PLANT REGISTERS—PART 17
TESTS USING MASTER TEST FRAME
NO. 5 CROSSBAR OFFICES

1. GENERAL

1.001 This addendum supplements Section 218-233-517, Issue 1.

1.002 This addendum is issued for the following reasons:

(a) To delete information which does not apply to Test BS.

(b) To correct information in Test BT to avoid confusion when performing this test.

2. CHANGES TO SECTION

2.001 On Page 4, delete Step 25 in its entirety.

2.002 On Page 6, Step 35, change to read as follows:

At MTF—
Operate PTRD key in accordance with Table C.
PLANT REGISTERS—PART 17
TESTS USING MASTER TEST FRAME
NO. 5 CROSSBAR OFFICES

1. GENERAL

1.01 This section is Part 17 in a series of sections that describe methods for testing plant registers.

1.02 This issue affects Equipment Test Lists.

1.03 The tests covered are:

**BS. IDDD Pretranslator (SD-27849-01) First and Second Trial Trouble Registers (IPTT Registers):** This test checks that a plant register operates on first trial service call failures and on second trial service call failures when a trouble record is requested before disconnect.

**BT. Automatic Recycle Features of Trunk Test Circuit (SD-25918-01) (ATRO, ATBY, ATAN, ATRF, ATTC Registers):** This test checks that a plant register operates when a reorder, busy, announcement, or three audible rings are encountered on automatic recycle tests when the automatic recycle feature is provided. A total count of all calls is also made.

1.04 Plant registers are located either in a self-contained register cabinet and referred to as the plant register circuit or just above the trouble recorder perforator on the master test frame (MTF) trouble recorder bay.

1.05 Table A indicates the tests requiring action and verification at more than one location.

1.06 **Lettered Steps:** A letter a, b, c, etc., added to a step number in Parts 3 and 4 of this section indicates an action which may or may not be required depending on local conditions. The condition under which a lettered step or a series of lettered steps should be made is given in the ACTION column, and all steps governed by the same condition are designated by the same letter within a test. Where a condition does not apply, all steps designated by that letter should be omitted.

### TABLE A

<table>
<thead>
<tr>
<th>ACTION AND/OR VERIFICATION REQUIRED AT:</th>
<th>TESTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Master Test Frame</td>
<td>✓ ✓</td>
</tr>
<tr>
<td>Plant Register Circuit</td>
<td>✓ ✓</td>
</tr>
<tr>
<td>Pretranslator Frame</td>
<td>✓ ✓</td>
</tr>
</tbody>
</table>

✓ As required

1.07 Local instructions should be followed for recording and reporting any register operations caused by performing these tests.

1.08 The manner of selecting some circuits and test conditions at the MTF and its associated circuits varies depending on the apparatus options furnished with these circuits. Therefore, where variable means of selection are provided, precise instructions for the selection of circuits and test conditions are not given. Precise instructions for the use of these variable means are given in Section 218-106-301.

1.09 The location statement, At MTF—, is used to refer to all apparatus located on the four basic bays of the MTF.

2. APPARATUS

2.01 The apparatus required for each test is listed in Table B. The details of each item are covered in the paragraph indicated by the number in parentheses. In addition, the following apparatus may also be required.

(a) Apparatus covered in 2.03 and 2.04 is required when a portable lamp is used to determine register operation.
(b) Two head telephone sets are required when a portable lamp is not used.

(c) A 32A test set is required when the master test frame is controlled from a remote point.

2.02 Master test control circuit SD-25800-01.

2.03 Two testing cords, W2W cords, 10 feet long, each equipped with a 310 plug, two 360-type tools (2W17C cords), two KS-6278 connecting clips, and two 108 cord tips (required when a portable test lamp is used).

2.04 38B lamp socket, equipped with a 2Y lamp (required when a portable test lamp is used).

2.05 When making connections to relays using test cords listed in this section, use as covered in Section 069-131-811.

<table>
<thead>
<tr>
<th>APPARATUS</th>
<th>TESTS</th>
<th>BS</th>
<th>BT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test Circuit (2.02)</td>
<td></td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>322A (make-busy) Plug</td>
<td></td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Cord (2.03)</td>
<td></td>
<td>√</td>
<td>√</td>
</tr>
</tbody>
</table>

✓ As required.

3. PREPARATION

<table>
<thead>
<tr>
<th>STEP</th>
<th>ACTION</th>
<th>VERIFICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Tests</td>
<td>Note: Refer to 1.08 and 1.09.</td>
<td></td>
</tr>
<tr>
<td>1a</td>
<td>If tests are to be performed without portable test lamp— Establish talking circuit between frames where test is to be performed and where observations are to be made.</td>
<td></td>
</tr>
<tr>
<td>2b</td>
<td>If tests are to be performed with portable test lamp—</td>
<td></td>
</tr>
</tbody>
</table>
At frame where action is to be taken—
Insert plug of 2W17C cord, equipped with
two KS-6278 connecting clips, into SP jack of
miscellaneous circuit.

3b Determine from circuit drawing of circuit
associated with register to be tested location
of terminal on terminal strip at which plant
register circuit is connected.

4b Connect one lead of 2W17C cord to terminal
on terminal strip associated with plant register
being tested.

5b Connect other lead of 2W17C cord to battery.

6b Connect leads of 38B lamp socket to leads of
another 2W17C cord, equipped with two KS-6278
connecting clips.

7b Insert plug of this 2W17C cord into any
appearance of selected SP jack of miscellaneous
circuit close to position where test is to be
performed.

8b Place portable test lamp so that it can be
easily observed.

9b If tests are to be performed with portable
test lamp—
To observe scoring of register when using
portable test lamp, proceed as follows: (a) For
first observation of scoring of register, observe
that portable test lamp indicates proper
condition on lead and that register scores as
required.
(b) For subsequent observations of scoring of
same register, observe portable test lamp
indications only.

**Note:** When the register to be tested scores
at timed intervals, the portable test lamp will
flash with the scoring of the register.

10 At MTF—
Restore all keys and switches.

11 Momentarily operate RL key.

12c If testing 4-wire switching systems—
Operate 4W key.

All lamps extinguished.
## 4. METHOD

### B5. IDDD Pretranslator (SD-27849-01) First and Second Trial Trouble Registers (IPTR, IPST Registers)

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
<th>Verification</th>
</tr>
</thead>
<tbody>
<tr>
<td>14</td>
<td>Insert make-busy plug into PRT-MB jack associated with pretranslator.</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Insert make-busy plug into TRMB PRT jack associated with pretranslator.</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>At MTF— Select PTT class of test.</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Select pretranslator under test.</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>Select A through C digits as required for a working country code.</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>Operate PRL key.</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>Momentarily operate ST key.</td>
<td>At plant register circuit— IPTR plant register associated with pretranslator under test scored once.</td>
</tr>
<tr>
<td>21</td>
<td>At MTF— Momentarily operate RL key.</td>
<td>All lamps extinguished.</td>
</tr>
<tr>
<td>22</td>
<td>Operate TR2 key to simulate second trial call condition.</td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>Momentarily operate ST key.</td>
<td>At plant register circuit— IPST plant register scored once.</td>
</tr>
<tr>
<td>24</td>
<td>At MTF— Momentarily operate RL key.</td>
<td>All lamps extinguished.</td>
</tr>
<tr>
<td>25</td>
<td>At pretranslator circuit— Remove test connection from TR2 relay.</td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>At MTF— Remove all make-busy plugs.</td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>Repeat Steps 14 through 26 for each pretranslator to be tested for plant register operation.</td>
<td></td>
</tr>
<tr>
<td>STEP</td>
<td>ACTION</td>
<td>VERIFICATION</td>
</tr>
<tr>
<td>------</td>
<td>--------</td>
<td>--------------</td>
</tr>
<tr>
<td>28</td>
<td>Restore all keys and switches and remove all test cords not required in next test.</td>
<td></td>
</tr>
</tbody>
</table>
|      | **BT. Automatic Recycle Features of Trunk Test Circuit**  
(SD-25918-01) ATRO, ATBY, ATAN, ATRF, ATTC Registers |              |
| 15   | At MTF—  
Operate PRO key in accordance with Table C. |              |
| 16   | Select MISC class of test. |              |
| 17   | Select A, B, and C digits required to direct call to desired route. |              |
| 18   | Select OR class of call and translator indication, as required, for access to selected route. |              |
| 19   | Select marker. |              |
| 20   | Select route advance. |              |
| 21   | Select a class of service and rate treatment, if required, for access to route selected. |              |
| 22   | Select D through G digits as required to direct call to desired termination. |              |
| 23   | Operate GPA/GPB key as required, when selected route is associated with an allotted trunk group. |              |
| 24   | Momentarily operate ST key. | At plant register circuit—  
ATRO, ATTC plant registers scored once. |
| 25   | At MTF—  
Momentarily operate RL key. |              |
| 26   | At MTF—  
Restore all keys and switches not required for next test. |              |
|      | **ATBY, ATTC Registers** |              |
| 27   | At MTF—  
Operate PBY key in accordance with Table C |              |
| 28   | Repeat Steps 16 through 23 as required. |              |
| 29   | At MTF—  
Momentarily operate ST key. | At plant register circuit—  
ATBY, ATTC plant registers scored once. |
SECTION 218-233-517

STEP ACTION VERIFICATION

30 Repeat Steps 25 and 26.

ATAN, ATTC Registers
31 At MTF—
Operate PANN key in accordance with Table C.
32 Repeat Steps 16 through 23 as required.
33 At MTF—
Momentarily operate ST key.
34 Repeat Steps 25 and 26.

ATRF, ATTC Registers
35 At MTF—
Operate PTRD key in Table C, according to type of test completion desired.
36 Repeat Steps 16 through 23 as required.
37 At MTF—
Momentarily operate ST key.
38 Repeat Steps 25 and 26.

At plant register circuit—
ATAN, ATTC plant registers scored once.

At plant register circuit—
ATRF, ATTC plant registers scored once.

TABLE C

<table>
<thead>
<tr>
<th>KEY</th>
<th>TYPE OF TEST</th>
<th>REGISTER OPERATED</th>
</tr>
</thead>
<tbody>
<tr>
<td>PBY</td>
<td>Complete on busy</td>
<td>ATBY</td>
</tr>
<tr>
<td>PRO</td>
<td>Complete on reorder</td>
<td>ATRO</td>
</tr>
<tr>
<td>PANN</td>
<td>Complete on announcement</td>
<td>ATAN</td>
</tr>
<tr>
<td>PTRD</td>
<td>Complete on third ring</td>
<td>ATRF</td>
</tr>
</tbody>
</table>