

## SWITCHED DIGITAL DATA SYSTEM ACCESS LINE TURN-UP PROCEDURES

### 1. GENERAL

**1.01** This section contains the procedures to be used for verifying proper operation of complete customer circuits during initial installation.

**1.02** The activities given in this section are for use by a telephone company (telco) employee at a serving test center (STC) to coordinate turn-up of an entire customer circuit.

**1.03** The activities given in this section should be performed only after the DS-0 facilities, the SDDS 758C switch, common equipment, and the 56-kb/s repeaters (if used) are installed and verified to be operating properly. If the access line arrangement includes a 56-kb/s off-net extension, the equipment peculiar to this service must also be installed and verified to be operating properly.

### 2. TURN-UP PROCEDURES

**2.01** A customer circuit may involve either one or two STCs as shown in Fig. 1. If the circuit involves two STCs, the switched digital data system (SDDS) hub office STC, that is the STC at the switch location, is the control STC and will provide overall coordination of the turn-up procedures. The control STC has specific responsibility for turn-up of the inter-STC facilities. The second STC (local) coordinates turn-up of the circuit to the customer station. If a customer circuit involves only the STC at the switch location, then that STC is the control STC and it coordinates all turn-up procedures.

**2.02** Simplified details of the access line are shown in Fig. 2. A simplified circuit arrangement for a 56-kb/s off-net extension is illustrated in Fig. 3.

**2.03** After connection procedures are performed, the control STC verifies that acceptable error performance is achieved by placing a call from the test trunk with a loop-back at the station and

performing an error run (Table A, Step 13). The ability of the station to place a call is checked by calling the digital test line from the station and verifying that the correct call progress codes are received at the station (Table A, Step 14). Step 14, Table A, is omitted for answer-only stations.

**2.04** The activities involved in turn-up of an entire customer circuit are listed in Table A in the recommended order in which they should be performed *prior* to release of the circuit to the customer. Not all the activities in Table A are to be performed by the STC; some will be performed by the following:

- (a) The telco employee at the serving central office (SCO) or at the station

*Note:* The SCO for a station is the office containing the office channel unit (OCU) associated with that station.

- (b) The telco employee at the STC in conjunction with the telco employee at the SCO or station
- (c) The telco employee at the SCO in conjunction with the telco employee at the station
- (d) The telco employee at the STC in conjunction with the telco employee at the SDDS 758C switch.

**2.05** To prevent multiple visits to customer premises, the channel service unit (CSU) or 501A data service unit (DSU) should be installed and tested when the visit is made to the customer premises to test the local loop.

**2.06** A local loop record card (E-6528-1 through 4) should be filled out for each circuit and kept at the SCO. An example of the card and the tests associated with the card are contained in the section entitled Digital Data System—Private Line Local Loop—Tests and Requirements (314-410-510). An STC initial test record card (E-6527) should also

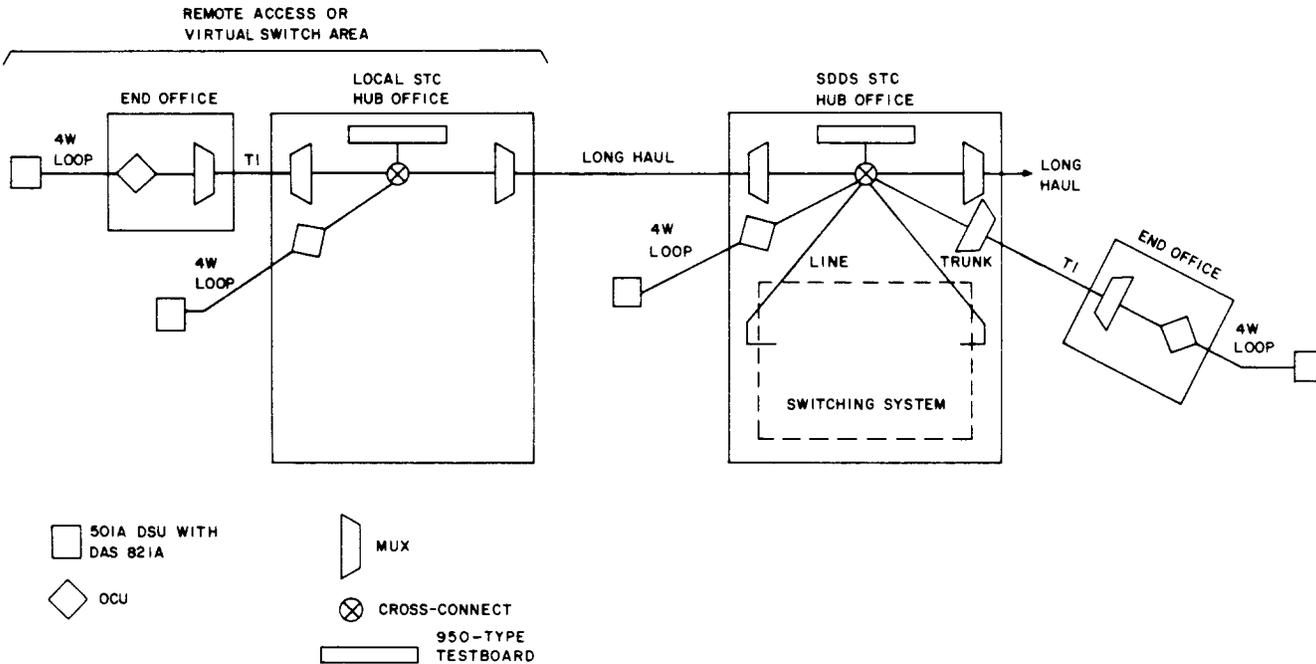


Fig. 1—SDDS Circuit Arrangement

be filled out and provided along with the circuit layout record card/circuit order layout record card (CLRC/COLR) for each circuit. This card should be located at the STC to record test results. An example of the card and the tests associated with the card are contained in the section entitled Digital Data System—Serving Test Center—Point-to-Point Private Line Circuit—Test Procedures (314-901-500).

**2.07** When a customer channel is derived from an integral subrate multiplexer (ISMX) at

an end office, designation strips are not provided for identification of the customer channel. To identify customer channels at an ISMX, it is possible to locate a locally provided designation strip on the bay frame adjacent to the ISMX shelf. The strip could then be used to correlate the test points and jack with a particular channel as shown in Tables B and C.

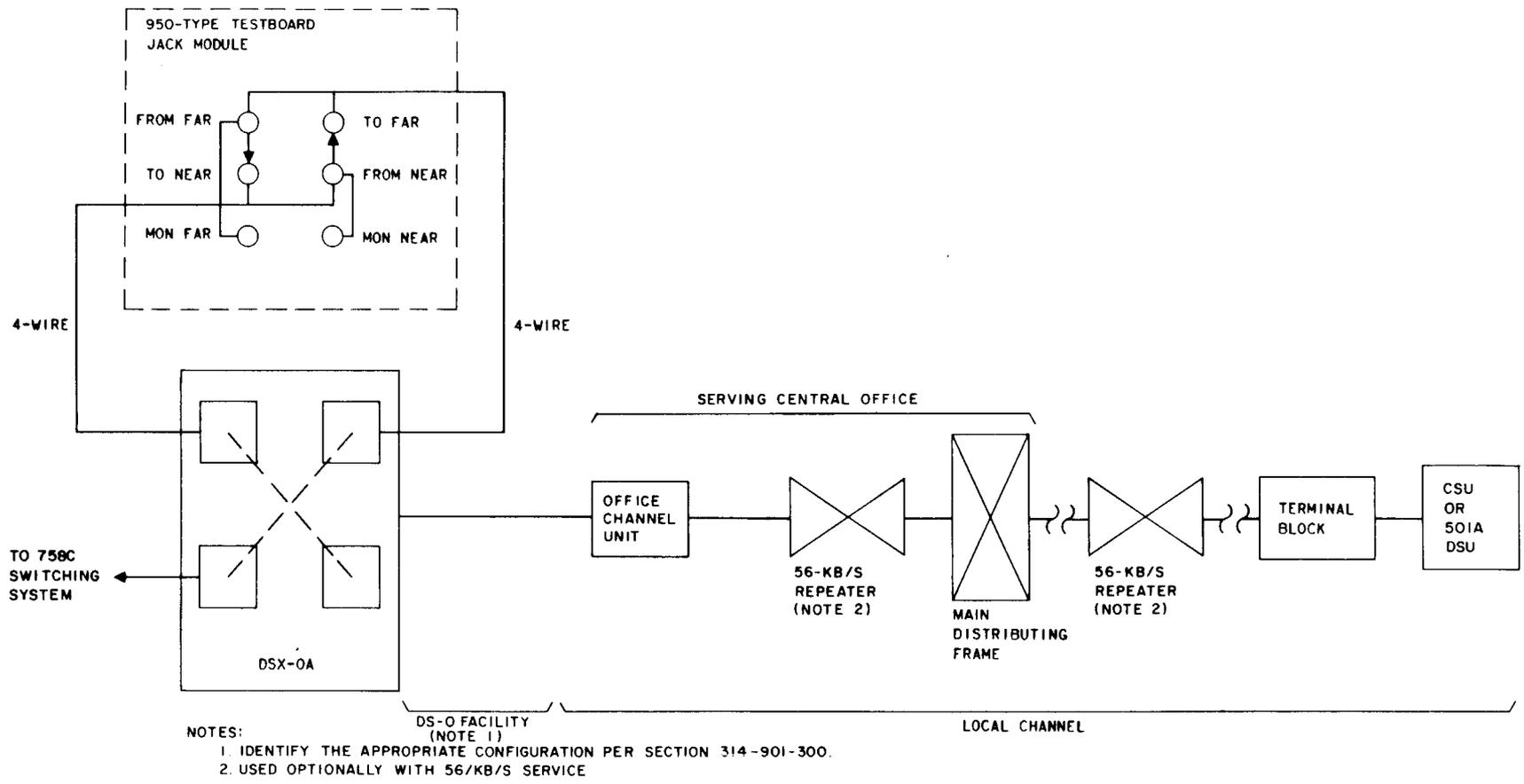


Fig. 2—Access Line

SECTION 314-901-210

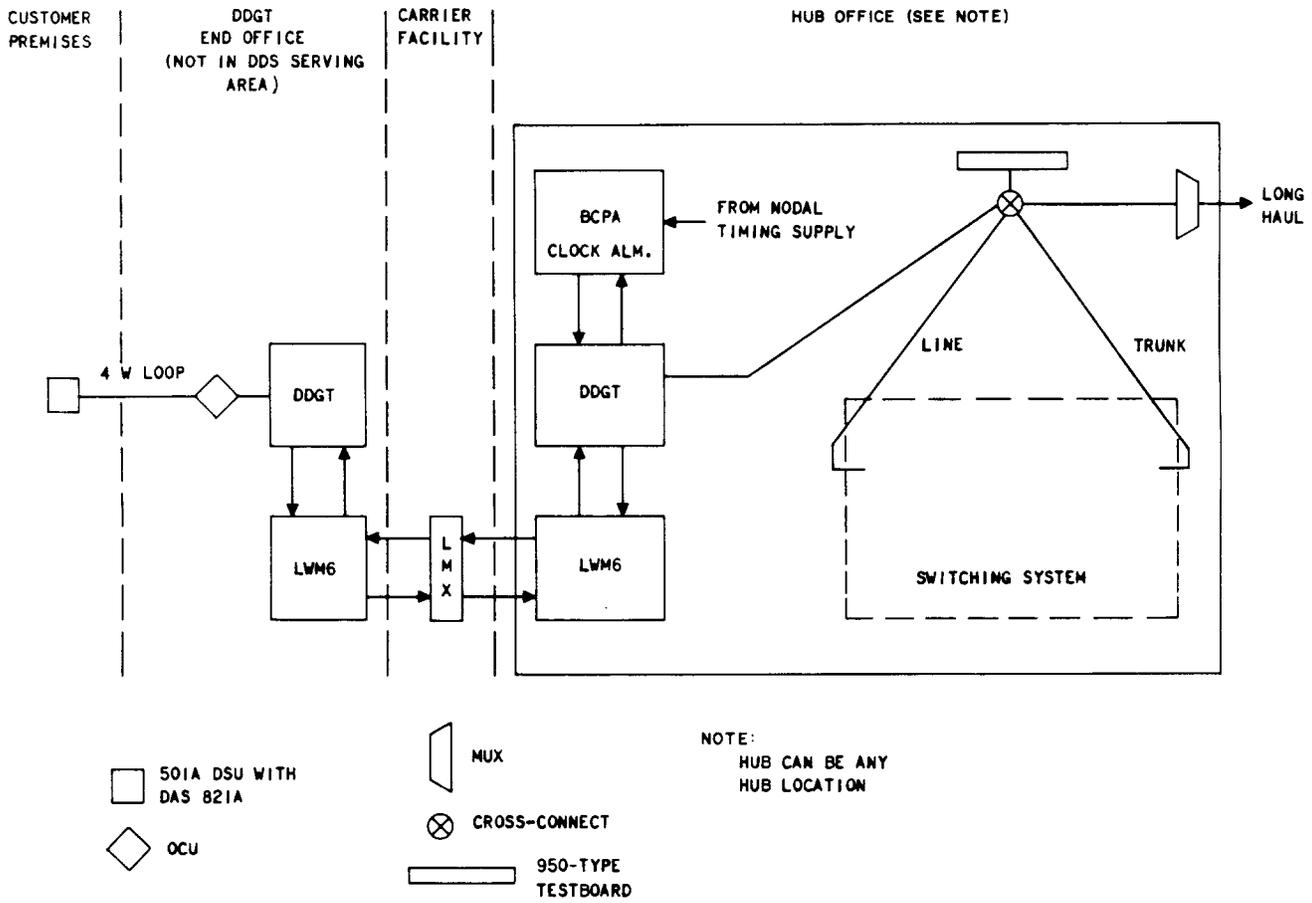


Fig. 3—56-kb/s Off-Net Extension Arrangement

**TABLE A**  
**TURN-UP PROCEDURES**

STC IN COMMAND	STEP	ACTIVITIES	LOCATION INVOLVED			BSP REFERENCE
			STC	SCO	STATION	
END, LOCAL, OR CONTROL STC	1	Service order received by telco employee at SCO and by telco installer. CLRC/COLR received by STC.	✓	✓	✓	
	2	Identify and label jack modules with customer ID at 950-type testboard, multiplexer or sub-multiplexer jack, and connector panel, if applicable.	✓	✓		666-600-101 314-970-100
CONTROL STC	3	Request that line circuit and cross-connects be installed in the switching system. Insure that correct options are installed in the line circuit.	✓			
	4	Perform test of line circuit.  Test OK: Record results Test Fails: Troubleshoot line circuit	✓ ✓ ✓			551-561-500
END, LOCAL, OR CONTROL STC	5	Physically connect required equipment at DSX-0A and DSX-0B, if applicable.	✓	✓		314-914-100 314-914-400
	6	Install and record options in the OCU and insert correct speed OCU circuit pack into proper shelf location.		✓		314-910-100
	7	Perform test of OCU.  Test OK: Record results Test Fails: Check OCU Check DS-0 STC trouble analysis	✓ ✓ ✓ ✓	✓ ✓ ✓ ✓		314-910-500  314-910-300 314-902-200 314-901-310
	8	Install jumper from OCU to local loop and check to see that correct OCU and loop are connected.		✓		

TABLE A (Cont)

## TURN-UP PROCEDURES

STC IN COMMAND	STEP	ACTIVITIES	LOCATION INVOLVED			BSP REFERENCE
			STC	SCO	STATION	
END, LOCAL, OR CONTROL STC	9	Have telco employee at customer location identify local loop pairs.		✓	✓	
	10	Perform local channel and 56-kb/s repeater tests.		✓	✓	314-410-510
		Test OK: Record results Test Fails: Check or replace loop. Check 56-kb/s repeaters.		✓ ✓	✓ ✓	314-410-310 314-920-300
	11	Install and connect CSU or Install and connect 501A DSU and DAS 821A (if used).			✓ ✓	595-100-200 595-300-200
12		Perform CSU tests.	✓		✓	595-100-500
	Test OK: Record results Test Fails: Check CSU	✓		✓ ✓	595-100-300	
	or Perform 501A DSU and DAS 821A tests.	✓		✓	595-300-500	
	Test OK: Record results Test Fails: Check 501A DSU	✓		✓ ✓	595-300-300	
CONTROL STC	13	Perform loop-back test via test trunk and perform error run.	✓			107-602-100 551-561-500
		Test OK: Record results Test Fails: Refer to troubleshooting procedures.				314-901-310
CONTROL STC	14	Inform AMARC that test call is to be made and request that AMARC monitor the line (teletype printout). Originate call from station to digital test line while monitoring with the DTSU at the 950B testboard. Verify that correct call progress codes are received by the DSTU and that AMARC has correctly recorded call details. (Omit step for answer only stations).	✓		✓	107-602-100 551-561-500 595-300-500

TABLE A (Cont)

## TURN-UP PROCEDURES

STC IN COMMAND	STEP	ACTIVITIES	LOCATION INVOLVED			BSP REFERENCE
			STC	SCO	STATION	
CONTROL STC	14 (Cont)	Test OK: Record results Test Fails: Refer to trouble- shooting procedures.				314-901-310
	15	Release circuit to customer.	✓			

TABLE B

IDENTIFICATION OF ISMX (HL8) TEST  
POINTS AND JACKS

OCU CHANNEL	TEST POINTS	TEST JACK
1	TP7 TP8	J1
2	TP9 TP10	J2
3	TP13 TP14	J3
4	TP17 TP18	J4
5	TP19 TP20	J5

TABLE C

IDENTIFICATION OF ISMX (HL 88)  
TEST POINTS AND JACKS

OCU CHANNEL	TEST POINTS	TEST JACK
1	TP17 TP18	J1
2	TP19 TP20	J2
3	TP21 TP22	J3
4	TP23 TP24	J4
5	TP25 TP26	J5
6	TP3 TP4	J6
7	TP5 TP6	J7
8	TP7 TP8	J8
9	TP9 TP10	J9
10	TP11 TP12	J10