OUTGOING TRUNKS TO MANUAL TANDEM OFFICE NO. 1 OFFICE

1. GENERAL

1.01 This section describes methods of testing trunks outgoing to a manual tandem office from a No. 1 switchboard. The following tests are covered:

(A) Operation Test - With Outgoing Trunk Test Circuit.

(B) Operation Test - Without Outgoing Trunk Test Circuit.

1.02 These tests are performed on a one person basis. However, the assistance of an operator is required at the tandem switchboard and at the "B" switchboard in a terminating office in order to establish connections to certain test equipment.

1.03 Test (A) should be made in those offices where the outgoing trunk test circuit has been provided. Test (B) should be made only in those offices where the outgoing trunk test circuit has not been provided.

2. APPARATUS

Test (A)

2.01 Outgoing Trunk Test Circuit per SD-12527-01.

2.02 Operator's Telephone Set.

2.03 No. P3D Cord, equipped with No. 109 Plugs, (J99213A-L3).

Test (B)

2.04 Operator's Telephone Set.

3. METHOD

(A) Operation Test - With Outgoing Trunk Test Circuit

3.01 Connect the operator's telephone set to the position from which the tests are to be made. It is preferable that the position selected be in the section of the switchboard with which the last appearance of the outgoing trunk multiple is associated.

3.02 Insert a calling cord plug, with the associated listening key operated, into the (LIST) jack of the outgoing trunk test circuit.

3.03 Insert one plug of the No. P3D cord into the (TEST) jack of the outgoing trunk test circuit. After making the usual busy test, insert the other plug of the cord into the jack of the outgoing trunk circuit to be tested and observe that the cord circuit supervisory lamp does not light.

3.04 On being connected with the tandem operator, as indicated by the receipt of triple order tone, request that the trunk be connected to "Tandem Test."

Note: The circuit used in this connection appears in the OGT multiple of the tandem switchboard and is designated (TAN. TST.). The circuit terminates in a regular tandem incoming selector circuit at a distant panel office. It is considered, however, as part of the testing arrangement.

3.05 On receipt of double order tone, which should be heard after the connection has been established by the tandem operator, as outlined in 3.04, request the "B" operator at the terminating office to complete the connection to the automatic test line circuit. Subscriber multiple number 0710 is used for establishing this connection.

3.06 An audible ringing signal should be heard during at least one ringing interval. The tandem incoming selector circuit at the terminating office, used as part of the test arrangement, will then be automatically tested for premature tripping and for tripping of the ringing. However, these functions are incidental to the test being made and, should difficulty be experienced in this connection, the failure should be considered as test circuit trouble which should be investigated and cleared before proceeding further with the test.

Note: If interrupted ringing induction is heard on the connection, it indicates that the trip relay of the tandem incoming selector circuit at the terminating office has operated prematurely. If steady ringing induction continues on the connection, it indicates that the trip relay has failed to operate.

3.07 If the trunk under test responds satisfactorily to a series of flashes applied to the supervisory relay of the tandem incoming selector circuit at the terminating office by the automatic test line circuit, the outgoing trunk test circuit will function and cause the cord circuit supervisory lamp to light.

3.08 Should the trunk circuit fail on the test, the cord circuit supervisory lamp will not light, but a "tick-tock" tone will be heard on the trunk, indicating that the automatic test line circuit in the terminating office has completed the test.

Note: After ringing has been tripped on the tandem incoming selector circuit, it would be well to restore the listening key in order to eliminate the interruptions which would otherwise be heard. If the cord circuit supervisory lamp does not light, the listening key should be operated to check for the "tick-tock" signal. Failure of the cord circuit supervisory lamp to light on consecutive trunks being tested, may indicate trouble on the supervisory relay of the tandem incoming selector or in the automatic test line at the terminating office, which should be investigated and cleared before proceeding further with the test.

3.09 When the test of the trunk is completed, disconnect by removing the plug from the outgoing trunk jack.

(B) Operation Test - Without Outgoing Trunk Test Circuit

3.10 Connect the operator's telephone set to the position from which the tests are to be made. It is preferable that the position selected be in the section of the switchboard with which the last appearance of the outgoing trunk multiple is connected.

3.11 After making the usual busy test, insert a calling cord plug with the associated listening key operated, into the jack of the outgoing trunk circuit to be tested. The cord supervisory lamp should be lighted. In order that the test results will be reliable, the "A" cord circuit selected for making the test should be known to be in good condition.

3.12 Proceed as outlined in 3.04 to 3.06, inclusive. If the trunk under test then responds satisfactorily, two series of flashes should be received on the cord circuit supervisory lamp, as follows: The cord circuit supervisory lamp will be extinguished, followed by three flashes, again become extinguished, followed by two flashes and then light steadily. These flashes should be distinct and at the rate of approximately two times per second. The number and regularity of these flashes should be observed in order to determine that the supervisory feature of the trunk under test is responding correctly. "Tick-tock" tone will be heard on the trunk after the automatic test line circuit in the terminating office has completed the test.

Note: After ringing has been tripped on the tandem incoming selector circuit, it would be well to restore the listening key in order to eliminate the interruptions which would otherwise be heard. If the cord circuit supervisory lamp does not indicate the two series of flashes, the listening key should be operated to check for the "tick-tock" signal. Failure of the cord circuit supervisory lamp to flash on consecutive trunks being tested, may indicate trouble on the supervisory relay of the tandem incoming selector or in the automatic test line circuit in the terminating office, which should be investigated and cleared before proceeding further with the test.

3.13 When the test of the trunk is completed, disconnect by removing the plug from the outgoing trunk jack.

4. REPORTS

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