CODE OPENINGS
RATE AND ROUTE VERIFICATION TESTS
CROSSBAR TANDEM OFFICES

1. GENERAL

1.01 This section:

- Explains how code openings are made in crossbar tandem offices.
- Provides a method to verify correct rates and proper routing from the offices.

1.02 Information contained herein was previously covered in Section 220-500-900PT which now provides only information on extra tests required for new equipment.

1.03 All cross-connect information sent to the central office (CO) should be reviewed by qualified telephone company (TELCo) personnel prior to being wired. This applies to a single code opening, as well as to additions and new offices.

Note: The title Contact Engineer, used in this section, may also be known as Project Engineer when large jobs are involved.

1.04 Keep track of troubles found and hours used performing these tests as outlined in Section 800-614-902PT. This information is required for preparing Form CE-1140 and CE-1140-1 when Western Electric (WE) jobs are involved.

2. BILLING INDEXER CHANGES

Note: Refer to Section 220-500-900PT for test of billing indexer cross-connect changes.

3. ESTABLISHING OFFICE CODES IN NEW OFFICES

3.01 WE will complete cross-connect work on the equipment and perform all HB tests.

3.02 WE will turn equipment over to TELCo. TELCo will test the equipment as outlined by the Test and Analysis (T&A) Committee.

3.03 Such tests shall include a marker cross-connect comparison. This is done by comparing trouble recorder cards or trouble indication obtained by taking trouble records for each code — local, NPA, 6-digit translation, and operator class calls using each originating treatment.

3.04 Correct any errors and retest equipment.

3.05 After outgoing trunks have been cross-connected, tested, and adjusted for transmission level and noise, proceed with route verification (Part 7) and alternate route verification (Part 8) tests.

4. ESTABLISHING NEW ORIGINATING OFFICE CODES IN NEW/EXISTING CROSSBAR TANDEM RECORDER GROUPS

4.01 Complete all billing indexer cross-connects before starting office index tests. Test accuracy of billing indexer cross-connects as outlined in Section 220-500-900PT.

4.02 CO forces shall obtain a service order establishing a telephone number for each originating office code. Where required, this number is passed to the CAMA operator for each test call.

Notes:

1. The number assigned should have the tens and units digits the same as the office index being tested.
2. A service order is not necessary when calls are placed to noncharge verification numbers.

4.03 CO forces will place a call from the AMA trunk test frame for each new office index in the crossbar tandem CAMA. Dial any local multimessage unit code.

4.04 Calls placed in 4.03 should be directed to only one AMA recorder where possible. This will help the Electronic Data Processing (EDP) Center as only one verbatim printout will have to be produced.

4.05 CO forces will cut the tapes containing office index test calls and forward them to the EDP Center. Fill out Form E-4104PT listing:

1. Date and time test calls were placed on the tape.

2. Recorder group and recorder number used.

3. Calling and called numbers used in placing test calls.

4.06 The EDP Center will convert the AMA tapes to separate magnetic tapes. A verbatim printout will be produced after the conversion and forwarded to the Equipment Billing Accuracy Control (EBAC) Group.

4.07 The EBAC Group will analyze the verbatim printout and notify CO forces of the results.

4.08 CO forces will notify the T&A Committee if there are any errors. The Committee will have WE make corrections and will reschedule the tests when necessary.

Note: This applies only when WE has placed the office index cross-connections.

5. REARRANGING ORIGINATING CODES (OFFICE INDEXES) WITHIN OR TO ANOTHER RECORDER GROUP

5.01 When originating codes are arranged within or to another recorder group, perform the billing indexer and office index tests on each code moved.

5.02 Apply Part 4 to complete the required tests.

6. CHANGES IN THE RATE STRUCTURE OF AN EXISTING CROSSBAR TANDEM OFFICE

6.01 If rate class cross-connects are changed in the sender link and controller circuit, test them from the AMA trunk test frame. Test associated incoming trunks per Section 220-136-501.

6.02 When transverter cross-connects are changed or added, test per Section 220-501-501.

6.03 Make required changes in the billing indexers and apply tests outlined in Section 220-507-501.

6.04 Release CAMA equipment for service after all AMA accuracy tests in the crossbar tandem CAMA office have been verified correct.

6.05 The EDP Center will verify correct message billing index for all calls within rating runs. Error cards will be produced for any discrepancy encountered. These cards will be forwarded to the EBAC Group.

6.06 EBAC will notify the crossbar tandem CAMA office of "OK' or error information.

6.07 CO forces will notify the Contact Engineer of "OK" or error information. The Contact Committee will have WE correct any cross-connect or wiring errors and will schedule additional tests after errors are cleared.

Note: This applies only when WE has placed the cross-connects to change the rate structure.

7. ROUTE VERIFICATION TESTS FROM A CROSSBAR TANDEM OFFICE

7.01 Place a route verification call to all working local and NPA codes from the crossbar tandem office. Also, place a call to each code requiring 6-digit translation.

7.02 CAMA Offices — Using all customer classes of service, place calls from AMA trunk test frame.

7.03 All Offices — Use outgoing chief equipment man's line for placing operator class calls (SD-95617-01) for CAMA offices and for all calls in non-CAMA offices.

7.04 Use standard route verification test numbers. Hold calls only long enough to recognize correct office tone for each terminating code.

Note: Calls should also be placed to all vacant codes to verify marker wiring.

7.05 Coordinate route verification tests with switchboard-to-switchboard tests where necessary to avoid additional traffic releases of toll facilities.

7.06 If unable to complete on the first or second attempt, make a note of the trouble and proceed with tests. Refer troubles to offices involved for clearance and retest when cleared.

8. ALTERNATE ROUTE VERIFICATION TESTS

8.01 After the route verification tests are complete and there is an alternate route, proceed as described in the following.

8.02 Make busy the first route trunks.

Caution: This should be done during light traffic only *so that there is no interference with call processing.*

8.03 Using procedures outlined in 7.02, 7.03, and 7.04, hold connection just long enough to verify that the first idle trunk in the alternate group is selected.

8.04 Repeat this procedure until all alternate trunk groups have been tested and all trunk busy groups have been reached.

Note: If Traffic Overload Reroute Control (TORC) arrangements are provided, activate them manually to ensure that the correct route changes are established.