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BELL SYSTEM PRACTICES
Outside Plant Construction
and Maintenance
ADDENDUM G50.650.1
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T. P. T. & T. Co.

CABLE SPLICING - GENERAL

RANDOM SPLICES IN TOLL CABLES

NOTES CONCERNING THIS ADDENDUM

This Addendum supplements Section G50.650.1 with information relative to Bunch Random splicing in Multiple Unit type cables. The information covered in the previous issue of this Addendum regarding Special Random splicing, splicing Layer type cable to Multiple Unit type cable and Multiple Unit type cable to silk and cotton cable in cable vaults is included herein.

The cross-reference "See Addendum" should be marked in Section G50.650.1 at Paragraph 4.01 to indicate the addition of new information. Paragraph 1.01 has been replaced and Paragraph 1.05 has been added and both should be cross-referenced accordingly.

1. GENERAL

1.01 This section describes the method of making three general types of random splices in toll cables. In each of these types the pairs or quads are mixed according to a plan for the purpose of reducing crosstalk to a minimum. The type of random splice to be made will be determined by the size of the cable, method of segregation, kind of circuit for which the conductors will be used, etc. In addition to the methods of making random splices in toll cables as outlined in this section, there is the Special Random Splicing method outlined in Section G50.903 and all layer type 19 gauge CNB, DNB and layer type 22 gauge cable used for toll shall be spliced in accordance with the special random method.

1.05 When splicing Multiple Unit Type Cable to Layer type cable, the identity of the units in the Unit type cable (25 pr., 26 pr., 50 pr., 51 pr., or 101 pr.) shall be retained as they are spliced from one type of cable to the other. In this case it will not be possible to make the splice in accordance with either the Special Random Splicing Method or the Bunch Random Splicing

Method. However, during the splicing operations, the pairs of each unit should be scrambled as much as possible within the unit in order to reduce crosstalk to a minimum.

(1) For Example: When splicing a section of 455 pair 19 gauge layer type cable between sections of 455 pair 19 gauge Multiple Unit type cable, splice the last two units of the outside layer of the Unit type cable (one 25 pair and one 26 pair unit) to the 51 pair color group of the layer type cable. Splice 101 pairs of the outside layer of the Unit cable (three 25 pair and one 26 pair unit) to the next color group (101 pairs) of the Layer type cable. At the splice on the opposite end of the Layer type cable, the pairs comprising each of the 25 and 26 pair units must be identified through the Layer type cable before being spliced to the Unit type cable.

(2) The same principle shall be applied regardless of the size and gauge of the cables involved, and when splicing an incidental amount of Multiple Unit type cable between sections of Layer type cable, or when splicing either Unit type or Layer type cable to Silk and Cotton cable in a cable vault in order that unit identity will be possible at the main distributing frame in the Central Office.

4. BUNCH RANDOM SPLICE

4.01 Note: When splicing Multiple Unit type cable each unit shall be treated as a separate complement and divided into three approximately equal groups for splicing as shown in the illustration in Section G50.650.1, Paragraph 4.01. The wires in each unit on one side of the splice shall be joined only to wires in the corresponding unit on the other side of the splice.