

CONFERENCE CIRCUIT

TELETYPEWRITER SWITCHBOARDS NOS. 3 AND 3A

1. GENERAL

1.01 This section describes a method for making tests of the conference circuit and associated single line repeater used in teletypewriter switchboards Nos. 3 and 3A. The tests are as follows:

- (A) Busy Test of Conference Circuit Arranged for Use with Patching Cords
- (B) Operation Test of Conference Circuit Arranged for use with Patching Cords
- (C) Supervisory Lamp Test of Conference Circuit Arranged for Use with Switchboard Cords
- (D) Operation Test of Conference Circuit Arranged for Use with Switchboard Cords

1.02 Tests (B) and (D) require two persons one located at the test board and the other at the switchboard, usually an operator.

2. APPARATUS

2.01 No special testing apparatus is required. However in performing tests (B) and (C) a P3E Cord is specified which is normally provided as a part of the teletypewriter switchboards Nos. 3 and 3A.

3. METHOD

(A) Busy Test of Conference Circuit Arranged for Use with Patching Cords

3.01 At the Switchboard: Operate the typing key of an idle cord circuit to the rear position and touch the tip of the calling plug of the cord circuit to the sleeve of the jack in the first branch of the conference circuit to be tested. If the circuit is idle, the busy test lamp of the position circuit should not light, in which case, insert the calling plug into the first jack.

3.02 With the tip of a calling plug of another idle cord circuit and the typing key operated to the rear position, touch the jack sleeve of the second branch of the conference circuit under test. The position busy test lamp should light.

3.03 Repeat the test in 3.02 on the jack of each successive branch of the conference circuit under test until every branch has been tested for a busy indication.

3.04 Remove the plug from the first jack.

(B) Operation Test of Conference Circuit Arranged for Use with Patching Cords

3.05 At the Test Board: Connect the test board teletypewriter to the REC & TRK and SEND jacks of the testing and two-way trunk circuit.

3.06 At the Switchboard: The busy lamp, where provided, and the ANS lamp associated with the testing and two-way trunk circuit should light. Insert the calling plug of an idle cord circuit into the jack of the first branch of the conference circuit after determining that the circuit is idle and insert the answering plug of the same cord circuit into the CALL TEST jack of the testing and two-way trunk circuit. Connect the jack of the second branch of the conference circuit under test to the TRK jack of the testing and two-way trunk circuit, using a P3E cord. The ANS lamp associated with the testing and two-way trunk circuit should be extinguished.

3.07 At the Test Board: Operate the test board attendant's teletypewriter on a full duplex basis, transmitting signals over the SEND jack and receiving signals from the REC & TRK jack of the testing and two-way trunk circuit. Note that the signals are transmitted satisfactorily.

3.08 Repeat 3.07 with the RCL & REV key of the testing and two-way trunk circuit operated so as to reverse the direction of transmission through the conference circuit.

3.09 Restore the RCL & REV key of the testing and two-way trunk circuit to normal. Remove the plug of the cord from the SEND jack of the testing and two-way trunk circuit. Again operate and then restore the RCL & REV key.

3.10 At the Switchboard: The cord circuit supervisory lamp of the cord associated with the CALL TEST jack should flash and the conference circuit supervisory lamp, where provided, should flash. Momentarily operate the recall release key of the associated cord circuit. The supervisory lamp or lamps should be extinguished. Remove the plug of the P3E cord from the jack of the conference circuit and insert it into the jack of the next branch to be tested.

3.11 At the Test Board: Insert the plug of the cord into the SEND jack and repeat the test as outlined above.

3.12 After completing the test of all branches of the conference circuit, disconnect the test board teletypewriter from the testing and two-way trunk circuit.

3.13 At the Switchboard: The cord supervisory lamp and the conference circuit supervisory lamp, where provided, should light. Upon the receipt of the disconnect signal, the person at the switchboard should disconnect all cords from the conference and testing and two-way trunk circuit. The cord supervisory lamp, the conference circuit supervisory lamp, where provided, and the busy lamp associated with the testing and two-way trunk circuit, where provided, should be extinguished.

(C) Supervisory Lamp Test of Conference Circuit Arranged for Use with Switchboard Cords

3.14 At the Switchboard: Operate the typing key of an idle cord circuit to the rear position and touch the tip of the calling plug of the cord circuit to the sleeve of the jack in the first branch of the conference circuit to be tested. If the circuit is idle, the busy test lamp of the position circuit should not light in which case insert the calling plug into the first jack.

3.15 Connect in turn the ring of each jack associated with the supervisory lamp to be tested to ground. This may be accomplished by inserting a plug of the P3E cord into the CALL TEST jack of the testing and two-way trunk circuit, providing that it is idle, and inserting the other plug of this cord into each jack under test. The associated supervisory lamp should light. Remove the plug from the jack. The supervisory lamp should be extinguished.

3.16 After completing the test on all jacks of the conference circuit, disconnect the P3E cord from the testing and two-way trunk circuit.

(D) Operation Test of Conference Circuit Arranged for Use with Switchboard Cords

3.17 At the Test Board: Connect the test board teletypewriter to the REC & TRK and SEND jacks of the testing and two-way trunk circuit.

3.18 At the Switchboard: The busy lamp, where provided, and the ANS lamp associated with the testing and two-way trunk circuit should light. Insert the calling plug of an idle cord circuit into the jack of the first branch of the conference circuit after determining that the circuit is idle. The busy lamp associated with the conference circuit, where provided, should light. Insert the answering plug of the

same cord circuit into the CALL TEST jack of the testing and two-way trunk circuit.

3.19 Connect the jack of the second branch of the conference circuit under test to the TRK jack of the testing and two-way trunk circuit, using an idle cord circuit. The ANS lamp associated with the testing and two-way trunk circuit should be extinguished.

3.20 At the Test Board: Operate the test board attendant's teletypewriter on a full duplex basis, transmitting signals over the SEND jack and receiving signals from the REC & TRK jack of the testing and two-way trunk circuit. Note that the signals are transmitted satisfactorily.

3.21 Repeat 3.20 with the RCL & REV key of the testing and two-way trunk circuit operated so as to reverse the direction of transmission through the conference circuit.

3.22 Restore the RCL & REV key of the testing and two-way trunk circuit to normal. Remove the plug of the cord from the SEND jack of the testing and two-way trunk circuit. Again operate and then restore the RCL & REV key.

3.23 At the Switchboard: The cord supervisory lamps of the cords associated with the CALL TEST and TRK jacks should flash. Momentarily operate the recall release key associated with the cord circuits. The supervisory lamps should be extinguished. Remove the plug of the cord circuit from the jack of the second branch and insert the plug of the cord circuit into the jack of the next branch to be tested.

3.24 At the Test Board: Insert the plug of the cord into the SEND jack and repeat the test as outlined above.

3.25 After completing the test of all branches of the conference circuit, disconnect the test board teletypewriter from the testing and two-way trunk circuit.

3.26 At the Switchboard: The cord supervisory lamps of the cords associated with the CALL TEST and TRK jacks should light. Upon the receipt of the disconnect signal, the person at the switchboard should disconnect all cords from the conference and testing and two-way trunk circuit. The cord circuit supervisory lamps and busy lamps associated with the conference and testing and two-way trunk, where provided should be extinguished.

4. REPORTS

4.01 The required record of these tests should be entered on the proper form.