INFORMATION DESK CIRCUITS

1. GENERAL

1.01 This section covers the detailed methods to be followed in making transmission tests on information desk circuits in step-by-step offices.

1.02 Information covered in this section of practices is outlined in the following table:

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

2. CORD CIRCUITS AND ASSOCIATED OPERATOR'S TELEPHONE CIRCUITS

(a) Cord Circuits

2.01 These circuits are tested in conjunction with the associated telephone circuit.

(b) Telephone Circuits

2.02 Figure 1 shows schematically the connections for the test.

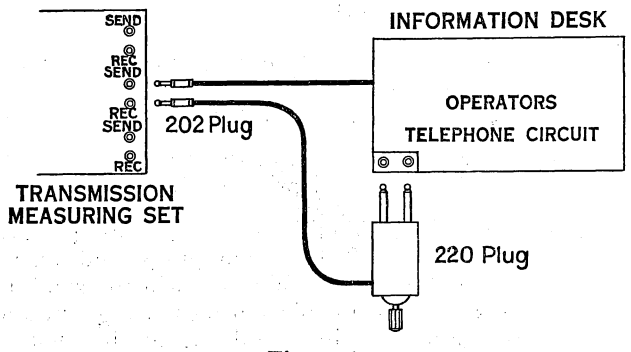

Figure 1

2.03 Insert the No. 220 plug in the telephone set jacks associated with the information desk position under test with the key of the plug in the T position.

2.04 Insert the No. 202 plug associated with the No. 220 plug in the receiving jack of the transmission measuring set.

2.05 Insert the single ended cord circuit of the information desk position in the sending jack of the transmission measuring set.

2.06 Operate the key associated with the information desk position to connect the telephone circuit across the cord circuit.

2.07 With the measuring set in the measuring condition perform the operations outlined in paragraphs 2.08, 2.09 and 2.10.

2.08 Rotate the plug of the cord circuit slowly in the test jack to detect cutouts due to a defective or dirty plug.

2.09 Test the cord for cutouts by holding the plug firmly in the jack and rotating the cord slowly with a cranking motion.

2.10 Test all keys associated with the cord circuit for cutouts in the normal and operated position (except ringing and flashing keys in the operated position) by tapping the key tops lightly and moving the levers slightly forward and backward while exerting a reasonable pressure to the left and right to take up any play or side lash.

2.11 Measure the transmission loss.

Note: This is the loss of the telephone circuit in the transmitting condition.

2.12 Operate the key of the No. 220 plug to the normal position.

2.13 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.

2.14 Measure the transmission loss.

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

2.15 To test the bridged retardation coil and condenser used in the operator's telephone circuit in conjunction with the information trunks, follow the procedure outlined below.

2.16 The test of this equipment should be made from a jack in the trunk multiple, preferably one which is connected to a spare trunk key on the position, otherwise it will be necessary to "make busy" a trunk at the step-by-step office and remove the tip and ring jumpers from the key side of the trunk at the connecting block inside of the information desk.

2.17 The auxiliary test unit will be required in connection with this testing work.

2.18 Figure 2 shows schematically the connections for the test.

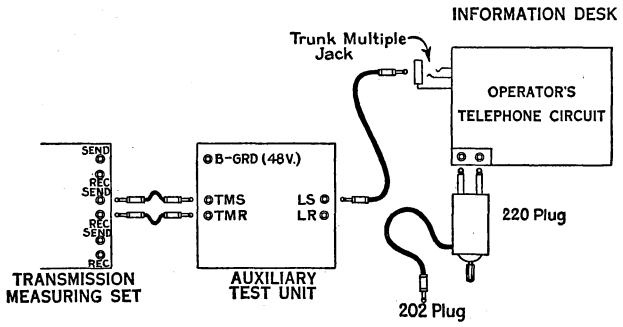

Figure 2

2.19 Provide two regular double ended patching cords, one equipped with 110 type plugs and the other equipped with plugs of a type suited to the jacks of the information desk.

2.20 Connect the sending jack of the transmission measuring set to the TMS jack of the auxiliary test unit and the LS jack of the auxiliary test unit to the trunk jack to be used in connection with the test.

2.21 Connect the B-GRD (48V) jack of the auxiliary test unit to 48 volt battery and ground (battery on tip and ground on sleeve) using the patching cord equipped with 110 type jacks.

Note: This battery and ground may be obtained from any source convenient to the location of the testing apparatus.

2.22 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.

2.23 Operate key 1 of the auxiliary test unit to HOLD. Other keys should remain in the normal position.

2.24 Insert the No. 220 plug in the operator's telephone set jack of the position under test with the key of the plug in the normal position.

2.25 Operate the information desk key associated with the trunk used in the test to the talking position.

2.26 Measure the transmission loss.

Note: This is the loss of the operator's telephone circuit in the bridged talking condition and the condenser retardation coil equipment.

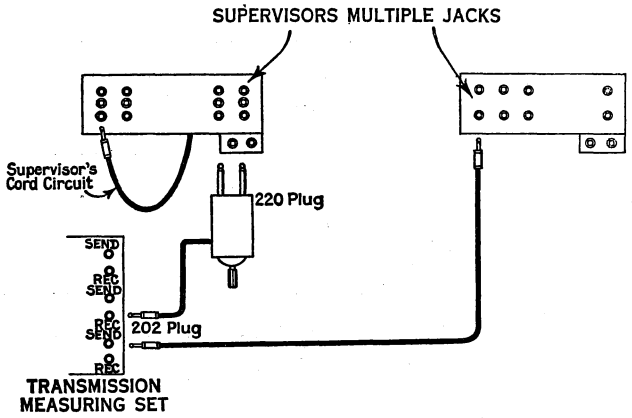

Figure 3

3. SUPERVISOR'S SINGLE-ENDED CORD CIRCUITS AND ASSOCIATED TELEPHONE CIRCUITS

(a) Cord Circuit

3.01 These circuits are tested in conjunction with the associated telephone circuit.

(b) Telephone Circuit

3.02 Figure 3 shows schematically the connections for the test.

3.03 Insert the No. 220 plug in the supervisor's telephone set jacks with the key of the plug in the T position.

3.04 Insert the No. 202 plug associated with the No. 220 plug in the receiving jack of the transmission measuring set.

3.05 Insert the plug of the supervisor's cord circuit in a supervisor's multiple jack.

3.06 Provide a double-ended patching cord equipped with 109 type plugs and insert one end of the patching cord in the sending jack of the transmission measuring set, and the other end in a multiple of the jack to which the supervisor's cord is connected in accordance with paragraph 3.05.

3.07 With the transmission measuring set in the measuring condition, rotate the plug

of the cord circuit slowly in the multiple jack to detect cutouts due to a defective or dirty plug and test the cord for cutouts by holding the plug firmly in the jack and rotating the cord slowly with a cranking motion.

3.08 Measure the transmission loss.

Note: This is the loss of the telephone circuit in the transmitting condition.

3.09 Restore the key of the No. 220 plug to the normal position.

3.10 Remove the No. 202 plug associated with the No. 220 plug from the receiving jack of the transmission measuring set.

3.11 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.

3.12 Measure the transmission loss.

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