FALSELY GROUNDED NUMBER GROUP RF OR TF TERMINAL
NO. 1 CROSSBAR OFFICES

1. GENERAL
1.01 This section covers methods to be followed in connection with troubles due to a falsely grounded RF or TF terminal in the number group.

2. INDICATIONS OF TROUBLE CONDITION
2.01 Terminating trouble indicator records.

3. REACTIONS DUE TO TROUBLE
3.01 This trouble prevents the completion of calls to all numbers in the number group.

4. IMMEDIATE PROCEDURE TO FOLLOW
4.01 Analyze trouble indicator records to locate the lead and number group in trouble.
4.02 Open the lead in trouble at the common point to restore service to all numbers except those in the line choice which is in trouble.

5. ANALYSIS OF TROUBLE
5.01 A false ground on an RF or TF lead causes a terminating marker LCF relay to operate before an L relay operates. The LCF relay in operating connects the marker to a line choice frame. This prevents the terminating marker TLF relay from operating.

6. SUGGESTED PROCEDURE FOR LOCATING AND CLEARING TROUBLE
6.01 The procedure for handling ground conditions will vary somewhat depending upon the nature and location of the trouble. However, the following procedure will, in general, be advisable to attempt to isolate the trouble and at the same time partially restore service to the balance of the numbers in the number group.

6.02 At the rear of the block relay frame involved, open the common lead to the field grounded. This will restore service to the remainder of the number group.

6.03 Test the field terminal thus opened for the presence of the false ground. This will determine whether the trouble is in the field wiring or in the common multiple for the number group connector circuit.

6.04 If the trouble is in the field wiring having multiple appearances, connect the opened lead to the field terminal, by means of a No. 893 cord equipped with No. 366A and No. 365 tools. Then open each multiple appearance in turn. Use additional No. 893 cords to reclose each multiple appearance as rapidly as it is determined to be free of trouble, and thus isolate the appearance in trouble.

6.05 Further isolation to the block of one hundred numbers involved may then be made by opening the straps between hundreds and by the use of No. 893 cords reclose the opens, thus isolating the one hundred numbers involved.

6.06 From the front of the block relay frame, the various lines cross-connected to the appearance in trouble, within the hundred count isolated, may then be checked to determine which particular line or lines are actually involved in the trouble and the other lines may be temporarily bridged to restore other multiple appearances to service.

7. TROUBLE CONDITIONS CAUSING REACTIONS MAY BE LISTED BELOW
7.01 Falsely grounded RF lead on cross-connection field.
Column A - Trouble indication.
Columns B and C - Any marker and sender.
Column D - Any number in number group.
Column E - Same number group with IGF lamp in column F and no L lamp in column K indicates a grounded RF or TF lead.

Analysis of Indication: The first 4 indications are the most common. Note that an IGF lamp indication is received even though no L lamp is operated, therefore, RF3 lead must be grounded. Indication No. 5 is received if the line choice connector is busy and the trouble is delayed connecting to it.

Immediate Procedure to Follow: Open the common lead to RF3 at rear of block relay frame. This will permit service to the balance of the number group.

Procedure for Locating Trouble: Test field terminal for presence of ground to determine whether the trouble is in the field wiring or in the common multiple for the number group. If trouble shows in field wiring having multiple wiring, open in turn each multiple appearance. By use of double ended cords it is possible to close each multiple appearance as it is found to be free of trouble. Isolate ground.

A B C D E F G H I