

CROSS-OFFICE NOISE—TESTING METHODS

SELECTING A SAMPLE

1. GENERAL

1.01 This section describes sampling techniques to be used in selecting lines for cross-office noise testing. Two sources of test lines and numbers are offered. The number of test calls required, the type of line to select and the conditions under which the selected lines are to be used are also described.

1.02 Associated sections are:

Test Equipment	331-700-130
Requirements	331-700-300
General Procedures	331-700-500
SXS Offices	331-700-501
Panel Offices	331-700-502
No. 1 Crossbar	331-700-503
No. 5 Crossbar	331-700-504
No. 1 ESS	331-700-505

2. SELECTING LINES AND NUMBERS

2.01 When selecting a test sample, all of the lines and numbers selected in an office must be in the same machine. Do not, for example, make a test call from a panel line to a crossbar number in the same building. Where several panel or SXS units use common *originating equipment* consider the whole as one machine. Where there is more than one crossbar marker group in the same building consider each marker group a separate entity. Make 20 test calls in each marker group.

2.02 The lines selected must be in different originating subgroups. This precludes identical paths through the originating machine on two test calls in the same sample. In panel and SXS offices, call numbers selected for noise measurement must be in different 100 groupings. This will preclude

identical paths through the terminating machine on two test calls in the same sample.

2.03 When using current service orders as a source of lines and numbers, individual lines should be used, preferably flat rate. When message rate lines are used, the test calls must be excluded from the line message register readings posted to the service orders. When using NC orders, read the line message register *after* testing. On PD orders read the register *before* testing.

2.04 In non-AMA offices, the locally approved message unit credit form can be used to credit the line with *completed* test calls. In AMA offices, the locally approved message unit credit form must be issued covering all *completed* test calls made from each line.

2.05 Ground start and coin lines must not be selected for test lines.

3. SOURCES OF TEST LINES AND NUMBERS

3.01 Current service orders can be used as a source of lines and numbers for noise test calls in any office. Select two NC (new connect) orders before turnover to customer or two PD (Permanent Disconnect) orders before jumpers are removed or select one of each. All of the lines and numbers selected must meet all of the requirements and be used under the conditions listed in Part 2.

3.02 Jack-ended test lines or numbers can be used in any office where they are available. When jack-ended circuits are used, only those requirements listed in 2.01, 2.02, and 2.05 apply.

3.03 In panel and SXS offices where service order activity does not provide enough usable lines or numbers within a reasonable period, spare lines and numbers can be used at their distributing frame appearances. When spare lines and numbers

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are used, only those requirements listed in 2.01, 2.02, and 2.05 apply.

3.04 In crossbar and in ESS offices where service order activity does not provide enough lines and numbers within a reasonable period, service orders will be required to have cross-connections made for test lines. It is understood that spare lines and numbers may not always be available in some locations and that service orders entail a considerable amount of work. For this reason the "current service order" method is recommended in crossbar and in ESS offices. All of the lines and numbers used on such service orders must meet only those requirements listed in 2.01, 2.02, and 2.05.

4. SAMPLE SIZE

4.01 In panel and SXS offices where one or more units use the same originating equipment, 20 test calls should be made from lines and to numbers that meet the requirements listed in Part 2.

4.02 In crossbar offices, 20 test calls should be made in *each marker group* from lines and to numbers that meet the requirements listed in Part 2. Since the newer crossbar equipment is of radically different physical design and most multigroup offices have both old and new equipment, each marker group should be sampled as a separate entity. Very little is known about the long term effects of environmental factors on the newer equipment.

4.03 In ESS offices, 20 test calls should be made in each machine.

4.04 The testing methods sections describe the method for placing the test calls and making noise measurements. When 20 connections have been tested, the data is analyzed to see if the results are satisfactory, unsatisfactory, or in doubt. When in doubt, test 20 additional connections. The additional connections must be selected with the same rules that applied in selecting the first 20 connections.