INTEROFFICE TRUNK CIRCUITS

TELETYPEWRITER SWITCHBOARD NO. 1

1. GENERAL

1.01 This section describes tests of the interoffice trunk circuits associated with the teletypewriter switchboard No. 1. These tests are made at the No. 15 test board. The tests are as follows:

(A) Overall Operation Test of Interoffice Trunks

(B) Operation Test of Interoffice Trunk Exclusive of Relay Equipment

(C) Voltmeter Test

1.02 This section has been issued to cover the information which has previously been included in Section A312.805 which this section replaces. The title has been changed from "Toll Lines" to that shown, in order to agree with the latest nomenclature.

1.03 Tests (A) and (B) require two persons, one at the No. 15 test board and one at the distant office, usually an operator.

2. APPARATUS

2.01 No special testing apparatus is required.

3. METHODS

(A) Overall Operation Test of Interoffice Trunks

3.01 Connections: Request the trouble operator to connect a toll line testing trunk to the circuit to be tested. The guard lamp at the test board associated with the testing trunk should light when the plug of the trunk at the switchboard is inserted into the jack of the circuit to be tested.

Note: Should a distant operator on the circuit under test originate a call, the ANS lamp associated with the testing trunk will light.

3.02 Insert the plug of the OVERALL LINE TST-B cord into the jack of the testing trunk. If, while the plug is being inserted, the tip of the plug touches the sleeve of the jack, the B lamp will flash. Momentarily operate the TTY ON CORD key. The B lamp will be extinguished.

3.03 Transmitting a Calling Signal: Operate the TTY ON CORD key and then operate the RING key for approximately 2 seconds to originate a call.

3.04 Transmitting Teletypewriter Signals: When the distant operator answers the call, signals should be received on the test board attendant's teletypewriter indicating that the distant operator is on the trunk. Inform the operator that this is a test call and to report any irregularities in the operation of the circuit.

3.05 Receiving a Recall Signal (Circuits Not Arranged for Flashing Recall): Request the distant office to send a recall signal. After approximately 10 seconds the B lamp at the test board should light. Operate momentarily the CORD ON STA key. The B lamp should be extinguished.

3.06 Receiving a Recall Signal (Circuits Arranged for Flashing Recall): Request the distant office to send a recall signal, then restore the TTY ON CORD key at the test board. After approximately 7 seconds the B lamp should flash. Operate the TTY ON CORD key. The B lamp should be extinguished.

3.07 Transmitting a Disconnect Signal: After requesting the distant office to disconnect and to call back on the circuit when a disconnect signal is received, restore the TTY ON CORD key and operate the DISC key associated with the testing trunk. After approximately 10 seconds the B lamp will light. When the distant office disconnects, the B lamp should flash. Remove the plug of the OVERALL LINE TST-B cord from the jack of the testing trunk and operate the TTY ON CORD key momentarily. The B lamp should be extinguished.

3.08 Receiving a Calling Signal: When the distant operator calls back, the ANS lamp associated with the testing trunk should light when the call is originated from the distant office. Insert the plug of the OVERALL LINE TST-B cord into the jack of the testing trunk and operate the TTY ON CORD key. The ANS lamp will be extinguished. Communicate with the distant office and advise that a recall signal will be sent on the circuit under test.

3.09 Transmitting a Recall Signal (Circuits Not Arranged for Flashing Recall): Operate the UNATT RECALL DISC key for approximately 1 second. After approximately 10 seconds the B lamp at the test board should light. Operate momentarily the CORD ON STA key. The B lamp should be extinguished.

3.10 Transmitting a Recall Signal (Circuits Arranged for Flashing Recall): Operate the UNATT RECALL DISC key for approximately 1 second and restore the TTY ON CORD key. After approximately 7 seconds the B lamp at the test board should flash. Operate the TTY ON CORD key. The B lamp should be extinguished.

3.11 Receiving a Disconnect Signal: Request that a disconnect signal be sent from the distant office and inform the distant office that this completes the test. After approximately 10 seconds the B

lamp should light. Remove the plug of the OVERALL LINE TST-B cord from the jack of the testing trunk and restore all keys to normal. The B lamp should be extinguished.

3.12 Disconnection: Unless proceeding with other tests requiring the same setup, remove all test connections.

(B) Operation Test of Interoffice Trunk Exclusive of Relay Equipment

3.13 Connections: Request the trouble operator to connect a toll line testing trunk to the circuit to be tested. The guard lamp associated with the testing trunk will light when the plug of the trunk at the switchboard is inserted into the jack of the circuit to be tested.

Note: Should a distant operator on the circuit under test originate a call, the ANS lamp associated with the testing trunk will light.

3.14 Operate the CORD ON TOLL key and insert the plug of the TOLL LINE TST-C cord into the TGL jack of the circuit under test. The B lamp will flash. Insert the plug of the TOLL LINE REL TST-E cord into the TTY SWBD jack of the same circuit under test in order to keep the switchboard side of the circuit closed.

3.15 Transmitting a Calling Signal: Operate the TTY ON CORD key and then operate the RING key for approximately 2 seconds to originate a call. The B lamp should be extinguished.

3.16 Transmitting Teletypewriter Signals: When the distant operator answers the call, signals should be received on the test board attendant's teletypewriter indicating that the distant operator is on the trunk. Inform the operator that this is a test call and to report any irregularities in the operation of the circuit.

3.17 Receiving a Recall Signal (Circuits Not Arranged for Flashing Recall): Request the distant office to send a recall signal. After approximately 10 seconds the B lamp at the test board should light. Restore momentarily the CORD ON TOLL key. The B lamp should be extinguished.

3.18 Receiving a Recall Signal (Circuits Arranged for Flashing Recall): Request the distant office to send a recall signal. After approximately 7 seconds the B lamp should flash. Operate the TTY ON CORD key. The B lamp should be extinguished.

3.19 Transmitting a Disconnect Signal: After requesting the distant office to call back on the circuit when a disconnect signal is received, restore the TTY ON CORD key and operate the UNATT RECALL DISC key for approximately 1 second and immediately restore the CORD ON TOLL key.

3.20 Receiving a Calling Signal: The C lamp should light when the call is originated from the distant office. Operate the CORD ON TOLL key. The C lamp should be extinguished and the B lamp should flash. Operate the TTY ON CORD key. The B lamp should be extinguished. Communicate with the distant office and advise that a recall signal will be sent on the circuit under test.

3.21 Transmitting a Recall Signal (Circuits Not Arranged for Flashing Recall): Momentarily operate the UNATT RECALL DISC key. After approximately 10 seconds, the B lamp should light. Restore momentarily the CORD ON TOLL key. The B lamp should be extinguished.

3.22 Transmitting a Recall Signal (Circuits Arranged for Flashing Recall): Restore the TTY ON CORD key and operate momentarily the UNATT RECALL DISC key. After approximately 7 seconds, the B lamp should flash. Operate the TTY ON CORD key. The B lamp should be extinguished.

3.23 Receiving a Disconnect Signal: Request that a disconnect signal be sent from the distant office and inform the distant office that this completes the test. After approximately 10 seconds, the B lamp should light. Remove the plug of the OVERALL LINE TST-B cord from the jack of the testing trunk and restore all keys to normal. The B lamp should be extinguished.

3.24 Disconnections: Unless proceeding with other tests requiring the same setup, remove all test connections.

(C) Voltmeter Test

3.25 Connections: Request the trouble operator to have the circuit to be tested made busy. Insert the plug of the TOLL LINE TST-C cord into the TGL jack of the circuit under test and insert the plug of the TOLL LINE REL TST-E cord into the associated TTY SWBD jack.

3.26 Test of Line Loop: Operate the VM ON TOLL key. The needle of the voltmeter should indicate approximately 92 volts.

3.27 Test Ring: Operate the TEST RING key. The needle of the meter should indicate approximately 46 volts. Restore the TEST RING key.

3.28 Test Tip: Operate the TEST TIP key. The needle of the meter should indicate approximately 48 volts on the opposite side of zero of that obtained in 3.27 (thus indicating a marking test). Restore the TEST TIP key.

3.29 Disconnection: Unless proceeding with other tests requiring the same setup, remove all test connections.

4. REPORTS

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