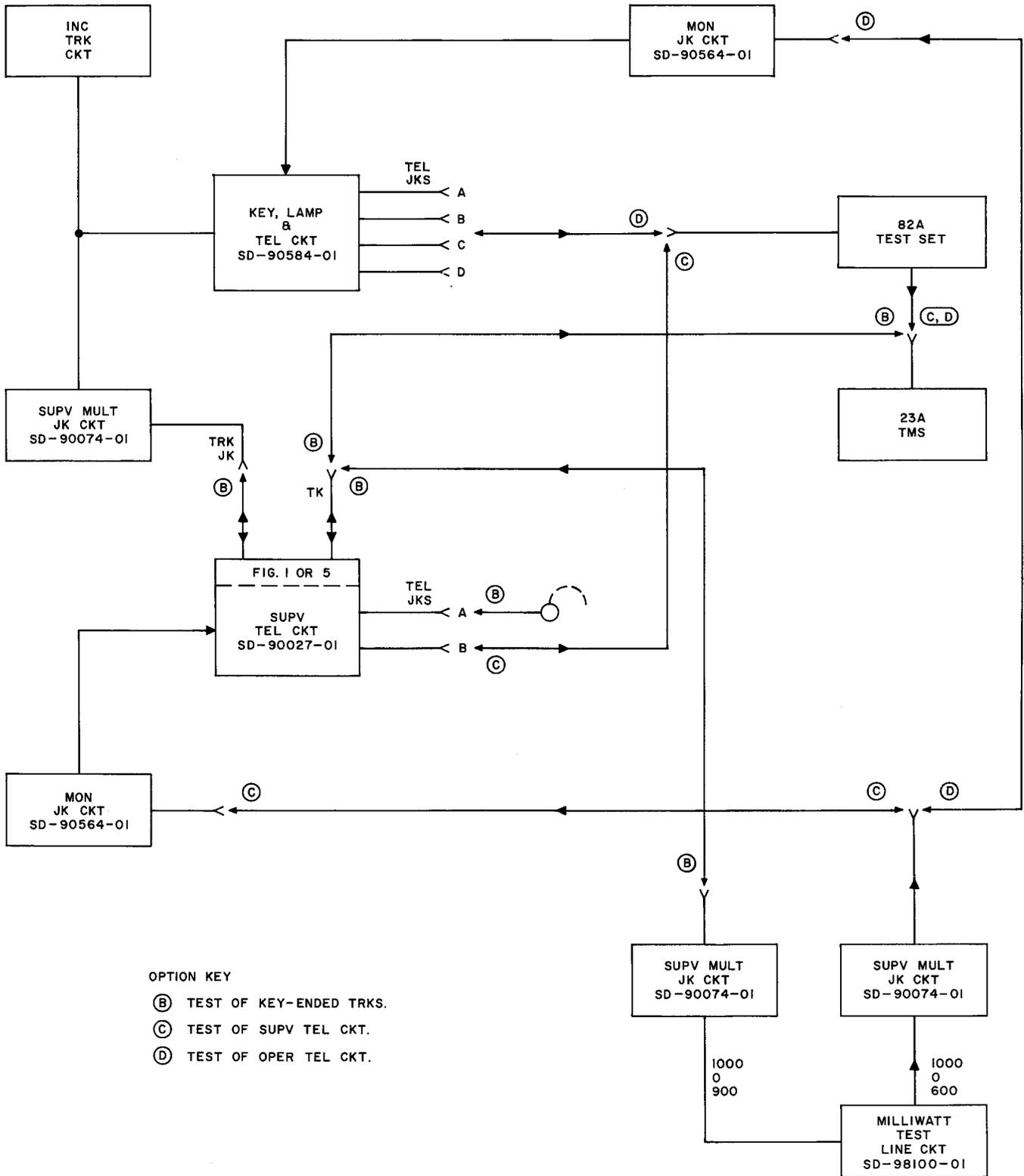


Fig. 1 — Method of Making Transmission Tests on Information Desk No. 2

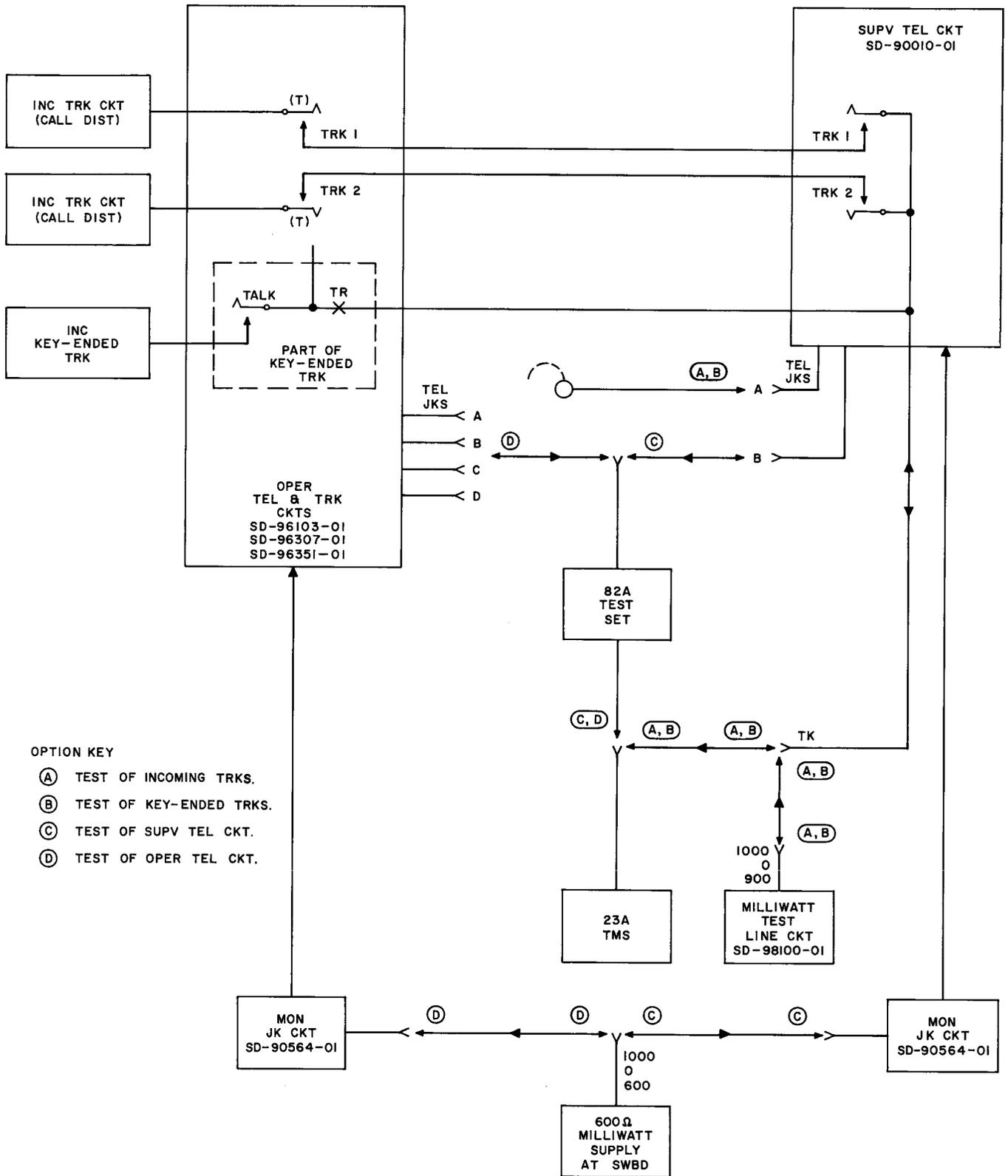


Fig. 2 — Method of Making Transmission Tests on Information Desks No. 3, 4, and 6 Type When Centralized Supervisory Console is Not Furnished

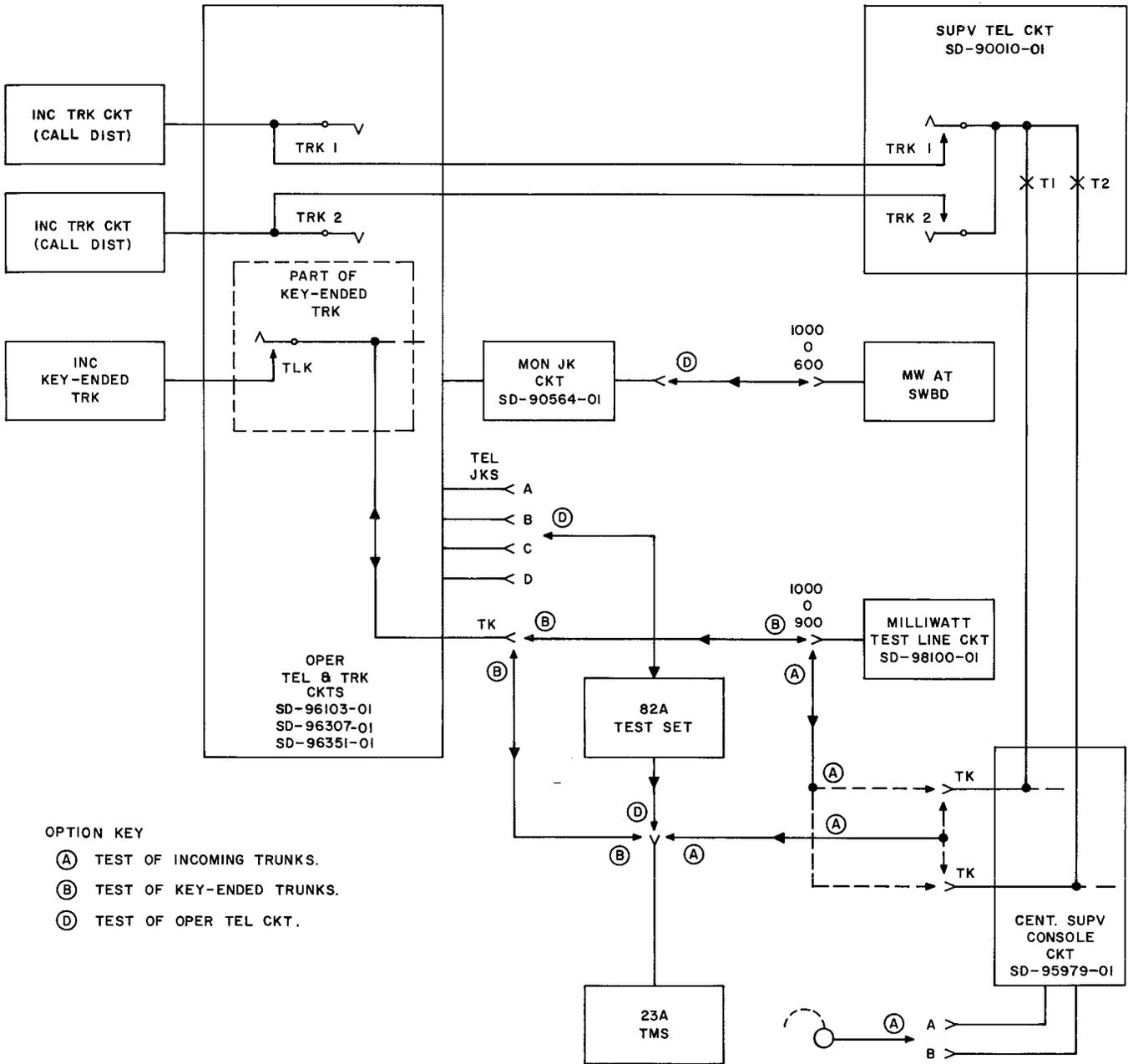


Fig. 3 — Method of Making Transmission Tests on Information Desks No. 3, 4, and 6 Type When Centralized Supervisory Console is Provided

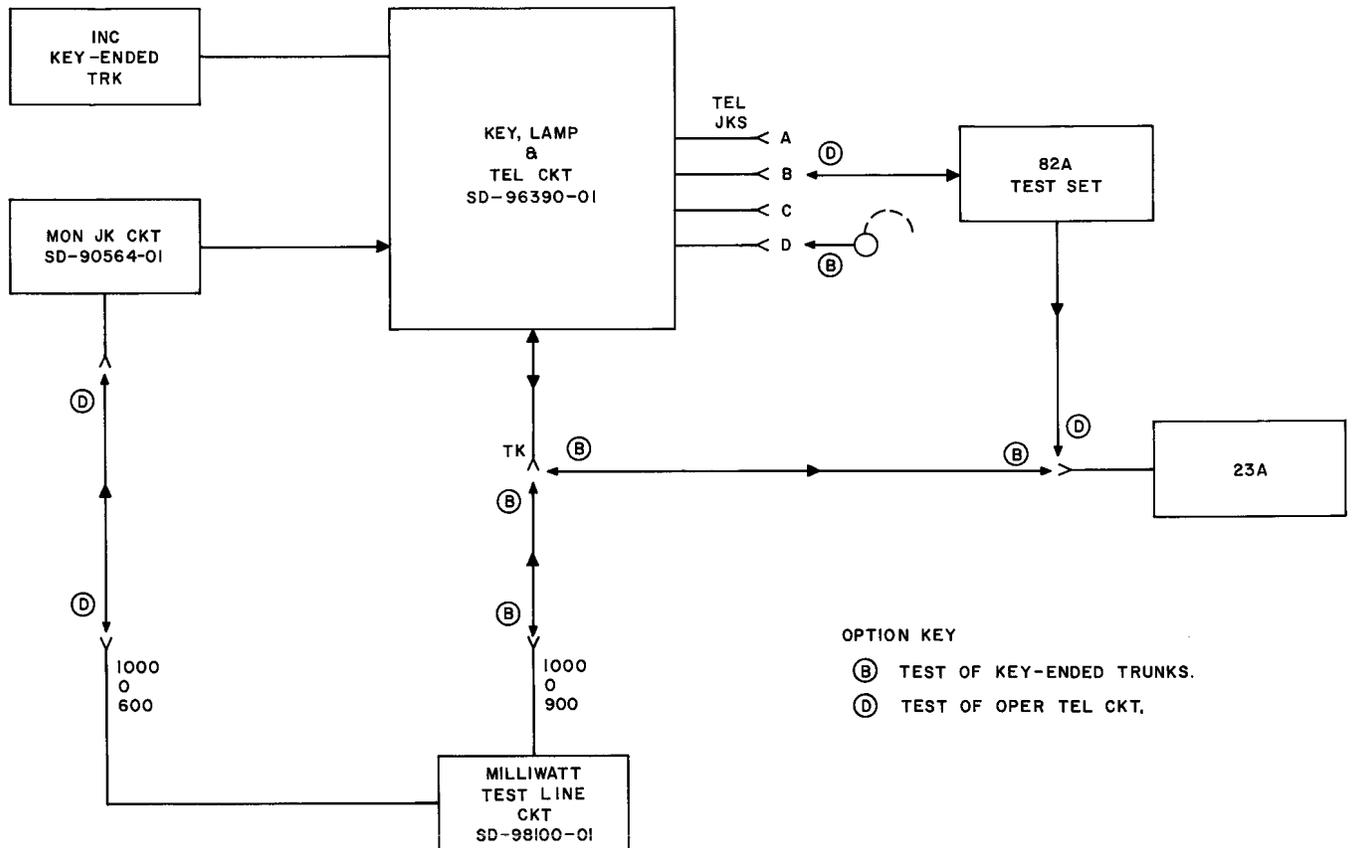


Fig. 4 — Method of Making Transmission Tests on Information Desks No. 7 and 7A

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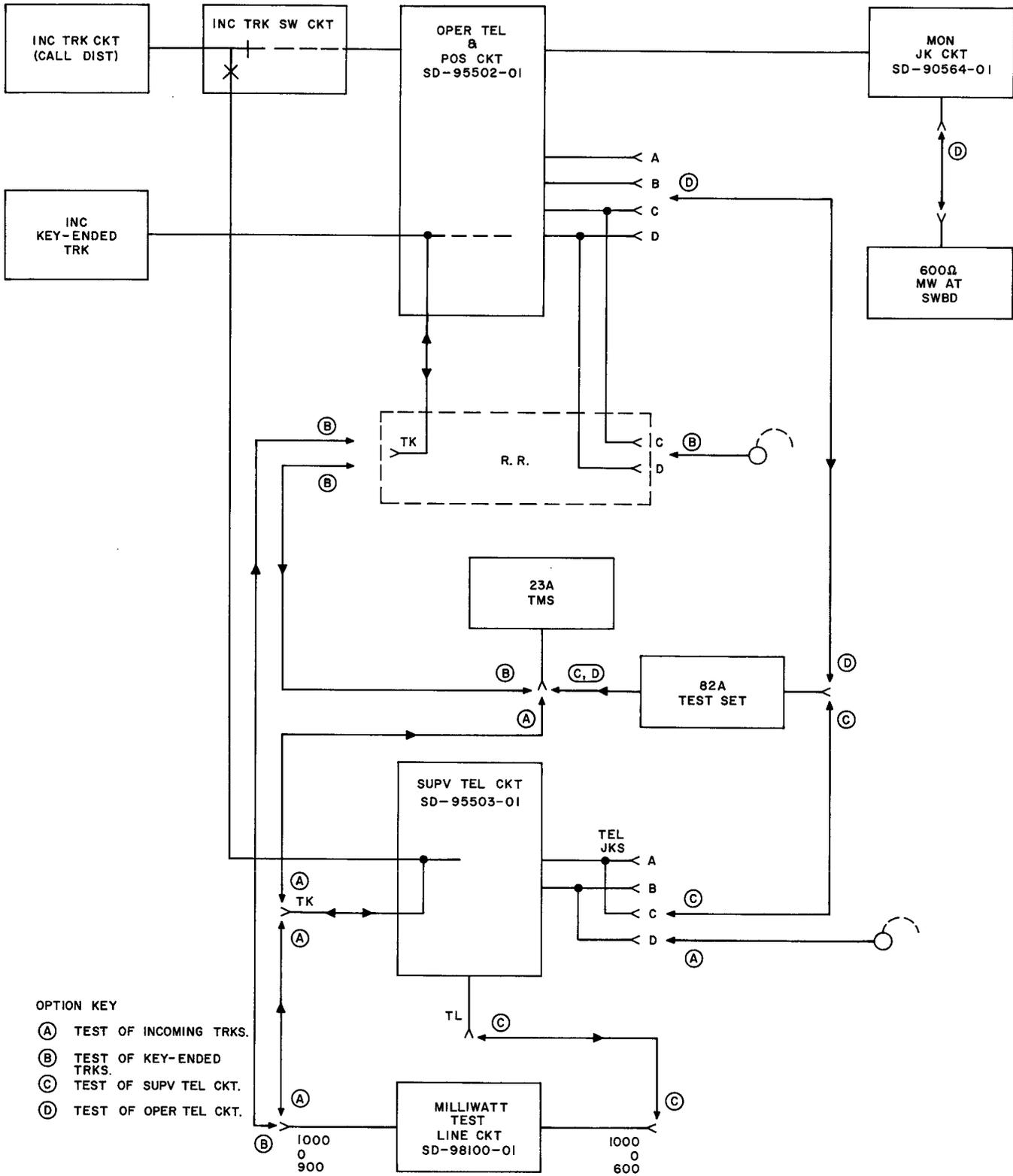


Fig. 5 — Method of Making Transmission Tests on Operating Room Desks No. 23A, B, and C When Centralized Supervisory Console is Not Furnished

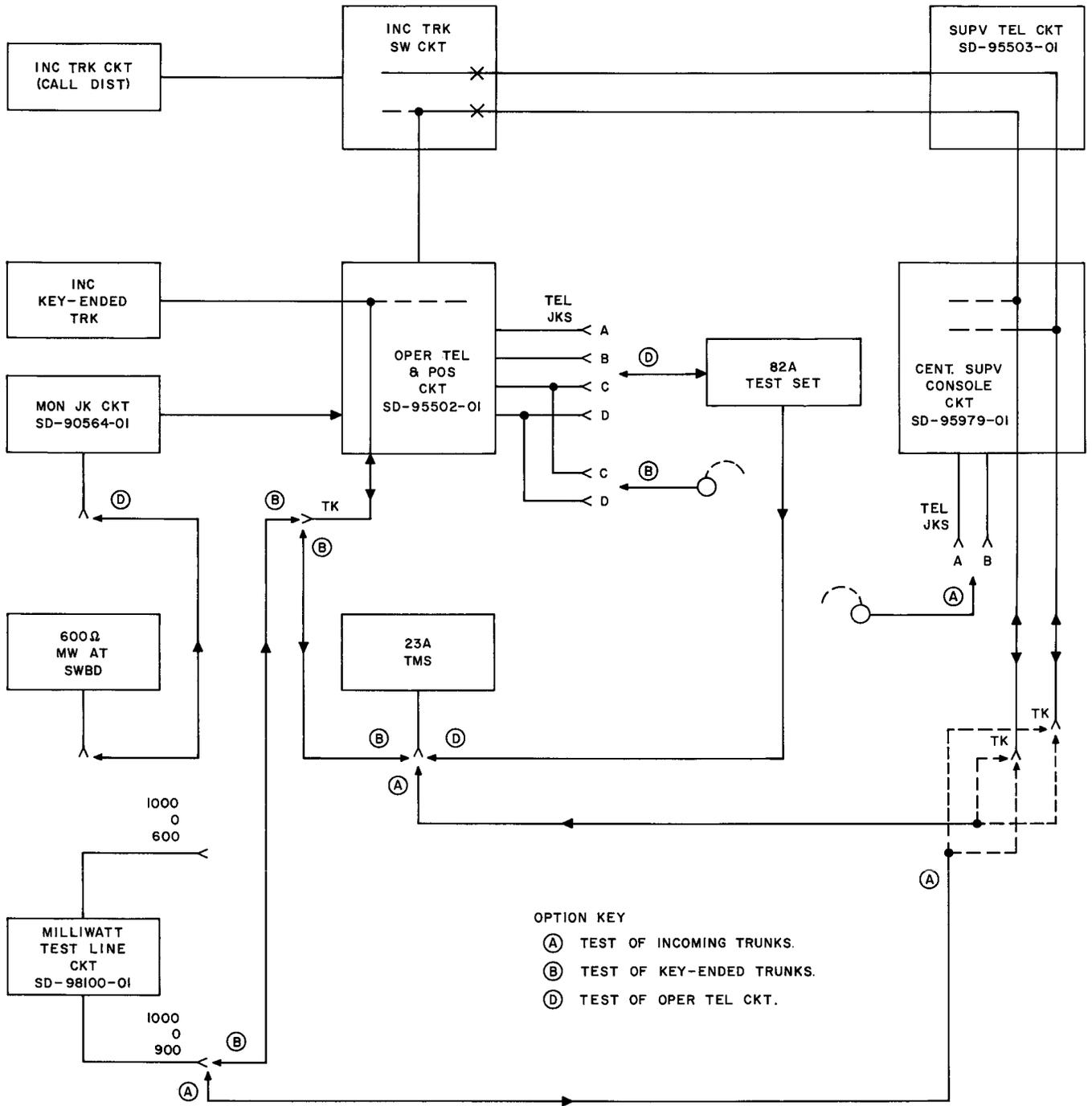
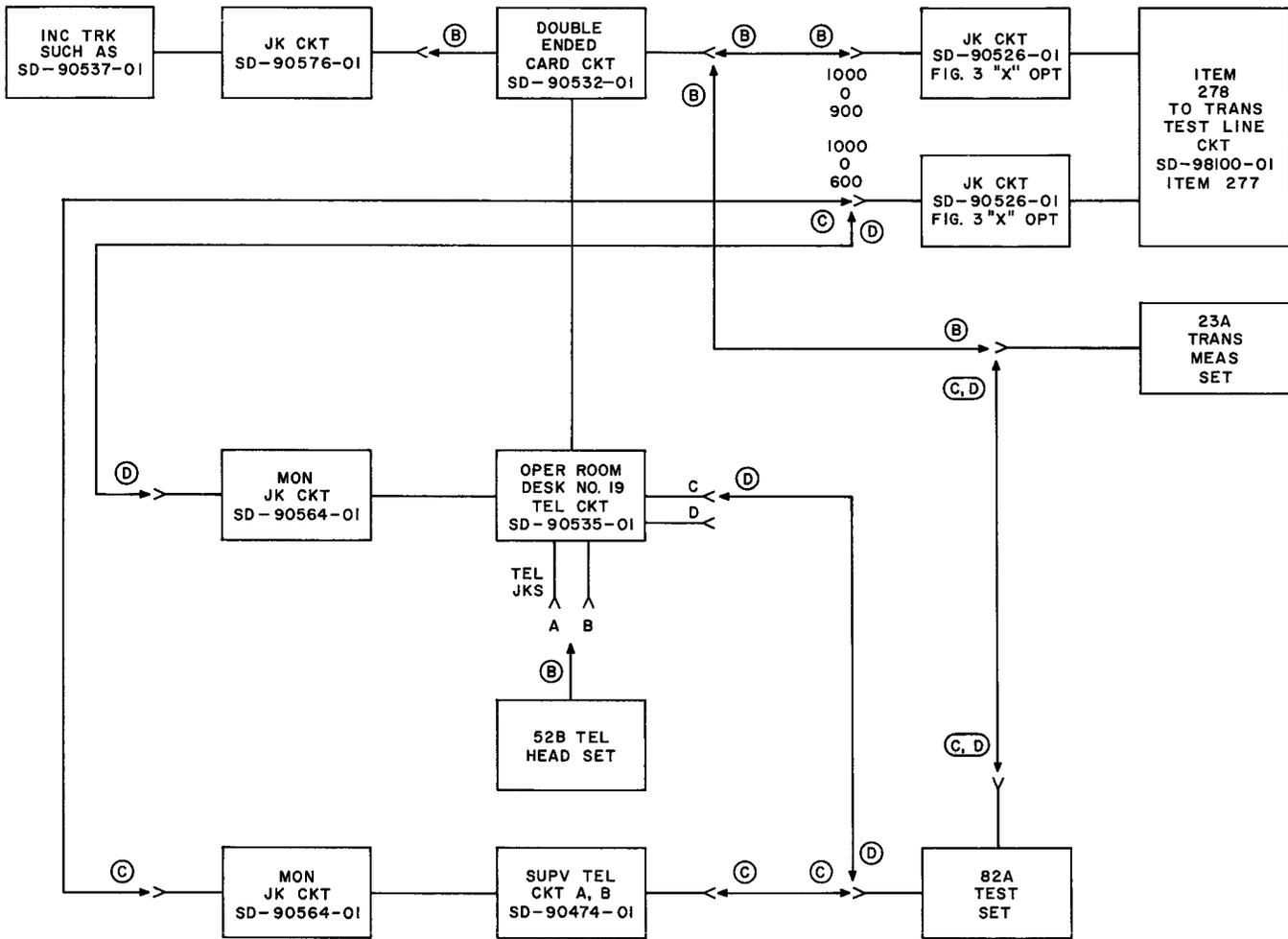


Fig. 6 — Method of Making Transmission Tests on Operating Room Desks No. 23A, B, and C When Supervisory Console is Furnished



- OPTION KEY
- ⓑ TEST OF KEY-ENDED TRKS.
 - ⓒ TEST OF SUPV TEL CKT.
 - ⓓ TEST OF OPER TEL CKT.

Fig. 7 — Method of Making Transmission Test on Operating Room Desk No. 19

TABLE A

**JACK ASSIGNMENTS FOR TRANSMISSION MEASUREMENTS
ON VARIOUS TYPE DESKS**

TEST	STEP	23 TYPE	2, 3, 4, AND 6 TYPE	7 TYPE	19 TYPE	CENT. SUPV CONSOLE	TYPE CKT
A	3	CD	AB			AB	SUPV.
	8	TK	TK			TK	
B	2	CD		CD	CD		OPER.
	7	TK		TK	See Fig. 3 and 1.13		
C	1	CD	AB		AB	AB	SUPV.
	5	TL	MON		MON	IN	
D	1	CD					
	5	MON					