

## E-TYPE TELEPHONE REPEATERS NETWORK STRAPPING BY USE OF CHARTS E1, E2, E13, AND E23 REPEATERS

### 1. GENERAL

1.01 This addendum supplements Section 332-200-106, Issue 1.

1.02 This addendum is issued to change the title of the section to include E1 and E2 repeaters, and to authorize use of the section for strapping existing E1 and E2 repeaters not associated with E3 repeaters, in the limited number of applications where such use does not preclude meeting current transmission objectives.

### 2. E1 AND E2 NETWORK STRAPPINGS

2.01 In the section, all of the charts include strappings for E1s or E2s and for E3s, where used as E13 or E23 combinations. Those E1 or E2 strappings for loaded cable circuits may also be used when the E1 or E2 repeaters are used alone, if suitable care is taken in selecting the gain step at which to enter the charts, as covered below. Some of these strappings differ from those formerly given in Section 332-200-107, but provide equivalent transmission performance.

### Selecting the Gain Step

2.02 The relation between the gain provided by the E1 or E2 repeater alone and that provided by the E13 or E23 combination (with the same E1 or E2 strapping) is given in Par. 3.09 of the section, and is repeated here for convenience. To illustrate its use, suppose that the 3.5-dB network strapping for an E2 repeater is needed. Look for 3.5 in the "E1 or E2" column, and find 5.8 in the corresponding line of the "E13 or E23" column. The strapping needed for the E2 repeater will be found in the "E1 or E2 STRAPPING" column of the proper strapping chart, opposite the nominal gain 5.8 dB.

GAINS IN DB			
E1 OR E2	E13 OR E23	E1 OR E2	E13 OR E23
1.0	1.9	4.0	6.5
1.5	2.7	4.5	7.3
2.0	3.5	5.0	8.0
2.5	4.3	5.5	8.6
3.0	5.0	6.0	9.2
3.5	5.8	6.5	9.8