

ZONE REGISTRATION EQUIPMENT - PROCEDURE

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1. GENERAL

1.1 Scope

1.11 This section outlines a typical transition plan to be used when adding and rearranging equipment for zone registration.

1.2 Present Arrangement

1.21 Figure 1 shows the present arrangement and association of equipment, consisting of three district junctor frames with 200 junctors cabled to ten RDC frame switches and served by ten ZR circuits in a common non-graded inter frame group.

1.3 Proposed Arrangement

1.31 Figure 2 shows the proposed arrangement and association of equipment, consisting of five district junctor frames with 320 junctors cabled to 16 RDC frame switches and served by 22 ZR circuits in a graded inter frame group consisting of 5 individual group of 3 ZR circuits each and one common group of 7 ZR circuits.

DIST. FRAME	JUNCTOR GROUP	R.D.C.		GRADING OF ZR CIRCUITS	
		FR.	SW.	IND.	COMM.
0	0-1	0	0	NONE	0-9
	2-3		1		
	4-5		2		
1	0-1		3		
	2-3		4		
	4-5		5		
2	6-7		6		
	0-1		7		
	2-3		8		
	4-5		9		

FIG. 1 TRANSITION PLAN-PRESENT ARRANGEMENT (PAR. 1.21)

1.4 SD-25320-01, Drawing Figure Outline

1.41 Figure 3 shows the SD-25320-01 drawing figure outline for transition steps, 1, 2, 3.

1.42 The outline agrees with the information shown in Figure 1 and 2 and shows the SD drawing figures that are required for the present and proposed arrangement of equipment on which the transition is to be performed.

DIST. FRAME	JUNCTOR GROUP	R.D.C.		GRADING OF ZR CIRCUITS	
		FR.	SW.	IND.	COMM.
0	0-1	0	0	0-2	3-9
	2-3		1		
	4-5		2		
1	0-1		3		
	2-3		4		
	4-5		5		
2	6-7		6		
	0-1		7		
	2-3		8		
3	4-5		9		
	0-1	10			
	2-3	0			
4	4-5	1			
	0-1	2			
	2-3	3			
		4			

FIG. 2 TRANSITION PLAN-PROPOSED ARRANGEMENT (PAR. 1.31)

1.43 All numbers shown in circles are the SD drawing figure numbers. Each number represents a separate figures. Accordingly, this outline shows the total number of SD drawing figures that are required.

1.44 The cabling and wiring shown, may be terminated in a different manner when the equipment is installed. However, the association of the equipment would remain in the same as shown.

1.45 It is assumed that there are four originating markers in service.

2. PRELIMINARY WORK

2.1 For this example, the following circuits should be wired and tested as far as practicable.

- (a) District Junctors
- (b) District Links
- (c) New zone registration equipment
- (d) Multiple between new connector switches
- (e) All wiring and cabling ready for connecting to the working equipment

3. TRANSITION WORK

3.1 General

3.11 The transition work has been outline in three steps as follows:

- Step 1 - Create individual groups (Paragraph 3.2)
- Step 2 - Provide for added district junctor groups (Paragraph 3.3)
- Step 3 - Extend common group multiple to the added district junctor frames (Paragraph 3.4)

The figures referred to in these steps are the SD- drawing SD-25320-01 figures.

3.2 Step 1 - Create Individual Groups

3.21 Make busy ZR circuits 0, 1, 2.

3.22 At RDC Frame

3.221 Disconnect the multiple between switches as follows:

For Levels	Between RDC			
	FR	SW	FR	SW
0,1,2	0	2	0	3
0,1,2	0	6	0	7

3.222 Connect the multiple between switches as follows:

For Levels	Between RDC			
	FR	SW	FR	SW
0,1,2	0	9	0	10

3.223 Connect new individual registration circuits as follows:

For Levels	At RDC	
	FR	SW
0,1,2	0	3
0,1,2	0	7

NOTE: The registration circuits for RDC frame 1, switches 0 and 3, levels 0,1,2 each switch, were connected during the preliminary work.

3.23 At RC Frame

3.231 Disconnect leads BT 0,1,2 between Figure 7 and 8 and connect between Figure 1 and 3, for district junctor frame 0.

3.232 Disconnect leads CT 0,1,2 between Figure 1 and 7 and connect between Figure 1 and 3 for district junctor frame 0.

3.233 Connect the E wiring of Figure 1 to the test frame for all Figure 1 that are assigned to the individual group of district junctor frame 0.

3.234 Connect the GB lead between Figure 1 and 8 for the individual group of district junctor frame 0.

3.235 Connect all Figure 3 and 8 to their associated Figure 1 for district junctor frames 1, 2, 3, 4.

3.236 Connect the E wiring of Figure 1 to the test frame for all Figure 1 that are assigned to the individual groups of district junctor frames 1, 2, 3, 4.

3.237 Block operated the CB relay of Figure 4 that is associated with district junctor frame 0 and complete all other wiring for the individual group, including the ZS1 lead associated with the LL relay of Figure 7, test, remove the block and restore the equipment to service.

3.238 Repeat the work of Paragraph 3.237 for the individual groups of district junctor frames 1 and 2, one at a time.

3.239 Remove the busy condition from ZR circuits 0, 1, 2.

3.3 Step 2 - Provide for Added District Junctor Groups

3.31 Block operated the CB relay of Figure 4 that is associated with district junctor frame 2.

3.32 Make busy ZR circuits 3 to 9.

3.33 Extend the multiple of levels 3 to 9 from switch 9 to switch 10 on RDC frame 0.

3.34 Connect leads SO to S9, RL and SC, between the new SM relay of Figure 2 for switch 10 on RDC frame 0 and the SM relays for switches 7 to 9, associated with district junctor frame 2.

3.35 Assuming that district junctor frame 2 has its LL relay of Figure 7 wired as the last appearance, in accordance with Figure C, change the wiring so as to become an intermediate appearance, and extend the chain to the new LL relays for district junctor frames 3 and 4.

3.36 Remove the block from the CB relay of Figure 4 for district junctor frame 2 and the busy condition from ZR circuits 3 to 9.

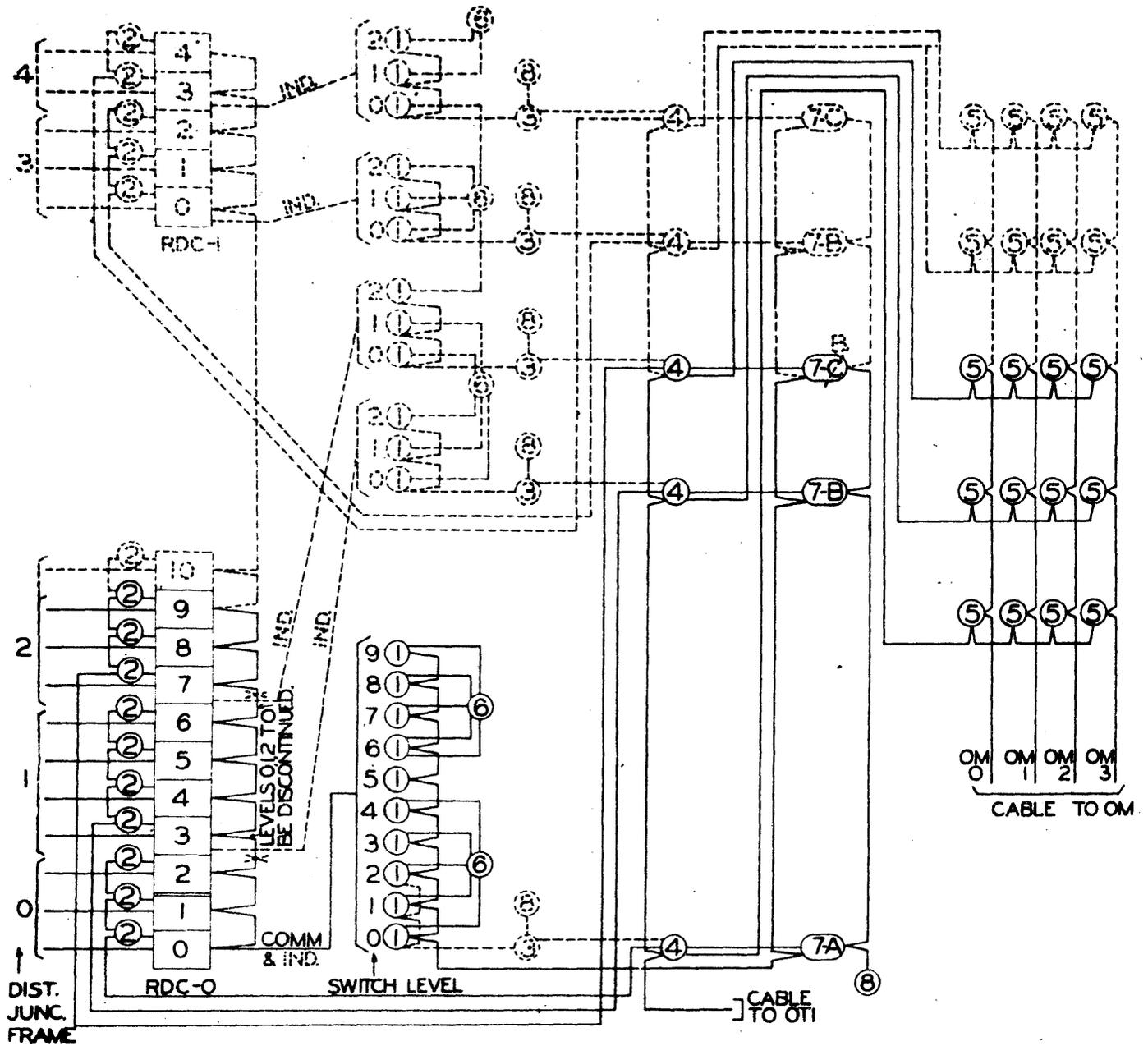
3.4 Step 3 - Extend the Common Group Multiple to the Added District Junctor Frame 3 and 4

3.41 Make busy ZR circuits 3 to 9.

3.42 Extend the multiple of levels 3 to 9 from switch 10 on RDC frame 0 to switch 0 on RDC frame 1.

3.43 Extend the multiple for leads ZA-ZE, ZL, BTO-9, CTO-9, GT, between Figure 7 of present district junctor frame 2 and Figure 7, each, of new district junctor frames 3 and 4.

3.44 Remove one originating marker from service, extend its multiple between the present and new Figure 5 and return it to service.



ALL NUMBERS IN CIRCLES ARE SD 25320-01 DRAWING FIGURES.
 EACH NUMBER IS A SEPARATE FIGURE.
 — PRESENT ARRANGEMENT. ---- ADDITIONS.

FIG. 3 SD DRAWING FIGURE OUTLINE FOR TRANSITION STEPS 1, 2, 3 (PAR. 1.41)

3.45 Repeat Paragraph 3.44 on all other originating markers.

3.46 Extend the multiple between the present and new Figure 4 for the ZRO-9 leads of the trouble indicator frame.

3.47 Remove the busy condition from ZR circuits 3 to 9.

4. CLEAN UP WORK

4.1 Remove all cabling and wiring no longer required, as specified at the completion of the transition work.

← 5. SEQUENCE OF OPERATIONS

5.1 Figure 4 provides a brief outline of the various operations.

ZONE REGISTRATION				
Preliminary Work	Wire & Test			
	District Junctors	-		
	District Links	-		
	New ZR Equipment	-		
Transition Work	Multiple between new RDC switches	-		
	Establish Individual Groups		-	
	Provide for New Dist. Junc. Groups			-
	Extend Common Multiple			-

FIG. 4 SEQUENCE OF OPERATIONS (PAR. 5.1)

→ Arrowed lines indicates new or changed information

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Reason for Reissue:
To remove time changing information
and general handbook revision

Replaces Section 24B, dated 4-17-47