"B" SWITCHBOARD SUPERVISOR'S TELEPHONE CIRCUITS

1. GENERAL

1.01 This section covers the detailed method to be followed in making transmission tests on "B" switchboard supervisor's telephone circuits in step-by-step offices.

1.02 Reference should be made to Section K20.01 for general testing methods and to Section K20.11 for general testing apparatus requirements.

2. TESTING METHOD

2.01 These circuits terminate in the step-by-step office on connector terminals for incoming calls to the "B" switchboard supervisor and on an answering jack at the "A" switchboard for outgoing calls.

Preliminary Connections

2.02 Provide two regular double ended patching cords equipped with 110 type plugs and two regular double ended patching cords equipped with 109 type plugs.

2.03 Connect the B-GRD (24V) jack of the auxiliary test unit to 24 volts battery and ground (battery on tip and ground on sleeve) using one of the patching cords equipped with 109 type plugs.

2.04 Connect the TMS jack of the auxiliary test unit to the sending jack of the transmission measuring set using one of the patching cords equipped with 110 type plugs.

2.05 Insert the 109 type plug of the other patching cord in the LS jack of the auxiliary test unit.

Testing Procedure

(a) Incoming Service

2.06 Figure 1 shows schematically the connections for the test.

2.07 Operate the following keys of the auxiliary test unit to the positions specified. Keys not mentioned should remain in the normal position.

Key 1 to TEST	Key 4 to MET
Key 2 to HOLD	Key 5 to BATT
Key 3 to MET	Key 7 to BATT

2.08 On the transmission measuring set connect the sending T and R terminals, re-

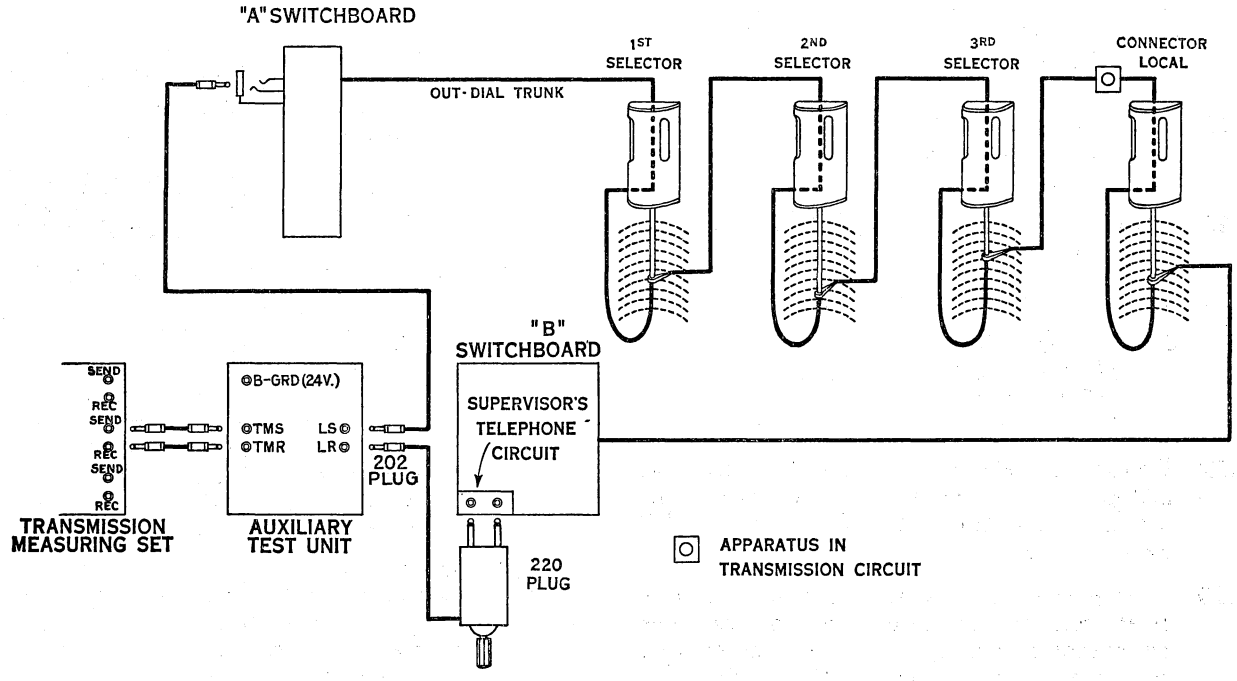

Figure 1

spectively, to the receiving T and R terminals.

Note: When a transmission measuring set of the No. 3 type is used, these connections are made through the jack contacts of the set when a dummy plug is removed from the jack other than the one to be used in this test.

2.09 Insert the 109 type plug of the patching cord connected to the LS jack of the auxiliary test unit into the jack of a dialing trunk at the "A" switchboard.

2.10 Dial the connector terminal number to which the supervisor's telephone circuit is connected.

2.11 At the "B" switchboard, after the supervisor's signal appears, insert the No. 220 plug in the supervisor's telephone set jack with the key of the plug in the normal position.

2.12 Operate key 1 of the auxiliary test unit to HOLD.

2.13 Measure the transmission loss.

Note: This is the loss of the supervisor's telephone circuit in the bridged talking condition together with the loss of a local connector circuit.

2.14 Remove the strapping between the sending T and R terminals of the transmission measuring set.

2.15 Connect the TMR jack of the auxiliary test unit to the receiving jack of the transmission measuring set, using one of the patching cords equipped with 110 type plugs.

2.16 Insert the No. 202 plug associated with the No. 220 plug in the LR jack of the auxiliary test unit.

2.17 Operate the key of the No. 220 plug to the T position.

2.18 Measure the transmission loss.

Note: This will be the loss of the supervisor's telephone circuit in the transmitting condition, together with the loss of a local connector circuit.

2.19 Release the circuit by removing the No. 220 plug from the supervisor's telephone set jack and then the cord at the "A" switchboard.

2.20 Where the "B" switchboard supervisor's telephone circuit terminates on another connector terminal, it will be necessary to test the circuit in conjunction with this terminal.

2.21 In order to "make-busy" the first terminal which has been included in the above tests, dialing should be repeated using a special service switchboard cord circuit at the "A" switchboard and leaving the cord circuit inserted in the switchboard jack while dialing from the auxiliary test unit to select the second connector terminal.

2.22 Repeat paragraphs 2.07 to 2.11, inclusive.

2.23 Operate the TBL key at the "B" switchboard.

Note: This will connect the supervisor's telephone circuit to the second connector terminal.

2.24 Repeat the above testing procedure as outlined in paragraphs 2.12 to 2.19, inclusive.

(b) Outgoing Service

2.25 Figure 2 shows schematically the connections for the test.

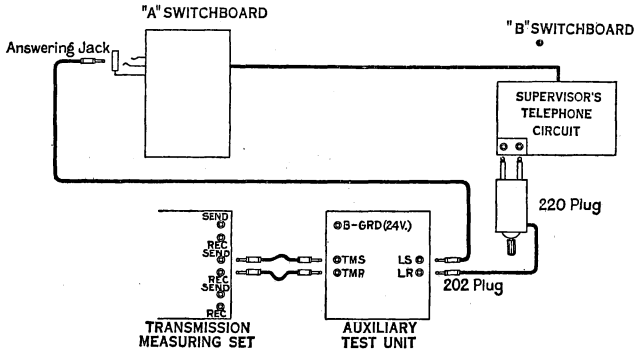

Figure 2

2.26 Operate the following keys of the auxiliary test unit to the positions specified. Keys not mentioned should remain in normal position.

Key 1 to HOLD	Key 4 to MET
Key 2 to HOLD	Key 5 to BATT
Key 3 to MET	Key 7 to BATT

2.27 On the transmission measuring set, connect the sending T and R terminals, respectively, to the receiving T and R terminals.

Note: When a transmission measuring set of the No. 3 type is used, these connections are made through the jack contacts of the set when a dummy plug is removed from a jack other than the one to be used in this test.

2.28 Insert the 109 type plug of the patching cord connected to the LS jack of the auxiliary test unit into the answering jack at the "A" switchboard on which the "B" switchboard supervisor's telephone circuit terminates.

2.29 At the "B" switchboard, insert the No. 220 plug in the supervisor's telephone set jack with the key of the plug in the normal position.

2.30 On "B" switchboards equipped with an OPR key, operate this key.

2.31 Measure the transmission loss.

Note: This is the loss of the supervisor's telephone circuit in the bridged talking condition.

2.32 Remove the strapping between the sending and receiving T and R terminals of the transmission measuring set.

2.33 Connect the TMR jack of the auxiliary test unit to the receiving jack of the transmission measuring set, using one of the patching cords equipped with 110 type plugs.

2.34 Insert the No. 202 type plug associated with the No. 220 plug in the LR jack of the auxiliary test unit.

2.35 Operate the key of the No. 220 plug to the T position.

2.36 On "B" switchboards equipped with an OPR key, operate this key.

2.37 Measure the transmission loss.

Note: This will be the loss of the supervisor's telephone circuit in the transmitting condition.

2.38 Release the circuit by removing the No. 220 plug from the supervisor's telephone set jack and then the plug of the cord from the answering jack at the "A" switchboard.