# 20C TEST SETS

## NOTES CONCERNING THIS ADDENDUM

This addendum supplements G86.061.6 with information regarding the use of a locally developed network in connection with the 20C test sets to minimize the possibility of interference in working cable.

"See Addendum" should be marked in G86.061.6 at Paragraph 1.02 which is supplemented and following Paragraph 2.04 to indicate additional information has been added.

## 1. GENERAL

1.02 Sets in this area are equipped with a locally designed network which is described in Part 2 of this section.

## 2. DESCRIPTION

2.05 Sets in this area are equipped with networks for the purpose of reducing interference in working cables. The network consists of a condenser and two resistances mounted in the buzzer compartment. The input of the network is connected to the 3 and 5 terminals of the 20-C test set and the output is connected to two added Fahnestock terminals designated "NET OUTPUT." Figure 1 shows the arrangement of this modification.

Note: Use terminals 3-4-5 only under the conditions outlined in Paragraph 2.07.

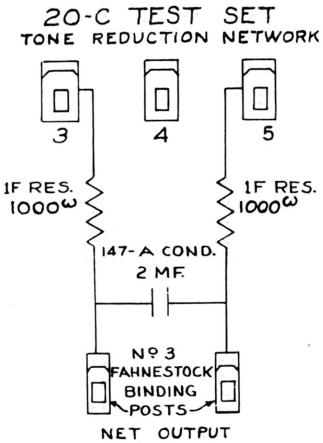


FIG. 1

2.06 Tone from the "NET OUTPUT" should always be used when tests are being made in working cables except in the special cases noted in Paragraph 2.07. A portable amplifier, such as the 4-B or 107-A amplifier, may be required at the listening point when using the 19-C coil for locating cable trouble, or the 108-A amplifier when identifying pairs, in order to increase the received tone to a suitable level.

2.07 The original output terminals are left in the 20-C set for use when the unfiltered output can be permitted, such as for tests in new cables where no working circuits will be exposed to interference, when exploring for underground structures, or in making tests which require other types of filters, such as in cables containing carrier circuits. The output from terminals 3 and 5 is maximum and shall be used when the fault resistance is high. Reduced output is available from terminals 3 and 4 and shall be used when fault resistance is low. In special cases where the "NET OUTPUT" is not sufficient, even with an amplifier at the listening point, the direct output from terminals 3 and 4 or 3 and 5 may be used in working cables if approved by the test deskman, except as indicated below.

2.08 For cables containing carrier circuits, approved tones other than the 20-C test set are considered advisable. If the 20-C test set is used, a network such as the 471A or its equivalent must be employed. Other tone sources which will minimize the possibility of interference include the following test sets: 43-A, 45-A and Spec. D159545 sets and certain vacuum tube oscillators with output current limit.