BELL SYSTEM PRACTICES Teletypewriter Stations

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CONNECT 28TTY FROM TRANSMITTER START CIRCUIT DESCRIPTION, OPERATION, AND TEST PROCEDURE

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GENERAL

1.01 This section gives a description, the operating principles, and test procedure for the "Connect 28TTY from Transmitter Start Circuit" per EAL2149 as used with a 14 Transmitter Distributor Control Circuit per EAL0963SD.

DESCRIPTION

2.01 The Circuit was designed for use at an outlying station on a SCATS system

2.02 The purpose of the Circuit is to put into the print condition a 28TTY when an associated 14 Transmitter-Distributor has been activated by a Transmitter Start Code (TSC).

2.03 The equipment consists of an SEM relay. A TP 152345 SOP for the 28TTY, and a resistor for use with the (TSL) relay of EAL0963SD.

3. THEORY OF OPERATION

3.01 When a valid TSC operates a set of contacts on the 28TTY, a short is placed across the AA-BB leads of EA10963SD, operating the (TSL) relay which locks if tape is available in the T-D

3.02 With (TS1) relay operated, the PR lead connected to the winding of the (RY) relay of EA12149, will operate the (RY) relay. 3.03 The contacts of relay (RY) will close the solenoid associated with the TP152345 SOP and place the 28TTY in the print condition.

3.04 When (TS2) relay of EAL0963SD releases, and the 14 T-D starts, the 28TTY will copy all transmission from the 14 T-D until the sixth pin of the T-D goes open due to a no-tape condition. (TS1) relay will then release, power is moved from the solenoid, and the 28TTY will return to the non-print condition.

TESTS

4.01 To test the Control circuit operation, coordination is required with the Serving Toll Test Center (STTC) due to the automatic features of the equipment.

4.02 The station tester should first obtain a release of equipment if tests are to be made during service hours, then have the STTC terminate the station in a dummy or test circuit.

4.03 At the station under test, with the equipment in operating condition, place a test tape in the T-D gate. For test purposes, any test sentence such as "The quick brown fox" will suffice.

4.04 Request the STTC to transmit a valid TSC. This can be done manually from a keyboard. The TSC for any station should be FIGS H LTRS FIGS * S LTRS.

*Insert here the individual code of the station under test.

4.05 Receipt of the TSC should cause the 28TTY to go into the print condition 7 and to start copying transmission as the T-D starts to operate.

4.06 Assuming the test sentence is on a torn tape, complete passage of the tape through the T-D gate will operate the sixth pin. This should deactivate the T-D, at the same time causing the 28TTY to return to the non-print condition.

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To test the non-print condition, have the STTC transmit random characters. No typing or functional operation should occur.

4.07 With tape available, have the STTC transmit an invalid TSC. There should be no operation of either the T-D or the 28TTY.

Test of the non-print condition of the 28TTY is the same as in 4.06.

CONNECTING CIRCUITS

5.01 EAL0963SD 14 Transmitter-Distributor Control Circuit

REFERENCES

- Start Circuit
- EAL0720CD MXD Timing and Control Circuit P70.034 28 Teletypewriter
- P70.035 28 Stuntbox
- P35.102 14 Type Transmitter-Distributor

EA10669CD Sequentially Controlled Automatic Transmitter Start System (SCATS) EA12149 Connect 28TTY From Transmitter