

SUPERVISORS' CIRCUITS
TELETYPEWRITER SWITCHBOARD NO. 1

1. GENERAL

1.01 This section describes tests of the supervisors' circuits associated with the teletypewriter switchboard No. 1. The tests are as follows:

- (A) Monitoring Circuit Operation Test
- (B) Monitoring Circuit Orientation Test
- (C) Teletypewriter Two-Way Trunk Circuit Operation Test
- (D) Messenger Call Circuit
- (E) Supervisor's Call Circuit

1.02 The tests outlined herein, with the exception of minor changes, were previously covered in Provisional Section A281.805. This section cancels Section A281.805.

1.03 Tests (A) and (B) require two persons, one at the No. 15 test board and one at the operating room desk No. 22.

2. APPARATUS

2.01 No special testing apparatus is required.

3. METHOD

(A) Monitoring Circuit Operation Test

3.01 At the No. 15 Test Board: Insert the ANS cord plug of the cord transmission testing circuit into the ANS jack of the cord transmission testing trunk circuit.

3.02 At the Switchboard: At a position associated with the monitoring circuit to be tested, insert the plug of an idle answering cord into the A jack of the cord transmission testing trunk. Operate the typing key associated with this cord circuit.

3.03 At the operating room Desk No. 22: Operate the PRINTER MONITORING key of the monitoring circuit under test.

3.04 At the No. 15 Test Board: Operate the TTY SIG and SEND ON ANS keys, thus sending teletypewriter test signals to the switchboard teletypewriter.

3.05 At the Desk: The supervisor's teletypewriter should record an identical copy of the test signals received by the switchboard teletypewriter.

3.06 Upon the completion of this test, and unless proceeding with test (B), remove at the switchboard and at the test-board the cords used for making this test and restore the keys associated with these cords to normal. At the desk the PRINTER MONITORING key associated with the circuit under test should be restored to normal.

(B) Monitoring Circuit Orientation Test

3.07 At the Desk: Operate the PRINTER MONITORING key associated with a monitoring circuit to an unoccupied switchboard position. Measure the local orientation range of the supervisor's teletypewriter and record the readings.

Note: If the orientation range obtained is less than 70 points, the supervisor's teletypewriter and the polar relay in the supervisor circuit should be checked separately in accordance with the established requirements for this equipment.

3.08 Connect the desk, switchboard and No. 15 test board circuits, as described in 3.01 to 3.03 unless the circuits have been left connected after making test (A).

3.09 With the signals originating from the No. 15 test board, measure the orientation range of the supervisor's teletypewriter when connected to the monitoring circuit and record the readings. The upper and lower limits of the orientation range through the monitoring circuit should be within 2.5 points of the corresponding limits obtained in 3.07.

Note: This test can be made only in the monitoring direction as the circuit is not arranged for two-way communication.

3.10 Upon the completion of this test, remove at the switchboard and at the No. 15 test board the cords used for making this test and restore the keys associated with these cords to normal. At the desk, restore the PRINTER MONITORING key to normal.

(C) Teletypewriter Two-Way Trunk Circuit Operation Test

3.11 At the Switchboard: Make a busy test of the teletypewriter two-way trunk circuit to be tested with the calling cord of an idle cord circuit. If the trunk circuit is idle, insert the plug of the calling cord into the trunk jack. The calling cord supervisory lamp should light.

3.12 Operate the typing key of the cord circuit and the ringing key to ring on the calling cord. The ringing guard lamp should light and the calling cord supervisory lamp should be extinguished with the operation of the ringing key. The ringing guard lamp should remain lighted after the ringing key is released.

3.13 At the Desk: The calling lamp of the circuit under test should light and the audible signal of the auxiliary signal circuit should function. Operate the trunk key of the circuit under test to the CALL position. The calling lamp should be extinguished. The audible signal of the

auxiliary signal circuit should cease provided no other calls are waiting to be answered. Test for two-way communication between the desk and switchboard. Operate the trunk key to the HOLD position.

3.14 At the Switchboard: The cord circuit supervisory lamp should remain extinguished and no characters should be typed on the switchboard operator's teletypewriter.

3.15 At the Desk: The supervisor's teletypewriter should be released from the trunk under test and will spin until another call is answered or until the trunk key is restored to the CALL position.

3.16 Restore the trunk key to the CALL position. The supervisor's teletypewriter should again be connected to the trunk circuit under test.

3.17 Disconnect from the trunk circuit at the desk by restoring the trunk key to NORM. The supervisor's teletypewriter should be released from the trunk circuit.

3.18 At the Switchboard: The calling cord supervisory lamp should light as a disconnect signal. Remove the calling cord from the trunk circuit and restore the cord circuit typing key to normal.

3.19 At the Desk: Operate the trunk key of the circuit under test to the CALL position. The associated line lamp at the switchboard should light.

3.20 At the Switchboard: Insert the plug of an idle answering cord circuit into the jack associated with the lighted line lamp. The lamp should be extinguished.

3.21 Upon the completion of this test, restore the trunk key under test at the operating room desk to NORM. The cord circuit supervisory lamp at the switchboard should light. Remove the cord circuit from the jack of the trunk circuit.

(D) Messenger Call Circuit

3.22 At the Switchboard: Operate the MESS CALL key. The messenger call lamp at the section associated with the position under test should light. Check that the pilot lamp at the messenger's desk, where provided is lighted.

3.23 Restore the MESS CALL key to normal. The messenger call lamp and the pilot lamp at the messenger's desk should be extinguished.

3.24 At the Desk: Operate the MESS CALL key. The messenger call lamp should light. Check that the pilot lamp at the messenger's desk where provided, is lighted.

3.25 Restore the MESS CALL key to normal. The messenger call lamp and the pilot lamp at the messenger's desk should be extinguished.

(E) Supervisor's Call Circuit

3.26 At the Switchboard: Operate the SR CALL key. The section indicating lamp associated with the position under test should light.

3.27 At the Desk: The audible signal should function. Momentarily operate the SR CALL key. The audible signal should cease.

3.28 At the Switchboard: Restore the SR CALL key to normal. The section indicating lamp should be extinguished. The release of the SR CALL key functions to restore the audible signal circuit at the desk to normal. If two or more calls are waiting to be answered after the momentary operation of the SR CALL key at the operating room desk, the audible signal circuit will not restore to normal until all operated switchboard position keys have been restored to normal.

4. REPORTS

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