

TRUNK TRANSMISSION MAINTENANCE INDEX

MECHANIZED SUMMARY PROCEDURE—DATA REPORTING

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1. GENERAL

1.01 This section describes the forms and the procedures required to use the Bell System mechanized program that summarizes loss and noise measurements and computes the Trunk Transmission Maintenance Index (TTMI) for Individual Companies.

1.02 Issue 4 includes additions and changes made to the mechanized summary procedure. Since it is a general revision, marginal arrows usually used to denote changes have been omitted.

1.03 Associated sections which should be consulted to fully understand the mechanized procedure are:

301-124-100 Trunk Transmission Maintenance Index Mechanized Summary Procedure—General Description

301-124-110 Trunk Transmission Maintenance Index Mechanized Summary—Description of Outputs.

1.04 Individual offices record loss and noise measurements as they are made on the appropriate forms. The forms are prepared in duplicate. The *original* is forwarded to the data processing center (DPC) designated locally in each Company. (Fig. 1) Care should be taken to prepare the forms legibly. At the DPC, the measurements are recorded on keypunched cards and entered into the mechanized program; this program then summarizes results and computes indexes. ***Plant/Network staff and DPC representatives must prepare a realistic schedule*** of dates for the individual offices to forward input forms to the DPC. If this is done, outputs can be returned to the individual offices at the intervals requested—weekly, monthly, or quarterly. Subdistricts also can request loss results on a weekly or monthly basis. In addition, subdistricts and district loss and noise results are compiled quarterly and outputs sent to those levels of organization. At division or area levels, balance measurements are introduced. Then in addition to loss and noise component results, the TTMI results will be issued for division, area, and Company. (Fig. 2)

1.05 One of the outputs from each Company is an AT&T Report (Fig. 22) that should be forwarded to the Administrative Services—Calculating Services Supervisor, 295 North Maple Avenue, Basking Ridge, New Jersey 07920, for preparation of System results not later than the 25th of the month following the end of each quarter.

1.06 In this section, the small numbers on forms showing the field or column in which information is to be keypunched on computer input cards are referred to as column numbers.

1.07 Order the following E forms from Western Electric Company.

FORM NO.	NO. OF SHEETS TO PAD	NO. OF PADS TO PACKAGE
E 5695 (MANUAL) Input 04	100	4
E-5696 (ATTC) Input 05	100	1
E-5910 (Controlled Trunks) Input 03	100	2
E-5911 (ATMS) Input 06	100	1
E-5912 (Uncleared Noise) Input 08	100	2
E-6501 (CAROT) Input 10	100	2

1.08 Unnumbered forms (Input 01, 02, 09 and Quarter History Sheet) are not required in large quantities. Use attached blank copies for reproducing the required copies.

1.09 One of the inputs for every quarterly Electronic Data Processing (EDP) run will be a Quarter History file. The initial EDP run when the TTMI program is introduced will require Plant/Network to create these records manually for each office that has trunks measuring loss at 50 or 60 frequency (semiannually or annually). Quarter History Sheet (Fig. 20) will be used for this. Line 1, Column 1 will show A (add) under these circumstances. Figure 20 may be used for reproducing the copies required. If the TTMI program is introduced in the first quarter of a year, no noise quarter history file will have to be created. However, if it is introduced at any other quarter, the Quarter History Sheet for noise will also have to be submitted so that previous quarter data can be incorporated in the results. See step by step procedures in 11.02. See Fig. 23 for a list of Quarter History Update error messages.

2. REPORT FREQUENCY AND MAILING INFORMATION RECORDS

2.01 Inputs 01 and 02 are used to provide the master computer file information necessary for control of the data processing program (DPP). In addition, inputs 01 and 02 ensure that output information is sent to the proper location at the requested interval. These inputs must be submitted when the mechanization program is initiated. However, there is no need to reissue the forms unless there is a change of address, organization, or the frequency that reports are desired. Blank copies of the two records are attached for reproducing the number of copies required. (Fig. 3 and 4) Another copy of each format is attached giving examples of how they should be filled out. (Fig. 5 and 6)

A. For Offices (Input 01)

2.02 The form for reporting the office information is **Input 01** and the code 01 appears in Columns 1 and 2. Each sheet has space for information for three offices. The program will accept a maximum of 25 offices for each subdistrict. Figure 3 is a blank form to be used for reproducing copies required.

2.03 On input 01, line 01, Column 3 must show the code indicating why the form is being submitted, eg, Code 4 in Column 3 is used when creating the file. A list of the codes and uses is provided on the Input 01 form. (See Fig. 5.)

2.04 The code number shown on Line 01, Column 4, indicates whether or not the office wishes to receive progress reports on a weekly or monthly basis in addition to the regular quarterly inputs. Code 3 is used if weekly or monthly progress reports are not desired. Additional codes are listed in the Input 01 form (See Fig. 5).

2.05 On line 01, Column 5 will be blank in most Companies. The exception is if a Company is using the format referred to in 10.01 then a Code 1 is shown in Column 5.

2.06 On line 01, Columns 6 through 16 are provided for the 11-digit Common Language Location Identification (CLLI) code for the particular office. If an office does not know its CLLI code, it can be found in the 795 series of BSPs. An individual section is prepared for the offices of

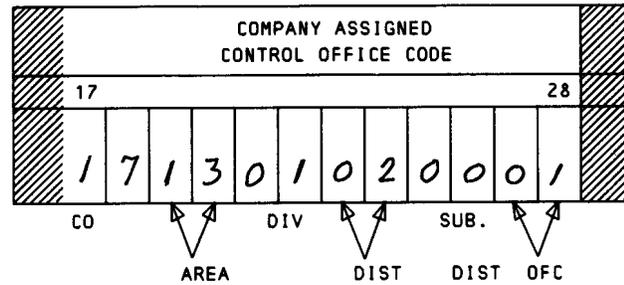
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each state. If a location has only 10 digits, add a zero at the end to make 11 digits. To avoid confusion between the number zero and the letter "O" always put a *slash* through the letter (Ø). In the case of the number one and the letter "l" put horizontal lines at the top and bottom of the letter l. Letter "Z" should have a *slash* through it (Z) to differentiate the letter from the number two.

2.07 If the CLLI code is changed after it is in the program, 11.06 gives the step by step procedure for making the change.

2.08 On line 01, Columns 17 through 28 are provided for the 12-digit control office code assigned by each Company. These particular office codes *should be assigned at a centralized location* such as Headquarters or Area Plant/Network staff. The code is a unique number that indicates what subdistrict, district, division, area, and Company the office belongs in. All columns must be filled with numerals. If a district has offices reporting directly with no subdistrict organization, zeros

should be placed in columns that refer to the missing level of organization as shown below:

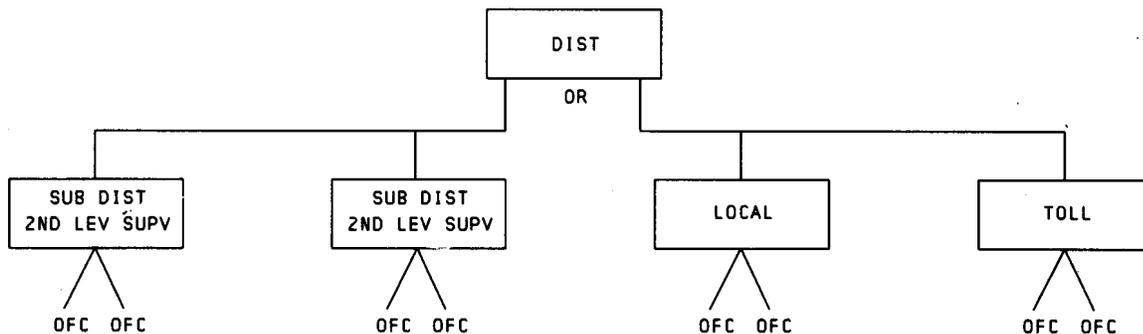


Company and area codes must be designated in accordance with the list shown in Fig. 7. Division, district, subdistrict, and central office codes are assigned in each Company.

Note: Do not assign Code 99 as 99 is used in Input 02 to designate a particular condition.

2.09 If it is necessary to change the company assigned code after it is in the program, 11.07 gives the step by step procedures.

2.10 Some Areas or Companies may not want to use subdistrict level in the way it is designed in the program. Two possible ways of using this level are shown below.



2.11 On line 01, Columns 29 through 42 contain the office name; this will be used to designate the office on all outputs. An office name can be used only once in a district. Always begin in Column 29 leaving blanks and using abbreviations where necessary.

2.12 On line 02, Columns 17 through 46 show the title of the person to whom progress and quarterly reports will be addressed, eg, Chief

Switchman—5 Floor. Always begin in Column 17 leaving blanks and using abbreviations where necessary.

2.13 On line 02, Columns 47 through 76 show the name of the Company for the reports. This is necessary because some reports will be sent by U.S. Mail.

2.14 On line 03, Columns 17 through 46 show the address to which the progress and

quarterly reports are sent. Always begin in Column 17 leaving blanks and using abbreviations where necessary.

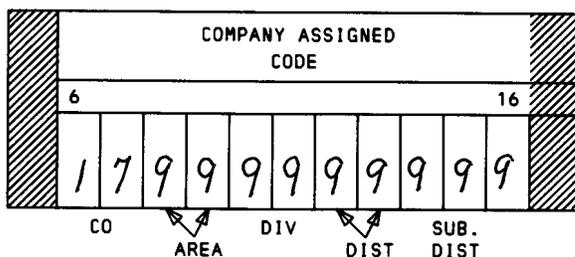
2.15 On line 03, Columns 47 through 76 are provided for the city, state, and zip code number needed to send reports by U.S. Mail. Always begin in Column 47 leaving blanks and using abbreviations where appropriate.

B. For Subdistrict, District, Division, Area, and Company (Input 02)

2.16 The form for the subdistrict, district, division, area, and Company reports is called **Input 02** and that code 02 appears in Columns 1 and 2. Each sheet has space for information for three locations. The program will accept a maximum of 15 subdistricts for each district, 15 districts for each division, 15 divisions for each area, and 20 areas for each company. Figure 4 is a blank form to be used for reproducing the number of copies required.

2.17 On line 01, Column 3 must show the code that indicates why the form is being submitted, eg, Code 4 in Column 3 is used when creating the initial computer file. A list of the codes and uses is provided on the Input 02 form. (See Fig. 6.)

2.18 On line 01, Columns 6 through 15 show the Company code assigned by each Company. **These codes should be assigned at a centralized location**, eg, Headquarters or Area Plant/Network staff. Each code is a unique number that indicates where the locations fit into the levels of organization. The last digit shows a preprinted nine to indicate that this location is not an office; all office information must be given on Input 01 form. Two digits are left for all other levels and 99 must be placed in the columns that do not apply. If **company** mailing information is being provided, these columns would be filled in as shown.



As mentioned in 2.08, the Company and Area codes are designated in Fig. 7. Division, district, and subdistrict codes are assigned in each Company as required.

Note: Do not assign code 00 as 00 is used in Input 01 to designate a particular condition.

2.19 On line 01, Columns 29 through 42 contain the name of the subdistrict, etc; this will be used as the designation on all outputs. Therefore, the same designation can be used only once in a district. Always begin in Column 29 leaving blanks and using abbreviations where necessary.

2.20 On line 02, Columns 17 through 46 show the title of the person to whom progress and quarterly reports will be addressed. Always begin in Column 17, leaving blanks and using abbreviations where necessary.

2.21 On line 02, Columns 47 through 76 show the name of the Company for the reports. This is necessary because some reports will be sent by U. S. Mail.

2.22 On line 03, Columns 17 through 46 show the address to which the progress and quarterly reports are sent. Always begin in Column 17, leaving blanks and using abbreviations where necessary.

2.23 On line 03, Columns 47 through 76 are provided for the city, state, and zip code number needed to send reports by U. S. Mail. Always begin in Column 47, leaving blanks and using abbreviations where appropriate.

3. CONTROLLED TRUNKS FORM E-5910 (INPUT 03)

3.01 Initially, every reporting office, except offices completely tested by Centralized Automatic Reporting On Trunks (CAROT), must submit **Input 03**, Form E-5910, to the DPC. This record is used as a base for determining the percentage of measurements made. (See Fig. 8.) Once an Input 03 is on file, it is not necessary for an office to submit another until there is some change. The trunk information in the computer memory for a given office will always be that submitted on the latest valid Input 03. When the controlled trunks need to be corrected, the office can submit a new Input 03 listing the correct information for the first run of the quarter. Then, **the information on this Input 03 will replace the**

corresponding data existing in the program.

If, however, there is a significant change after the first run of the quarter for one or more trunk groups, the computer memory may still be updated by submitting an Input 03 with an A or D in Column 32 for the trunk group being changed only. The 03 issued **during** the quarter is **not** a complete replacement, eg, if the program shows:

TYPE	FACILITY	SCHED FREQ	CONT TRKS	COL 32
1	02	50	100	

and 25 of them are disconnected the 03 issued **during** the quarter would show:

TYPE	FACILITY	SCHED FREQ	CONT TRKS	COL 32
1	02	50	25	D

Computer memory would then show 75 trunks for Type 1, Facility 02, Frequency 50. If, instead of disconnecting, you wish to add 25 trunks and 03 issued **during** the quarter would show:

TYPE	FACILITY	SCHED FREQ	CONT TRKS	COL 32
1	02	50	25	A

Then the computer memory would show 125 trunks for Type 1, Facility 02, Frequency 50.

3.02 In order for the DPC to notify the office of the numbers of inputs received from each office and whether or not there are any errors, pages must be numbered; three spaces (Columns 3, 4, and 5) are provided for this at the top of the form. **Use Column 5 for a single digit.**

3.03 Columns 6 through 16 are provided for the 11-digit CLLI code. If the CLLI code, for any office is unknown, the code can be found in the 795 series of BSPs. An individual section is prepared for the offices of each state. (See 2.06.)

If a location has only 10 digits, add a zero at the end to make 11 digits.

3.04 Columns 17 through 19 should show the quarter and year for which this control trunk information is being provided.

3.05 The term "type of loss measurement" refers to method used, ie, manual Automatic Transmission Test and Control (ATTC), Automatically Directed Outgoing Intertoll (ADOIT), or Automatic Transmission Measuring System (ATMS). Each type of loss measurement will have a line for each facility scheduled to be measured at one particular frequency. (See Fig. 8.) The code number in Column 22 indicates the type of loss measurement to be used; these codes are listed in the instruction section of the form.

3.06 Columns 23 and 24 are provided for the two-digit codes assigned to different facility arrangements as follows:

01—E rept (no hyb)—trunk equipped with an E-type repeater that has a 2-wire switching system at both ends.

02—E rept and hyb—trunk equipped with an E-type repeater and hybrid at the end to provide for 4-wire switching, eg, a trunk to a No. 4 Crossbar Office.

03—Non gain (no hyb)—trunk without gain device that has a 2-wire switching system at both ends.

04—Non gain and hyb—trunk without gain device that has a 4-wire switching system at one end requiring a hybrid.

05—Comb E rept N gain (no hyb)—see individual definitions above. Used when an ATTC, ATMS, or CAROT measure both E repeatered and non gain trunks on the same run.

06—Comb E rept N gain and hyb—see explanation under 05.

08—Rept other than E—trunk equipped with a gain type repeater instead of a negative impedance repeater type, eg, V type instead of E type.

09—Carrier—trunk making use of L, N, ON, T, etc, carrier channels.

10—Comb other Rept and Carrier—Used when an ATTC, ATMS, or CAROT measure both trunks with 4-wire repeaters and carrier on the same run. The above code numbers are listed in the instruction section of the form.

If more than one type of device is used, assign the code of the one that should be measured more often.

3.07 Columns 25 and 26 are provided for the code to indicate the scheduled loss measurement frequency for trunks shown on that particular line. These codes are listed in the instruction section of the form.

3.08 Columns 27 through 31 should show the number of controlled trunks of a certain type, facility, and measurement frequency on each line. **The unit digit belongs in Column 31.**

3.09 Column 32 is to be used only if an addition or deletion is required to original information submitted and the change is being made **after the first run of a quarter.**

(1) If a line of data shown on original information is to be deleted **completely**, enter a D in Column 32 for the facility group being changed and the information will be removed from the program.

(2) If an additional line of data or an addition to a line already in memory needs to be put into the program, show an A in Column 32 and submit the data. Do not repeat the lines that were originally submitted and remain unchanged.

4. MANUAL LOSS AND NOISE MEASUREMENTS—FORM E-5695 (INPUT 04)

4.01 In offices that measure manually, the tester will record loss and noise measurement for each trunk on Input 04, Form E-5695. (See Fig. 9.) Each form has space for measurements on 20 trunks. The **originals** are sent to the DPC. The **duplicates are retained** in the central office and used to take corrective action as required.

4.02 In order for the DPC to notify the office of numbers of inputs received from each office and whether or not there are any errors, pages must be numbered; three spaces (Columns 3, 4, and 5) are provided for this at the top of

the form. **Use Column 5 for a single digit.** Pages issued on one day are numbered sequentially. When pages are submitted on another date, start with number one.

4.03 Columns 6 through 16 are provided for the 11-digit CLLI code. If the CLLI code for any office is unknown, the code can be found in the 795 series of BSPs. An individual section is prepared for the offices of each state. If a location has only 10 digits, add a zero at the end to make 11 digits. To avoid confusion between the number zero and the letter "O", put a **slash** through the letter (Ø). In the case of number one and letter "1", put horizontal lines at the top and bottom of letter I. Letter "Z" should have a **slash** through it (Z̄) to differentiate the letter from the number two.

4.04 Column 17 will show Code 1 if it was scheduled to be tested manually and in fact it was tested manually. If, however, the testing is scheduled to be automatic but is done manually, show the type originally scheduled in Column 17. If loss is automatic but noise is measured manually, show automatic type, facility, and loss frequency for the noise on Input 04. If CAROT is included in this report, Input 10 must be submitted ahead of this input, otherwise it will be rejected. See back of Input 04 (Fig. 10) for codes and explanations.

4.05 Columns 18 and 19 are provided for the two-digit codes assigned to different facility arrangements. Code numbers are on the back of the form. See 3.06 or the back of Input 04 (Fig. 10) for further explanation.

4.06 Columns 20 and 21 are provided for the code to indicate the scheduled **loss** measurement frequency of all the trunks shown on that particular page. See reverse of form for code numbers.

4.07 Columns 22 through 27 are provided for the date the page is forwarded to the DPC. All pages submitted on the **same** date should be numbered sequentially.

4.08 Space is provided on the form to identify the trunks being measured. This permits the tester to go back and work on any trunks requiring corrective action after he has submitted the original of the form to the DPC. In addition, this identification may be necessary if the computer

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edit program shows an error on a line requiring correction.

4.09 The Engineered Measured Loss (EML) value should be written in Columns 34 through 36 by the tester before taking the measurements. This information is available on a circuit layout card or its equivalent. The value should be correct to one decimal place; the mark "▲" indicates the decimal point on the form; the tenths digit should be in Column 36. If more than one trunk has the same value EML, a vertical line can be drawn down through those lines instead of rewriting the numbers. If any line does *not* show an EML value or a vertical line, the form will be returned from the DPC as an error. Also, if the EML is greater than 16.0 dB, the edit program will not accept it. Since loss and noise measurements will not always be made at the same frequency, the computer program will accept reports with either loss or noise only.

A. Manual Loss Measurements

4.10 Far to Near Actual Measured Loss (AML)—Enter the actual measured loss in Columns 31 through 33 when measuring the loss at the near end. If a loss of more than 19.9 dB or a gain of more than 9.9 dB is recorded, it will not be accepted by the edit program.

4.11 Near to Far AML—Enter the actual measured loss in Columns 38 through 40 when measuring the loss at the far end. The values should be correct to one decimal place; "▲" indicates the decimal point on the form. If a loss of more than 19.9 dB or a gain of more than 9.9 dB is recorded, it will not be accepted by the edit program. If facility is 01, 03, 05 program will accept F through N or N through F; all others require both filled in.

4.12 Columns 30 and 37 remain blank unless the measurement to be recorded is gain instead of loss. Then a minus sign (-) to indicate gain is shown in the proper column.

Note: Gain refers to readings above 0.dB

B. Manual Noise Measurements

4.13 Enter the miles shown on the circuit layout card in Columns 41 through 44. **The units digit should be in Column 44.** If the exact

mileage is not available, show the approximate mileage. When more than one trunk has the same mileage, a vertical line can be drawn down through the column instead of rewriting the number. If any line does not show a mileage value or a vertical line, the form will be returned from DPC for correction.

Caution: If mileage is shown on the form the program will reject the information unless noise measurements are also given.

4.14 Information relating to noise limits on Intertoll, Toll Connecting and Exchange type trunks is contained in Section 660-403-500. Information on tests on toll connecting and exchange type trunks not appearing on testboards is contained in Section 660-500-500.

4.15 Enter the near end and far end limits in Columns 45 through 48 and Columns 51 through 54, respectively; limits are found in Section 660-403-500. Even when the limits are the same on both ends of the trunk (same type of testboards and/or measuring systems), an entry must be made in both places. Otherwise, the DPC will return the form for correction. If a number of trunks on the same page have the same limits, a vertical line can be drawn down through the proper lines instead of repeating the number. If there is neither a value nor a line, the form will be returned from DPC for correction.

4.16 Columns 49 and 50 and 55 and 56 are provided for the tester to record the actual noise measurements made. If the measurement is a single digit, it should be entered in Columns 50 or 56.

4.17 There is space at the end of each line to record any action taken or a trouble ticket reference. This information does not affect the program. Space is also provided for showing estimated noise at far end. However if it is the type of 01, 03, 05 facility where far end noise can be estimated, the program will do the computations. If Input 04 has only noise measurements, the program cannot estimate far end noise .

4.18 Since loss and noise measurements will not always be made at the same frequency, the computer program will accept reports with loss

measurements without any noise measurements or noise measurements without loss.

4.19 When an office measures loss automatically (ATTC) and records the information on Input 05 the noise measurement will be submitted on the Input 04 with type 2 or 3 shown in Column 17.

5. AUTOMATIC LOSS AND NOISE FORMS (INPUTS 05 AND 06)

A. Loss Measurements with ATTC Frames—Form E-5696 (Input 05)

5.01 In offices that make loss measurements using the ATTC (ADOIT) frame, **Input 05**, E-5696 is used. The tester records the readings of the loss deviation registers on the form and sends the original to the DPC. A sample of Form E-5696 filled in is shown in Fig. 11. Columns 30 through 77 on lines 01 through 07 and 11 through 17 are drawn to simulate the registers that the tester will be reading.

5.02 A separate page is required for each set of circumstances involving type, facility, and loss measurement frequency. One page will show only one type and one facility at one measurement frequency. All pages of this input submitted on the same date should be numbered sequentially. **A single-digit number should be recorded in Column 5.**

5.03 Enter the 11-digit CLLI code in Columns 6 through 16. If an office does not know the CLLI code, it can be found in the 795 series of BSPs. An individual section is prepared for the offices of each state. If a location has only 10 digits, add a zero at the end to make 11 digits. To avoid confusion between the number zero and the letter "O", put a *slash* through the letter (Ø). In the case of number one and letter "I", put horizontal lines at the top and bottom of the letter I. Letter "Z" should have a *slash* through it (Z̄) to differentiate the letter from the number two.

5.04 Enter Code 2 or 3 in Column 17 dependent on whether the ATTC tests to 102 or 104 type test line. See reverse of the form for these codes. (Fig. 12)

5.05 Columns 18 and 19 are provided for the two-digit codes that indicate the measurements shown on that page were made on trunks with that particular facility. The code numbers are shown on the reverse of the form and definitions of the facility arrangements are shown in 3.06.

Note: ATTC runs must be made so that readings can be obtained for E repeater and non gain facilities separate from carrier and other repeatered facilities.

5.06 Columns 20 and 21 are provided for the code to indicate the scheduled loss measurement frequency of trunks shown on that particular page. If the ATTC is operated to test the trunks weekly or more frequently, show the frequency as weekly. All readings can be submitted if trunks are measured at the same frequency. However, if some are measured weekly and others more often, only one set a week should be submitted.

5.07 Enter the date the form is prepared in Columns 22 through 27. One form can show readings taken on several dates—a line for each day.

5.08 If an office is unable to measure loss using the ATTC (out of service, etc), manual readings are made and submitted on Input 04 (E-5695) with appropriate Type (2 or 3) as reported on Input 03 with a Frequency 13, 23, etc. This will adjust control trunks from automatic to manual. This adjustment will be reflected on progress reports, but the total trunk figures will not change.

5.09 Noise measurements must be made manually in offices having ATTC frames and are submitted on Input 04 (E-5695). Type 2 or 3 will be shown on Input 04.

B. Loss and Noise Measurements with ATMS Frames—Form E-5911 (Input 06)

5.10 In offices that make loss measurements using the ATMS frame, Input 06 (E-5911) is used. The tester records the readings of the loss deviation and noise registers on the form and sends the original to the DPC. (See Fig. 13.) Columns 30 through 61 on lines 01 through 07, Columns 30 through 69 on lines 11 through 17, and Columns 30 through 39 on lines 21 through 27 are drawn to simulate the registers that the tester will be reading.

Note: ATMS tapes or cards must be prepared so that readings can be obtained with E repeater and non gain trunks separate from Carrier and other repeatered trunks.

5.11 A separate page is required for each set of circumstances involving type, facility, and loss measurement frequency. One page will show only one type and one facility at one measurement frequency. All pages of this input submitted on the same date should be numbered sequentially. **A single-digit number should be recorded in column 5.**

5.12 Enter the 11-digit CLLI code in Columns 6 through 16. If an office does not know the CLLI code, it can be found in the 795 series of BSPs. An individual section is prepared for the offices of each state. If a location has only 10 digits, add a zero at the end to make 11 digits. To avoid confusion between the number zero and the letter "O", put a SLASH through the letter (Ø). In the case of number one and letter "I", put horizontal lines at the top and bottom of the letter I. Letter "Z" should have a *slash* through it (Z̄) to differentiate the letter from the number two.

5.13 Enter Codes 4, 5, 6, or 7 in Column 17 dependent on what type of test lines are used. See reverse of the form for these codes. (Fig. 14)

5.14 Columns 18 and 19 are provided for the two-digit codes that indicate the measurements shown on the page were made on trunks with that particular facility. The code numbers are shown on the reverse of the form (Fig. 14) and definitions of the facility arrangements are shown in 3.06.

5.15 Columns 20 and 21 are provided for the code to indicate the scheduled loss measurement frequency of trunks shown on that particular page. If the ATMS is operated to test the trunks weekly or more frequently, show the frequency as weekly. All readings can be submitted if trunks are measured at the same frequency. However, if some are measured weekly and others more often, only one set a week should be submitted.

5.16 Enter the date the form is prepared in Columns 22 through 27. One form can show readings taken on several dates—a line for each day.

5.17 Lines 01 through 07 and 11 through 17 are used to record readings of loss deviation registers.

5.18 Lines 21 through 27 are used to record noise register readings. The reverse of the form defines the terms used on these registers. (Fig. 14) **QIN Register** records total measurements exceeding maintenance limits. **Total Measurements Register** records total measurements made. **Total Limits Register** records total measurements exceeding immediate action limit.

6. CENTRALIZED AUTOMATIC REPORTING ON TRUNKS (CAROT)

6.01 There will be offices where some trunks have the loss and noise measurements made as directed by a CAROT 1 Center. This section will cover the method of handling the results. When CAROT 2 is introduced, an addendum or a new issue of this section will be issued.

6.02 The CAROT (1) Center will provide the input to the DPC (Input 10). This will include both the number of trunks and test results on all trunks testable for the index by CAROT. There are circumstances where CAROT can access a trunk and test it, but the control office is still required to make tests for the TTMI, eg, a CAROT test to 102 test line (one way loss) cannot be used for index on a 4-wire or carrier trunk. This must be submitted by the control office.

6.03 The CAROT Center will have the responsibility to provide the control office with a listing of the trunks that **cannot** be accessed and tested for the index. The control office will submit an Input 04 to provide the proper inputs to the DPC on all trunks not testable for index by CAROT.

6.04 **Automatic Measurements Using CAROT—Form E-6501 (Input 10)** Input 10 (Fig. 15) will be submitted by the CAROT Center to the DPC. Prepare it in duplicate. The original is sent to the DPC and the duplicate retained in the CAROT Center. The CAROT TTMI Output (see Fig. 16) will give the center most of the information required to fill out the form. The Plant/Network Staff person responsible for TTMI can inform the Center of the local schedule for sending inputs to the DPC.

- 6.05** Columns 1 and 2 on the form indicate that these are CAROT results being submitted by the CAROT Center.
- 6.06** In order for the DPC to notify the office of the number of inputs received and whether or not there are errors, pages must be numbered; three spaces (Columns 3, 4, and 5) are provided for this at the top of the form. *Use Column 5 for a single digit.*
- 6.07** Columns 6 through 16 are provided for the 11-digit CLLI code. This code will appear on the top of the CAROT TTMI Output. If a location has only 10 digits, add a zero at the end to make 11 digits.
- 6.08** The CAROT 1 office is the Remote Office Test Line (ROTL) office as identified in the CAROT Trunk Maintenance File (TMF). In most cases, this will be the control office. In the case of a two way trunk with a ROTL in the non-control office, a local arrangement will have to be made for index reporting. It is suggested that the ROTL office assume routine maintenance control, at least temporarily.
- 6.09** Column 17 will show Code 8 if loss measurements are being made to 102 type test line. These are 2-wire trunks with or without hybrids and one loss measurement per trunk is counted. One manual loss measurement per trunk is also required. The manual measurements will be submitted on an Input 04. On the 04 input show type 8 in Column 17. This will indicate to the program that the noise measurement is associated with the CAROT loss measurement. If a 4-wire or carrier trunk to be tested to a 102 is flagged by CAROT for index, the measurement should not be included. The measurements must be performed manually for index purposes. Input 10 must be submitted ahead of Input 04 in the case of manual measurements, otherwise, it will be rejected.
- 6.10** Column 17 will show Code 9 if loss and noise measurements are being made to 105 type test line. This code will also be used for two wire facilities to a combined 100 type test line. Two-wire, 4-wire, and carrier trunks tested to a 105 type test line have loss and noise measurements counted in each direction.
- 6.11** Columns 18 through 21 show preprinted zeros which are required for keypunching.
- 6.12** Columns 22 through 27 are provided to show the measurement period. The end date that appears on the CAROT TTMI Output should be used. Since this will usually be a monthly report, the start date on the CAROT TTMI Output is not required.
- 6.13** The lines shown below, Columns 28 and 29 are preprinted 01 through 07. This makes it possible to list seven different varieties of facility and frequency that are all the same type.
- 6.14** Columns 30 through 34—The total number of CAROT indexable trunks for each type, facility and loss frequency combination must be entered manually by the CAROT Center for CAROT 1. This information will be provided by the program in CAROT 2. The number of trunks should be updated quarterly. There are some trunks, mentioned previously, that can be accessed by CAROT but not completely tested for TTMI. These trunks are excluded from input 10 and a list must be provided quarterly to the control office by the CAROT Center. In that way, arrangement can be made for issuing 04 inputs to the mechanized program or made part of the manual calculation (if the company does not use the mechanized program).
- 6.15** Columns 35 and 36 are provided for the facility code. Code 05 is a combination of E repeater and non-gain. Code 06 is similar to code 05 but is used when hybrids are present. It is recommended, when trunks are tested to 102 or combination 100 test lines with open hybrid legs, that the ROTL office assume routine maintenance control. Facility code 10 is a combination of other repeater and carrier.
- 6.16** Columns 37 and 38 are provided for the frequency of test intervals. Section 010-410-300 gives the number of frequency categories used in CAROT. Three are used in the TTMI report.
- 10*—weekly
- 20—semimonthly (biweekly)
- 30—monthly
- *Trunks tested daily, 00 frequency, will be flagged once a week for index and included in weekly trunks.

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6.17 Columns 39 through 53 are provided for the actual number of loss measurements in each deviation band.

Deviations greater than ± 0.7 dB and up to ± 1.7 dB list under .7 column

Deviations greater than ± 1.7 dB and up to ± 3.7 dB list under 1.7 column

Deviations greater than ± 3.7 dB list under 3.7 column

6.18 Columns 54 through 60 are provided for the total number of measurements. This figure appears on the CAROT TTMI Output.

A. Noise Deviations

6.19 Columns 61 through 70 are provided for the actual number of noise measurements exceeding maintenance limits and immediate action limits. Columns 71 through 77 are provided for the total. This information appears on the **CAROT Report** (Fig. 16).

7. UNCLEARED NOISE TROUBLES FORM E-5912 (INPUT 08)

7.01 Every office is required to submit Input 08 (E-5912) **near the end of each quarter to the DPC** (Fig. 17). Do not submit this data on first EDP run or it will be rejected. It is suggested that it be submitted before the last run in case there are errors that would hold up the quarterly results. Log of trunks with noise above maintenance limits, Form E-593D or its equivalent, is the source of the information for Input 08.

7.02 Enter the quarter and year for the report period in Columns 3 through 5.

7.03 Enter the 11-digit CLLI code in Columns 6 through 16. Office CLLI codes can be found in the 795 series of BSPs. An individual section is prepared for the offices of each state. If a location has only 10 digits, add a zero to the end to make 11 digits. See 2.06 for additional information.

7.04 Enter in Columns 17 through 21 the total number of trunks above maintenance limit in the office at the time the report is made. **Units digit should be in column 21.**

7.05 Enter in Columns 22 through 26 the number of trunks that have been above the maintenance limit for over a year. **Units digit should be in Column 26.** These trunks are included in Columns 17 through 21 and some may be included in Column 27 through 31.

7.06 Enter in Columns 27 through 31 the total number of trunks referred to the Engineering Department for corrective action and still above the maintenance limit. **Units digit should be in Column 31.** There should be a record of a formal referral.

8. BALANCE MEASUREMENT RECORD (INPUT 09)

8.01 Balance results are submitted at division or area level on Input 09 (Fig. 18) by the Engineering Department. The Plant/Network Staff at Headquarters in each Company should be the coordinator between Engineering and DPC to make certain this input is submitted at the proper time, then the outputs from that level up will show the TTMI not just the Loss and Noise Component Indexes. Form E-5688 will show the information required on Input 09. **Units digits should be in the columns that are to the extreme right.** The mark "▲" indicates where data should be shown to one decimal place.

8.02 Enter in Columns 22 and 23, 24 and 25 the code for Area and/or Division submitting results. Figure 7 gives the assigned Area codes; the division codes are the ones assigned by each company when preparing Inputs 02. If division results are submitted, all divisions within the reporting area must report.

Note: If only area data is reported, Columns 24 and 25 must be blank. If division data is reported, Columns 22 and 23 must have area code.

8.03 Balance results must be submitted once during the quarter. The EDP run can be determined locally. It is suggested that it be before the last run in case there are errors that would hold up the quarterly results. If there is a correction or addition, the letter "C" must appear in Column 4 instead of page number.

8.04 For this program, fourth level of organization (OFFICE, SUBDISTRICT, DISTRICT, or

DIVISION) is considered division even if another title is used.

9. INPUTS RECEIVED AND ERROR LISTINGS REPORT

9.01 The computer program is arranged to return a report to each reporting office giving the number of measurements received by date and input numbers. When there is an error, an error code plus the data will be shown (Fig. 19). A duplicate of the card will be available in Accounting. Errors must be corrected promptly on the error listings report and returned to DPC. Since errors can be the responsibility of either tester or keypunch operator, it is suggested that errors detected by the DPC be corrected immediately. All others must be corrected by Plant/Network.

9.02 The error codes with a sample explanation of the type of error the program checked for is given in Fig. 21.

10. MISCELLANEOUS FORMAT

10.01 An additional format is available in the mechanized program. As of now, no company has chosen to use it. Therefore, the details are not included in this issue of the practice. If, however, from the description given below a company wishes to use it, the detailed format is available in the Program documentation filed by the local Data Processing Group and AT&TCo., Transmission and Network Services, 295 North Maple Avenue, Basking Ridge, New Jersey 07920.

10.02 For those companies that summarize loss data in the control office and wish to continue doing so, a summarized loss input is available (Input 07). But if this loss input is used, noise measurements must also be summarized and **only** introduced at the Area level in a special format.

11. METHODS TO ADD OR DELETE AN OFFICE, CHANGE THE COMPANY ASSIGNED, OR COMMON LANGUAGE LOCATION IDENTIFICATION CODES

11.01 Caution must be taken when an office is being added, deleted, or a company assigned code is being changed. If all data regarding the office are not properly inserted or deleted, that information can cause errors in the overall results. Therefore, it is recommended that additions, deletions, and changes be made at the end of the

quarterly process. To assist you, step by step procedures are included in the following paragraphs.

Note: Never attempt to add and delete the same office on the same run of the program.

A. Adding a Central Office

11.02 The following steps should be taken when a central office is added to the program.

(a) Assign a 12-digit company assigned office code in accordance with 2.07. This code is a unique number that indicates which subdistrict, division, area, and company the office belongs.

(b) Issue an Input 01 that relates this 12-digit company assigned office code to the common language office code, office name, and mailing address. The digit 4 should be shown in Column 3. This input will provide the Master Computer file information necessary for control of the DPP. Once the Input 01 is issued, there is no need to reissue the forms unless there is a change of address, organization, or the frequency that reports are desired. (See Part 2 and Figure 3 and 5 for further details.)

(c) An Input 03 must also be submitted on the next computer run giving the number of trunks by type, facility, and frequency of loss measurements. Column 32 on Input 03 should be left blank if it is the first run of the quarter; any other run should have A in Column 32. This step does not apply to offices completely tested by CAROT.

(d) If **any** of the lines on the Input 03 show a frequency (Col. 25 and 26) of 50 or 60, a TTMI—Quarter History Sheet must be issued for **loss**. (See Fig. 20 and note in next paragraph for specific instructions). In the case of a new office cutover see 11.03 for specific instructions. For a list of the Quarter History Update error messages see Fig. 23. This step does not apply to offices completely tested by CAROT.

(e) If it is **not** the first quarter of the year, a TTMI Quarter History Sheet must be issued for **noise** (Fig. 20). Noise measurements are done on a calendar basis. This form can only be issued for loss **or** noise. If both are required,

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a separate form must be issued for each. In the case of a new office cutover see 11.04 for specific instructions.

Note: TTMI Quarter History Sheet is needed so that measurement made earlier in the year is considered in the results of the office. Failure to submit Quarter History Sheet will unnecessarily penalize an office in percent measured.

11.03 For a new office cutover, the following steps should be completed to create the **Loss** Quarter History Sheet (Fig. 20) for those trunks with an annual (60) or semiannual (50) frequency.

(a) Columns 1 through 18 should be filled in accordance with the instructions provided in the TTMI—Quarter History Sheet form.

(b) Annual frequency (60) Non-Gain—No Hyb facility (03)—Divide the number of control trunks in the office by 4 and round to the nearest whole number. Place the result (zero fill where necessary) in each set of columns—Columns 19 through 24, 25 through 30, 31 through 36, 37 through 41, and 42 through 46. Put a zero in Columns 47 through 51.

(c) Annual frequency (60) Non-Gain—Hyb facility (04), also, semiannual frequency (50), E Rep (01) and Comb. E Rep Non-Gain—No Hyb (05) facility—Divide the number of control trunks in the office by 2 and round to the nearest whole number. Place the result (zero fill where necessary) in each set of columns—Columns 19 through 24, 25 through 30, 31 through 36, 37 through 41, and 42 through 46. Put a zero in Columns 47 through 51.

Note: Any record with other than 03 or 04 facility with annual frequency (60) will be rejected.

(d) Semiannual Frequency (50) E Rep + Hyb (02) Comb. E Rep Non-Gain + Hyb (06) facility. Enter total number of control trunks in the office in each set of Columns 31 through 36, 37 through 41, and 42 through 46. Put a zero in Columns 19 through 24, 25 through 30, and 47 through 51.

11.04 For a new office cutover, the following steps should be followed to create the **NOISE** Quarter History Sheet if it is not the first quarter of the year.

(a) Columns 1 through 14 should be filled according to the instructions on the Quarter History Sheet form.

(b) To determine columns 15 through 21, multiply the number of trunks in the office by 2 and by Q, where Q equals:

- .25 if cutover is in the 2d Quarter
- .50 if cutover is in the 3d Quarter
- .75 if cutover is in the 4th Quarter

Round the result to the nearest whole number and place in Columns 15 through 21 (zero fill where necessary).

(c) To determine the number of manual measurements above the maintenance limits (Columns 22 through 28), multiply the figure arrived at in (2) above (Columns 15 through 21) by P1. P1 is equal to the **district** percentage of manual measurements exceeding the maintenance limit from the quarter previous to the cutover. The P1 for the district can be found on the Noise Report for each district (see Fig. 11 in Section 301-124-110). Round this result to the nearest whole number and place in Columns 22 through 28 (zero fill where necessary).

(d) To determine the number of manual measurements exceeding the immediate action limits (Columns 29 through 35) multiply the figure arrived at in (1) above (Columns 15 through 21) by P2. P2 is equal to the **district** percentage of manual measurements exceeding the immediate action limit from the quarter previous to the cutover. P2 can be found on the Noise Report for each district (see Fig. 11 in Section 301-124-110). Round the result to the nearest whole number and place in Columns 29 through 35 (zero fill where necessary).

B. Deleting a Central Office

11.05 Just as many precautions must be taken in removing a central office from the program as adding one. If obsolete data are left in the program it will cause errors in the overall results.

11.06 The following steps should be taken when a central office is deleted from the program. Only step (b) applies to offices completely tested by CAROT.

(a) An input 03 must be issued giving the number of trunks by type, facility, and frequency. Column 32 should show a D. If the office is deleted after the quarterly run Input 03 need not be issued.

(b) After step (a) has been completed, issue an Input 01 to remove the office from the DPP. ***The digit 5 should be shown in Column 3.***

C. Changing Company Assigned Code

11.07 There are many times when a Company assigned office code must be changed, for example, when there is redistricting. It is important to change all the information in the program that is associated with the office. By using the following guide it will be accomplished. Only steps (a), (b), and (d) apply to offices completely tested by CAROT.

(a) Assign a new 12-digit company assigned office code to indicate which subdistrict, district, division, area, and company the office belongs.

(b) Issue an Input 01 that relates this 12-digit company assigned office code to the common language office code and office name.

(c) If there are any trunks in the office which measure loss on a semiannual (50) or annual (60) basis, a TTMI Quarter History Sheet must be issued for ***loss***. Columns 52 through 63 will show the ***new*** 12-digit code and Columns 3 through 14 will show the ***old*** 12-digit code.

(d) If it is not the first quarter of the year, a TTMI Quarter History Sheet must also be issued for noise. Annual noise measurements are done on a calendar basis. Items 5 and 6 make certain that measurements made earlier in the year are considered in the results.

11.08 If a Company makes a change in the common language code of an office, it will be necessary to:

(a) Issue an Input 01 giving the new common language code. ***The digit 4 should be shown in Column 3.***

(b) Issue another Input 01 to delete the old common language code. ***The digit 5 should be shown in Column 3.***

(c) Issue an Input 03 listing all the trunks by type, facility, and frequency. This step does not apply to offices completely tested by CAROT.

Trunk transmission maintenance index mechanized plan inputs . . .

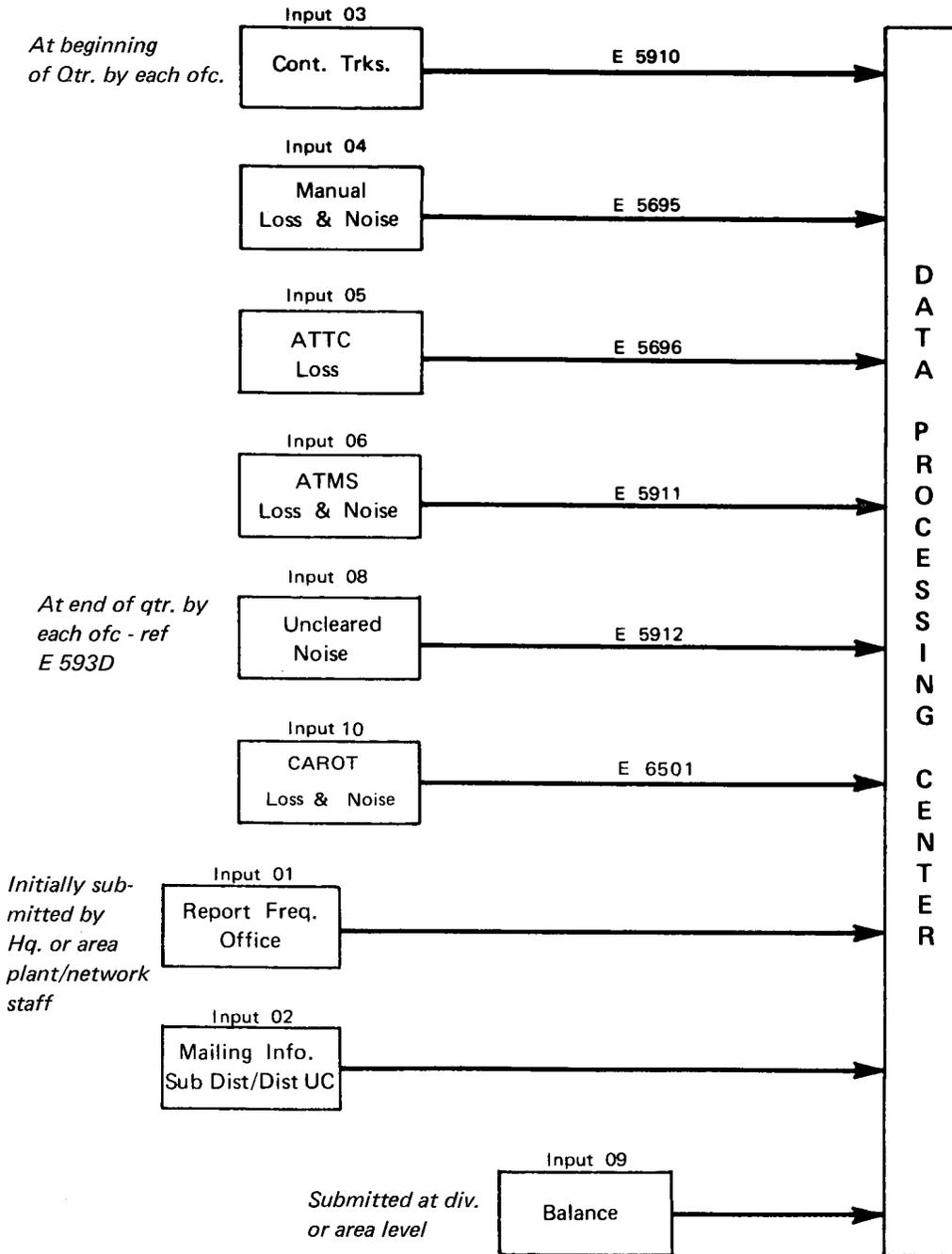


Fig. 1—Trunk Transmission Maintenance Index—Mechanized Plan Inputs

Trunk transmission maintenance index mechanized plan outputs . . .

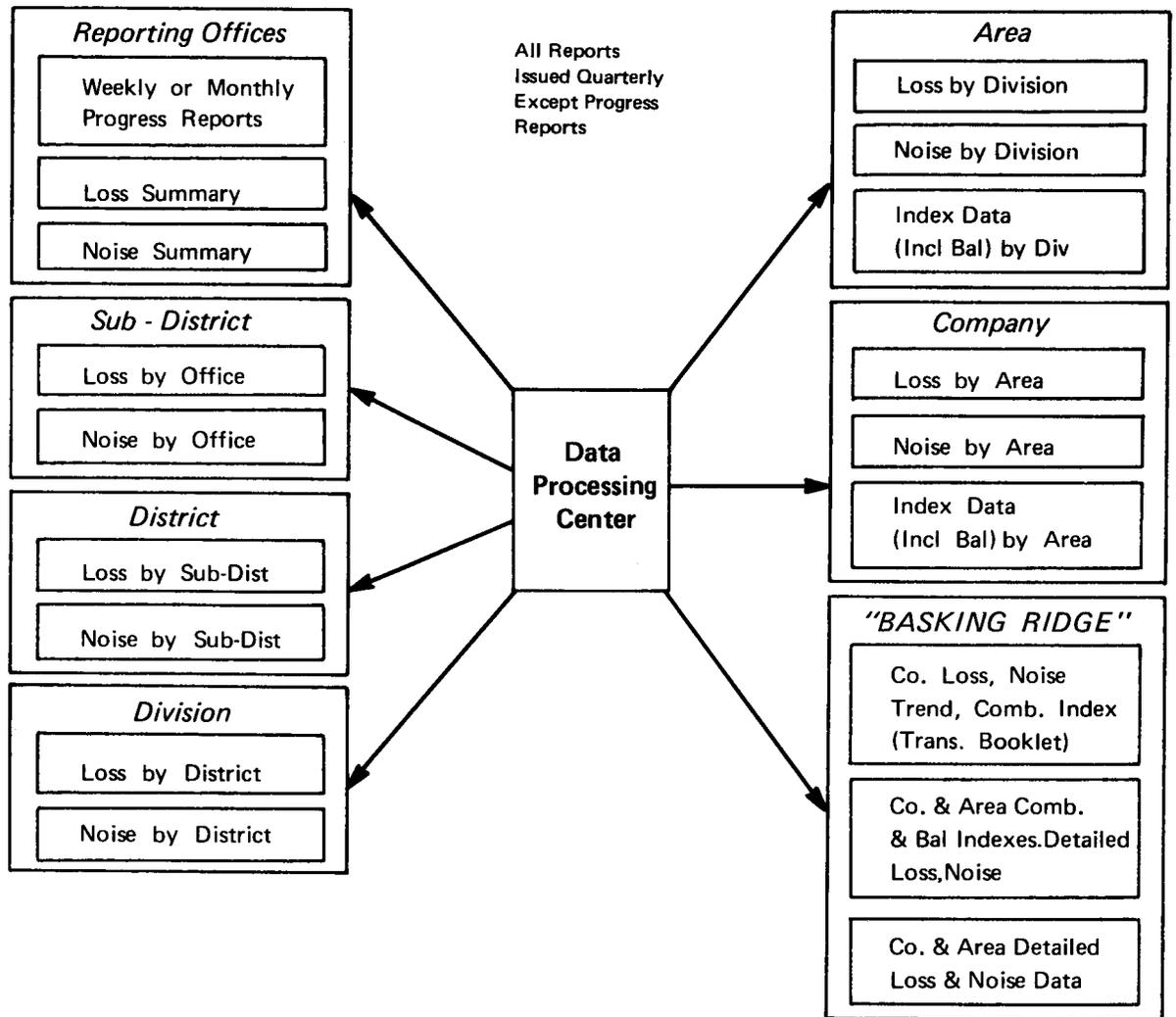


Fig. 2—Trunk Transmission Maintenance Index—Mechanized Plan Outputs

INPUT	
0	1

REPORT FREQUENCY AND MAILING INFORMATION FOR OFFICES TRUNK TRANSMISSION MAINTENANCE INDEX

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INSTRUCTIONS									
LINE NO.	IND	FREQ	SUM	COMMON LANGUAGE OFFICE CODE	COMPANY ASSIGNED OFFICE CODE	OFFICE NAME			
	3	4	5	6	16	17	28	29	43
0	1								*
0	2					17 MAILING INFORMATION - TITLE			46
						47 COMPANY			77
						17 ADDRESS			46
0	3					47 CITY - STATE - ZIP CODE			76
0	1								*
0	2					17 MAILING INFORMATION - TITLE			46
						47 COMPANY			77
						17 ADDRESS			46
0	3					47 CITY - STATE - ZIP CODE			76
0	1								*
0	2					17 MAILING INFORMATION - TITLE			46
						47 COMPANY			77
						17 ADDRESS			46
0	3					47 CITY - STATE - ZIP CODE			76
0	1								*
0	2					17 MAILING INFORMATION - TITLE			46
						47 COMPANY			77
						17 ADDRESS			46
0	3					47 CITY - STATE - ZIP CODE			76

INDICATOR CODES (COL. 3)

1. CHANGE OFC. NAME - FILL IN LINE 01 ONLY
2. CHANGE MAILING ADDRESS CO. CODE AND OFFICE NAME FILL IN LINES 01, 02 & 03
3. CHANGE REPORT FREQ FILL IN LINE 01 ONLY
4. CREATE FILE OR ADD OFFICE-FILL IN LINES 01, 02, 03
5. DELETE OFFICE - FILL IN LINE 01 ONLY
6. CANCEL SENDING SUMMA- RIZED DATA-FILL IN LINE 01 ONLY

FREQUENCY CODES (COL. 4)

1. QUARTERLY PLUS WEEKLY OFFICE PROGRESS REPORTS
2. QUARTERLY PLUS MONTHLY OFFICE PROGRESS REPORTS
3. QUARTERLY REPORTS ONLY

COL. 5

BLANK EXCEPT IF SUMMARIZED LOSS AND NOISE RESULTS WILL BE SUBMITTED - THEN SHOW 1 IN COL. 5

NOTE: OFFICE NAME AND MAILING INFORMATION BEGIN IN COLS. 29, 17, 47-USE ABBREVIATIONS WHERE NECESSARY.

*(COLS. 43 AND 77)
ASTERISK MUST BE KEY PUNCHED TO INDICATE END OF LINE AND CONTINUATION OF RECORD

Fig. 3—Report Frequency and Mailing Information For Offices—Trunk Transmission Maintenance Index

INPUT	
1	2
0	2

**CODE ASSIGNMENT AND MAILING INFORMATION FOR
SUB DISTRICT-DISTRICT-DIVISION-AREA-COMPANY
TRUNK TRANSMISSION MAINTENANCE INDEX**

BSP 660-403-011
12-72

INSTRUCTIONS

**INDICATOR
CODES (COL. 3)**

1. CHANGE NAME
FILL IN LINE 01 ONLY
2. CHANGE MAILING ADDRESS
FILL IN LINES 01, 02 & 03
- 3.
4. CREATE FILE-FILL IN
LINES 01, 02, 03
5. DELETE - FILL IN LINE 01
ONLY

* (COLS. 43 AND 77)
ASTERISK MUST BE KEY PUNCHED
TO INDICATE END OF LINE AND
CONTINUATION OF RECORD

LINE NO.	IND	COMPANY ASSIGNED CODE	SUB DIST - DIST - DIV - AREA - CO NAME
	3	6	29
0	1	9	*
0	2		
0	3		
0	1	9	*
0	2		
0	3		
0	1	9	*
0	2		
0	3		

**Fig. 4—Code Assignment and Mailing Information For Subdistrict—District—Division—Area—Company—Trunk
Transmission Maintenance Index**

INPUT	
0	1

REPORT FREQUENCY AND MAILING INFORMATION FOR OFFICES TRUNK TRANSMISSION MAINTENANCE INDEX

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LINE NO.	IND	FREQ	SUM	COMMON LANGUAGE OFFICE CODE			COMPANY ASSIGNED OFFICE CODE			OFFICE NAME						
				6	16	17	28	29	43							
0	1	41		AT	LN	GAT	NG	63	6	17	171301020002	28	29	TOCO HILLS	43	*
0	2			17 MAILING INFORMATION - TITLE			46			CHIEF SWITCHMAN			46			
0	2			47 COMPANY			77			SOUTHERN BELL			77	*		
0	3			17 ADDRESS			46			2204 LA VISTA RD			46			
0	3			47 CITY - STATE - ZIP CODE			76			TOCO HILLS GA 12347			76			
0	1	43		AL	BY	GAMA	IT	6	16	17	171302010101	28	29	ALBANY MAIN	43	*
0	2			17 MAILING INFORMATION - TITLE			46			CO FOREMAN			46			
0	2			47 COMPANY			77			SOUTHERN BELL			77	*		
0	3			17 ADDRESS			46			304 PINE AVE			46			
0	3			47 CITY - STATE - ZIP CODE			76			ALBANY GA 12348			76			
0	1							6	16	17		28	29		43	*
0	2			17 MAILING INFORMATION - TITLE			46						46			
0	2			47 COMPANY			77						77	*		
0	3			17 ADDRESS			46						46			
0	3			47 CITY - STATE - ZIP CODE			76						76			

INSTRUCTIONS

INDICATOR CODES (COL. 3)

- CHANGE OFC. NAME - FILL IN LINE 01 ONLY
- CHANGE MAILING ADDRESS FILL IN LINES 01, 02 & 03
- CHANGE REPORT FREQ FILL IN LINE 01 ONLY
- CREATE FILE OR ADD OFFICE-FILL IN LINES 01, 02, 03
- DELETE OFFICE - FILL IN LINE 01 ONLY
- CANCEL SENDING SUMMA-RIZED DATA-FILL IN LINE 01 ONLY

FREQUENCY CODES (COL. 4)

- QUARTERLY PLUS WEEKLY OFFICE PROGRESS REPORTS
- QUARTERLY PLUS MONTHLY OFFICE PROGRESS REPORTS
- QUARTERLY REPORTS ONLY

COL. 5

BLANK EXCEPT IF SUMMARIZED LOSS AND NOISE RESULTS WILL BE SUBMITTED - THEN SHOW 1 IN COL. 5

NOTE: OFFICE NAME AND MAILING INFORMATION BEGIN IN COLS. 29, 17, 47-USE ABBREVIATIONS WHERE NECESSARY.

***** (COLS. 43 AND 77) ASTERISK MUST BE KEY PUNCHED TO INDICATE END OF LINE AND CONTINUATION OF RECORD

Fig. 5—Report Frequency and Mailing Information For Offices—Trunk Transmission Maintenance Index

INPUT
1 - 2
0 2

**CODE ASSIGNMENT AND MAILING INFORMATION FOR
SUB DISTRICT - DISTRICT - DIVISION - AREA - COMPANY
TRUNK TRANSMISSION MAINTENANCE INDEX**

BSP 660-403-011

INSTRUCTIONS
INDICATOR
CODES (COL. 3)

1. CHANGE NAME
FILL IN LINE 01 ONLY
2. CHANGE MAILING ADDRESS
FILL IN LINES 01, 02 & 03
- 3.
4. CREATE FILE-FILL IN
LINES 01, 02, 03

LINE NO.	IND	COMPANY ASSIGNED CODE	SUB DIST - DIST - DIV - AREA NAME
0 1	4	179999999999	SOUTHERN BELL *
0 2		17 MAILING INFORMATION - TITLE GPM	46
		47 COMPANY SOUTHERN BELL	77 *
0 3		17 ADDRESS HURT BLDG	46
		47 CITY - STATE - ZIP CODE ATLANTA GA 30303	76
0 1	4	171399999999	GEORGIA AREA *
0 2		17 MAILING INFORMATION - TITLE GPS TRANSMISSION	46
		47 COMPANY SOUTHERN BELL	77 *
0 3		17 ADDRESS 805 PEACHTREE ST NE	46
		47 CITY - STATE - ZIP CODE ATLANTA GA 30308	76
0 1	4	171301999999	ATLANTA DIV *
0 2		17 MAILING INFORMATION - TITLE TOLL PLT SUPV	46
		47 COMPANY SOUTHERN BELL	77 *
0 3		17 ADDRESS 805 PEACHTREE ST NE RM 203	46
		47 CITY - STATE - ZIP CODE ATLANTA GA 30308	76

**Fig. 6—Code Assignment and Mailing Information For Subdistrict—District—Division—Area—Company—Trunk
Transmission Maintenance Index**

ASSIGNED COMPANY AND AREA CODES												
		CO	AREA			CO	AREA			CO	AREA	
N.E.	—		Maine	11	SO. CENT.	—	Alabama	11	MTN.	—	Arizona	11
			Massachusetts	12			Kentucky	12			Colorado	12
			New Hampshire	13			Northwest	13			Idaho	13
			Rhode Island	14			Mississippi	14			Montana	14
			Vermont	15			Tennessee	15			New Mexico	15
		02	Total				New Orleans	16			Texas	16
							Total	19			Utah	17
N.Y.	—		NYC West	11							Wyoming	18
			NYC East	12	OHIO	—	Northern	13			Total	36
			Mid State	13			Eastern	11				
			Long Island	14			Southwestern	12	PNB.	—	Wash. — Id.	11
			Northeast	15			Total	21			Oregon	12
			Central	16							Total	38
			Western	17	MICHIGAN	—	Metropolitan	11				
		04	Total				Northern	12	PAC.	—	NCR Switching	11
							Southern	13			Network North	12
N.J.	—		Northern	11			Total	23			North Sector	14
			Central	13	INDIANA						Network South	15
			Southern	14							South Sector	16
			Hudson	15							Nevada	17
			Essex	16	WISCONSIN	—					Total	40
			Raritan	17								
		06	Total		ILL.	—	Chicago	13	L.L.	—	Northeastern	11
							State	16			Eastern	12
PA.	—		Philadelphia	11			Suburban	19			Southern	13
			Eastern	12			Total	29			Central	14
			Central	13	N.W.	—	Iowa	11			Midwestern	15
			Western	14			Minnesota	12			Western	16
		08	Total				Nebraska	13			New York	17
							North Dakota	14			Total	44
C&P	—		Washington	11			South Dakota	15			SO. NEW ENGLAND	47
			Maryland	12			Total	31				99*
			Virginia	13	S.W.	—	Arkansas	11			CINCINNATI	48
			West Virginia	14			Kansas	12				99*
		16	Total				Kansas City	13				
							Oklahoma	14				
SO.	—		No. Florida	11			Dallas	15				
			So. Florida	12			Houston	16				
			Georgia	13			San Antonio	17				
			No. Carolina	14			St. Louis	18				
			So. Carolina	15			Total	33				
			S.E. Florida	16								
		17	Total									

99* = Area No. for Input 02

Fig. 7—Assigned Company and Area Codes

TRUNK TRANSMISSION MAINTENANCE INDEX

INPUT 1 2 0 4		PAGE 3 5		CONTROL OFC. CODE 6 16												MANUAL MEASUREMENTS												E-5695 BSP 660-403-011 12-72			
TYPE 17		FACIL 18 19		LOSS FREQ. 20 21		DATE 22 27																									
						MO. DAY YR.																									
LINE NO.	LOSS										NOISE (ANNUAL)																ACTION TAKEN				
	TRUNK IDENTIFICATION	GAIN	FAR TO NEAR AML		EML		GAIN	NEAR TO FAR AML		CIRCUIT MILES (TO NEAREST MILE)	NEAR END				FAR END				EST.												
			MTC. LIMIT	IMED. ACTION	ACTUAL	MTC. LIMIT		IMED. ACTION	ACTUAL																						
2829	30	31	33	34	36	37	38	40	41	44	45	46	47	48	49	50	51	52	53	54	55	56									
01			▲		▲			▲																							
02			▲		▲			▲																							
03			▲		▲			▲																							
04			▲		▲			▲																							
05			▲		▲			▲																							
06			▲		▲			▲																							
07			▲		▲			▲																							
08			▲		▲			▲																							
09			▲		▲			▲																							
10			▲		▲			▲																							
11			▲		▲			▲																							
12			▲		▲			▲																							
13			▲		▲			▲																							
14			▲		▲			▲																							
15			▲		▲			▲																							
16			▲		▲			▲																							
17			▲		▲			▲																							
18			▲		▲			▲																							
19			▲		▲			▲																							
20			▲		▲			▲																							

TESTERS _____

SEE REVERSE FOR INSTRUCTIONS

Fig. 9—Trunk Transmission Maintenance Index—Manual Measurements

TYPE OF LOSS MEASUREMENT (COL. 17)

1. SCHEDULED AND DONE MANUALLY
IF SCHEDULED TO BE AUTOMATIC BUT
DONE MANUALLY SHOW THE TYPE
ORIGINALLY SCHEDULED
2. ATTC TO 102 TYPE
3. ATTC TO 104 TYPE
4. ATMS TO 100 TYPE
5. ATMS TO 102 TYPE
6. ATMS TO 104 TYPE
7. ATMS TO 105 TYPE
8. CAROT TO 102 TYPE (SEE NOTE)

NOTE - FOR CAROT TRUNKS INPUT 10 MUST
BE SUBMITTED BEFORE INPUT 04, OTHERWISE INPUT
04 WILL BE REJECTED.

FACILITY (COL. 18 & 19)

- 01 E REP (NO HYB)
- 02 E REP + HYB
- 03 NON GAIN (NO HYB)
- 04 NON GAIN + HYB
- 05 COMB E REP N GAIN (N HYB)
- 06 COMB E REP N GAIN + HYB
- 08 REP (OTHER THAN E)
- 09 CARRIER
- 10 COMB OTHER REP AND CARRIER

FREQUENCY OF LOSS MEASUREMENT (COL. 20 & 21)

- 10 WEEKLY
- 20 SEMI-MONTHLY
- 30 MONTHLY
- 40 QUARTERLY
- 50 SEMI-ANNUALLY
- 60 ANNUALLY

IF MEASUREMENTS THAT ARE SCHEDULED TO BE
AUTOMATIC ARE PERFORMED MANUALLY, SHOW
SCHEDULED DIGIT FIRST AND ACTUAL DIGIT NEXT.

- 13 SCHEDULED WEEKLY BUT MANUALLY MEASURED
MONTHLY
- 23 SCHEDULED SEMI-MONTHLY BUT MEASURED
MONTHLY
- 14 SCHEDULED WEEKLY BUT MEASURED QUARTERLY
- 24 SCHEDULED SEMI-MONTHLY BUT MEASURED
QUARTERLY
- 34 SCHEDULED MONTHLY BUT MEASURED
QUARTERLY

GAIN (COL. 30 & 37)

THESE COLUMNS WILL REMAIN BLANK
UNLESS MEASUREMENT TO BE RECORDED
IS GAIN INSTEAD OF LOSS; THEN SHOW
MINUS SIGN (-) IN COL. 30 OR 37 ON
THE PROPER LINE.

Fig. 10—Back of Input 04

TRUNK TRANSMISSION MAINTENANCE INDEX
AUTOMATIC MEASUREMENTS USING ATTC

E 5696
BSP 660 403 011

INPUT		PAGE	
1 0	2 5	3 	5 1
CONTROL OFC. CODE			
6 A T L N G A T H 6 3 6			
TYPE		FACIL	
17 3		18 19 0 1	
LOSS FREQ		DATE	
20 21 2 0		22 27 1 0 1 5 6 8	
		MO. DAY YR.	
FRAME NO. <u>2251</u>			

LOSS DEVIATION REGISTERS																												
28-29	30-31	32-33	34-35	36-37	38-39	40-41	42	44	45	47	48	50	51	53	54	56	57	59	60	62	63	65	66	69	70	73	74	77
LINE	DATE	-8.0	-7.5	-7.0	-6.5	-6.0	-5.5	-5.0	-4.5	-4.0	-3.5	-3.0	-2.5	-2.0	-1.5	-1.0	-0.5	0										
01	10/8																			1.0				2.5		7	3.2	
02	10/15	1										2	1.0	2.5	9								2.5					2.6
03																												
04																												
05																												
06																												
07																												

28-29	30	33	34	37	38	40	41	43	44	46	47	50	52	53	55	56	58	59	61	62-63	64-65	66-67	68-69	70-71	72-73	74	77
LINE	DATE	+0.5	+1.0	+1.5	+2.0	+2.5	+3.0	+3.5	+4.0	+4.5	+5.0	+5.5	+6.0	+6.5	+7.0	+7.5	+8.0	TOTAL TESTS									
11	10/8		9	1.0	2.5		1											1									1.20
12	10/15		2				2.0		1.0																		1.30
13																											
14																											
15																											
16																											
17																											

SUBMITTED BY amw

SEE REVERSE FOR INSTRUCTIONS

Fig. 11—Trunk Transmission Maintenance Index—Automatic Measurements Using ATTC

<u>TYPE (COL. 17)</u>	<u>FACILITY (COLS. 18, 19)</u>	<u>SCHEDULED FREQUENCY OF LOSS MEASUREMENT (COLS. 20, 21)</u>
1. (MANUAL)	01 E REP (NO HYB)	10 WEEKLY
2. ATTC TO 102 TYPE	02 E REP + HYB	20 SEMI-MONTHLY
3. ATTC TO 104 TYPE	03 NON GAIN (NO HYB)	30 MONTHLY
	04 NON GAIN + HYB	
	05 COMB E REP N GAIN (N HYB)	
	06 COMB REP N GAIN + HYB	
	08 REP (OTHER THAN E)	
	09 CARRIER	
	10 COMB OTHER REP AND CARRIER	

Fig. 12—Back of Inpput 05—E-5696

TRUNK TRANSMISSION MAINTENANCE INDEX
AUTOMATIC MEASUREMENTS USING ATMS

INPUT 1 2 0 6	PAGE 3 3 1 1		E. 5911 BSP 660 403 011
CONTROL OFC. CODE 6 ATLNGAWD351		TYPE 17 6	FACIL 18 19 0 3
		LOSS FREQ 20 21 3 0	DATE 22 27 1.0 2.2 6.8 MO. DAY YR.
			FRAME NO. 611

LOSS DEVIATION REGISTERS												NOISE DEVIATION REGISTERS															
28-29	30	32	33	35	36	38	39	41	42	44	45	47	48	50	51	53	54	57	58	61	28-29	30	32	33	35	37	39
LINE	DATE	+5.0	+4.5	+4.0	+3.5	+3.0	+2.5	+2.0	+1.5	+1.0	+0.5	LINE	Q1N	TOTAL MEAS.	>TOTAL LIMITS												
01					5														1.5		21		2	3.8	0		
02																					22						
03																					23						
04																					24						
05																					25						
06																					26						
07																					27						

LOSS DEVIATION REGISTERS																								
28-29	30	32	33	35	36	38	39	41	42	44	45	47	48	50	51	53	54	57	58	61	62	65	66	69
LINE	DATE	-5.0	-4.5	-4.0	-3.5	-3.0	-2.5	-2.0	-1.5	-1.0	-0.5	0.0	TOTAL MEAS.											
11																1				1.5		4.0	7.6	
12																								
13																								
14																								
15																								
16																								
17																								

SUBMITTED BY Camen

SEE REVERSE FOR INSTRUCTIONS

Fig. 13—Trunk Transmission Maintenance Index—Automatic Measurements Using ATMS

<u>TYPE (COL. 17)</u>	<u>FACILITY (COL. 18, 19)</u>	<u>SCHEDULED FREQUENCY OF LOSS MEASUREMENT (COL. 20, 21)</u>
4. ATMS TO 100 TYPE	01 E REP (NO HYB)	10 WEEKLY
5. ATMS TO 102 TYPE	02 E REP + HYB	20 SEMI-MONTHLY
6. ATMS TO 104 TYPE	03 NON GAIN (NO HYB)	30 MONTHLY
7. ATMS TO 105 TYPE	04 NON GAIN + HYB	
	05 COMB E REP N GAIN (N HYB)	
	06 COMB E REP N GAIN + HYB	
	08 REP (OTHER THAN E)	
	09 CARRIER	
	10 COMB OTHER REP AND CARRIER	

NOISE DEVIATION REGISTERS

COL. 30-32 Q1N INDICATES TOTAL
MEASUREMENTS EXCEEDING
MAINTENANCE LIMIT

COL. 37-39 TOTAL LIMITS INDICATES
TOTAL MEASUREMENTS
EXCEEDING IMMEDIATE
ACTION LIMIT

Fig. 14—Back of Input 06—E-5911

TRUNK TRANSMISSION MAINTENANCE INDEX
 INFORMATION FROM 01/23/74 TO 01/23/74

PERIOD (COL 22-27)

OFFICE NAME	CONTROL OFC CODE (COL 6-16)			L MEAS	Q1N	Q2N	N MEAS
TYP, FAC, FRQ	.7	1.7	3.7				
SNFCC42176H							
9 10 14	0	0	0	22	0	0	22
9 10 24	0	0	0	0	0	0	0
9 06 24	0	0	0	0	0	0	0
9 06 34	0	0	0	0	0	0	0
8 05 24	0	0	0	0	0	0	0
8 05 34	0	0	0	0	0	0	0

TYPE (COL 17) FACILITY (COL 35-36) FREQUENCY (COL 37-38)

COL 39-43 COL 44-48 COL 49-53 COL 54-60

COL 61-65 COL 66-70 COL 71-77

Fig. 16—Trunk Transmission Maintenance Index—Information From 01/23/74 to 01/23/74

TRUNK TRANSMISSION MAINTENANCE INDEX
 INPUTS RECEIVED AND ERROR LISTING FOR AGSTGAMT72A

INPUT NO.	PAGES	DATE	QTR	YEAR	ERROR CODE	TYPE	FACIL.	FREQ.	LINE	COL.	DATA
04	1	12 07		68	70	1	07	40	04		
04	1	12 07		68	04	1	07	40	03		
04	1	12 07		68	70	1	07	40	03		
04	1	12 07		68	04	1	07	40	02		
04	1	12 07		68	70	1	07	40	02		
04	1	12 07		68	04	1	07	40	01		
04	1	12 07		68	70	1	07	40	01		
04	1	12 07		68	04	1	07	40	10		
04	1	12 07		68	70	1	07	40	10		
04	1	12 07		68	04	1	07	40	09		
04	1	12 07		68	70	1	07	40	09		
04	1	12 07		68	04	1	07	40	08		
04	1	12 07		68	70	1	07	40	08		
04	1	12 07		68	04	1	07	40	07		
04	1	12 07		68	70	1	07	40	07		
04	1	12 07		68	04	1	07	40	06		
04	1	12 07		68	70	1	07	40	06		
04	1	12 07		68	04	1	07	40	05		
04	1	12 07		68	70	1	07	40	05		
INPUT NUMBER - 04	DATE - 10-07-68	TOTAL INPUT RECEIVED - 0010									
INPUT NUMBER - 04	DATE - 10-14-68	TOTAL INPUT RECEIVED - 0010									
INPUT NUMBER - 04	DATE - 12-07-68	TOTAL INPUT RECEIVED - 0010									

Fig. 19—Trunk Transmission Maintenance Index—Inputs Received and Error Listing for AGSTGAMT72A

PROGRAM DETECTED ERROR CODES

ERROR CODE	EXPLANATION	INPUT (I) REFERENCE
01	— Input number not numeric	Col 1 and 2, I 03 through I 09
02	— Control office code does not match code on Input 01	Col 6 through 16 I 03 through I 08
03	— Type must be: 2 or 3 for I 05, 4 to 7 for I 06, 1 to 7 for I 04 and I 03	Col 22 I 03 Col 17 I 04, I 05, I 06
04	— Facility must be 01 through 06 or 08 through 10	Col 23 and 24 I 03 Col 18 and 19, I 04, I 05, I 06
05	— Frequency must be numeric on I 03 and I 04. Frequency must be 10, 20, 30 on I 05 and I 06	Col 25 and 26 I 03 Col 20 and 21 I 04, I 05, I 06
06	— Not numeric or in wrong Col	Col 31 through 33 on I 04
07	— Not numeric, in wrong Col or one loss measurement instead of two	Col 38 through 40 on I 04
08	— Not numeric or greater than 20 dB	Col 34 through 36 on I 04
09	— Not numeric in wrong Col or blank when there are noise measurements	Col 41 through 44 on I 04
10	— Must be blank or a two numeric digit	Col 45 and 46 on I 04 51 through 52 on I 04
11	— Must be blank or a two numeric digit	Col 47 and 48 53 and 54 on I 04
12	— Must be blank or numeric	Col 49 and 50 on I 04
13	— Must be blank or numeric — All Columns without data	Col 55 and 56 on I 04 Col 30 through 56 on I 04
14	— Noise measurements missing	Col 55 and 56 on I 04
15	— Type 7, with frequency 10 through 30, automatic form should be used	Col 20 and 21 on I 04
16	— Type 1, frequency must equal 10 through 60	Col 20 and 23 on I 04

Fig. 21—Program Detected Error Codes

PROGRAM DETECTED ERROR CODES (Cont)

ERROR CODE	EXPLANATION	INPUT (I) REFERENCE
17	— Type 2, facility must be 01, 03, or 05	Col 18 and 19 on I 04
18	— Type 2, 4, or 5 facility must be 01 through 06	Col 18 and 19 I 04
19	— There should be loss measurements for this type facility	Col 38 through 40 I 04
20	— Line number incorrect (key punch error)	Col 28 and 29 I 05 & I 06
21	— Must be numeric or blank (loss)	Col 30 through 77 I 05 Col 30 through 69 I 06
22	— Must be numeric or blank (noise)	Col 30 through 39 I 06
23	— Type 2, facility must be 01, 03, or 05 on I 05 Type 4 or 5, facility must be 01 through 06 on I 06	Col 18 and 19 I 05 Col 18 and 19 I 06
24	— Duplicate I 03 submitted	
25	— Must be 1, 2, 3, or 4	Col 17 I 03
26	— Not proper quarter	Col 17 I 03
27	— Year Not Numeric	Col 18 and 19 I 03
28	— Must be numeric, but not zero	Col 27 through 31 I 03
29	—	
30	— Must have A or D after first run of quarter. Must be blank for first run	Col 32 I 03
31	—	
32	—	I 03
33	— Not numeric	Col 17 through 21 I 08
34	— Not numeric	Col 22 through 26 I 08
35	— Not numeric	Col 27 through 31 I 08

Fig. 21—Program Detected Error Codes (Cont)

PROGRAM DETECTED ERROR CODES (Cont)

ERROR CODE	EXPLANATION	INPUT (I) REFERENCE
36	— Offices certified can not be greater than offices requiring balance	Col 53 through 56 I 09
37	— Not numeric	Col 57 through 63 I 09
38	— Trunks requiring balance can not be greater than total trunks	Col 57 through 63 I 09
39	— Not numeric, can not be zero	Col 26 through 32 I 09
40	— Not numeric	Col 22 and 23 I 09
41	— Must be numeric or blank	Col 24 and 25 I 09
42	— Not numeric, can not be zero	Col 26 through 32 I 09
43	— Not numeric	Col 33 through 36 I 09
44	— Not numeric	Col 37 through 40 I 09
45	— Not numeric	Col 41 through 44 I 09
46	— Not numeric	Col 45 through 48 I 09
47	— Not numeric	Col 49 through 52 I 09
48	— Att: Data Processing Record out of sequence	
49	— Not numeric	Col 53 through 56 I 09
50	— Change indicator must be 1 through 6	Col 3 I 01, I 02
51	— Frequency indicator must be 1 through 3	Col 4 I 01
52	— Office code incorrect	Col 6 through 16 I 01, I 02
53	— Not numeric	Col 6 through 16 I 01, I 02
54	— Att: Data Processing Keypunch error — this data must be the same on all three cards	Col 3 through 16 I 01, I 02
55	— Duplication of information already on file	I 01, I 02

Fig. 21—Program Detected Error Codes (Cont)

PROGRAM DETECTED ERROR CODES (Cont)

ERROR CODE	EXPLANATION	INPUT (I) REFERENCE
56	— Must be blank on 1	Col 5, I 01
57	— Number of cards for addition should not exceed 3	Col 3 I 01, I 02
58	—	
59	—	
60 through 66	— These error codes refer to a summarized loss input at present not being used by any companies	I 07 — see 10.01 and 10.02
67 through 69	—	
70	— Control trunk information submitted must match info on file on Input 03	I 04, I 05, I 06
71	— Request for delete and record is not there, or record to be added is already there	
72	—	
73	— Record submitted on wrong run, eg, I 08 on first run of quarter	
74	—	
75	— Loss not greater than 20.0 db Gain not greater than 10.0 db	Col 31 through 33 I 04
76	— Loss not greater than 20.0 db Gain not greater than 10.0 db	Col 38 through 40 I 04
77	— No I 03 on file for the office	I 08
78	— Must not equal zero	Col 74 through 77 I 05
79	— Must be numeric or blank	Col 30 through 69 I 06
80	— No match for CAROT-office on report information file	

Fig. 21—Program Detected Error Codes (Cont)

PROGRAM DETECTED ERROR CODES (Cont)

ERROR CODE	EXPLANATION	INPUT (I) REFERENCE
81	— Correction record. Information will be processed from correction record instead of original.	
82	— Page field must be numeric	Col 3 through 5 I 04 and I 10
83	— Line field must be numeric	Col 28 and 29 I 04 and I 10
84	— Type must be 8 or 9 for CAROT	Col 17 I 10
85	— Input number must be 04 or 10 for CAROT	Col 1 and 2 I 04 and I 10
86	— Incorrect Date	Col 22 through 27 I 04 and I 10
87	— Facility must equal 05 for I 04 and 05 or 10 for I 10	
88	— Must be 10, 20, or 30	Col 37 through 38 I 10
89	— Number of trunks field must be numeric	Col 30 through 34 I 10
90	— Deviation invalid or not numeric in number of measurements field	Col 39 through 60 I 10
91	— Must be numeric or number of measurements total is incorrect	Col 60 through 77 I 10
92	— Columns 61 through 77 must be blank if type 8 indicated	Col 61 through 77 I 10
93	— Must be numeric if type 9 indicated	Col 61 through 70 I 10
94	— Must be numeric, blank, or zero	Col 41 through 44 I 04
95	— Near end noise measurements must be numeric	Col 49 and 50 I 04
96	— Far end noise measurements must be numeric	Col 55 and 56 I 04
97	— Must be blank	Col 30 through 40 I 04
98	— Type must be 8 for CAROT	Col 17 I 04
99	— I 04 record has no matching facility and frequency on the CAROT loss file or in the I 10 record updates. Input 10 must be submitted before Input 04 for CAROT manual measurements.	

Fig. 21—Program Detected Error Codes (Cont)

COMPANY VARIABLE-DATA TRUNK TRANSMISSION MAINTENANCE INDEX
 1 3 LOSS REPORT 9 10
 INPUT NO 07 COMPANY NO 02 3ST QUARTER 1975

	TRUNKS EREP	TRUNKS CARR	% DEV.-EREP 0.7	% MEAS 3.7	% DEV.-CARR 0.7	% MEAS 1.7	EREP 3.7	CARR 4.3	LOSS 4.7	L-N-B 51	TRKS ABOVE 59	MTCE 65	LIMIT 70	ENG 75		
AREA 11	008126	012505	07.3	00.8	094.3	12.0	02.3	00.4	097.7	097.8	098.8	098.4	098.3	01024	00594	00228
AREA 12	107157	067522	05.9	00.2	098.8	08.0	01.3	00.1	093.8	098.6	099.3	098.9	098.9	03596	03291	00571
AREA 13	002692	009574	07.9	00.1	094.9	04.8	01.0	00.0	092.9	097.7	099.4	098.7	098.7	00467	00165	00213
AREA 14	013498	002760	02.0	01.0	095.2	01.7	00.8	00.5	097.2	099.1	099.4	099.2	099.2	00000	00000	00000
AREA 15	004089	006812	09.4	00.1	090.6	06.6	01.1	00.2	095.6	097.0	099.1	098.3	098.7	00286	00083	00087
COMP 00	139562	099173	05.8	00.3	097.7	07.9	01.3	00.1	098.4	098.5	099.2	098.8	098.8	05373	04133	01099

1 3 NOISE REPORT 9 10
 INPUT NO 03 COMPANY NO 02 3ST QUARTER 1975

	CTRL TRUNKS	% OVER MTCE	% TRKS MEAS	OVER MTCE	% MEAS	NOISE INDEX	BAL TRUNKS	% ERL MED	% ERL MIN	% SP MED	% SP MIN	NUM.OFFICES REQ BAL	BAL CERT BAL	TRKS REQ INDEX	ENG TO ENGR
AREA 11	0020630	05.9	078.9	096.3	100.0	096.7	0018656	083.8	000.0	087.5	000.0	0018	0018	099.9	0000000
AREA 12	0174680	03.1	084.2	098.0	100.0	098.2	0098478	087.7	000.0	091.0	000.0	0038	0038	100.0	0000000
AREA 13	0016266	05.2	084.9	097.0	100.0	097.3	0017029	082.9	000.1	088.8	000.1	0012	0012	099.9	0000000
AREA 14	0016258	02.0	094.2	098.6	100.0	098.7	0010809	100.0	000.0	100.0	000.0	0007	0007	100.0	0000000
AREA 15	0010901	04.8	077.4	097.2	100.0	097.5	0012820	091.6	000.0	098.2	000.0	0011	0011	100.0	0000000
COMP 00	0238735	03.4	084.1	097.8	100.0	098.0	0157792	087.8	000.0	091.5	000.0	0086	0086	100.0	0000000

3 5 ADDITIONAL NOISE REPORT NUMBER OF MEASUREMENTS
 SORT CODE 99 COMPANY NO 02

	DB BELOW MAINTENANCE LIMIT							DB BELOW MAINTENANCE LIMIT						
	9OR	6.7	3.4	0.1	ABOVE	IMMED.	9OR	6.7	3.4	0.1	ABOVE	IMMED.		
MILEAGE RANGE	MORE	OR 8	OR 5	OR 2	LIMIT	ACTION	MILEAGE RANGE	MORE	OR 8	OR 5	OR 2	LIMIT	ACTION	
INPUT NO 10	0-15	039274	010367	008340	005565	001483	000047	16-50	015052	004184	002664	001225	000512	000089
INPUT NO 11	51-100	002126	000984	000885	000507	000091	000110	101-200	000814	000671	000693	000470	000036	000015
INPUT NO 12	201-400	000072	000256	000222	000040	000007	000000	401-1000	000005	000011	000003	000001	000000	000000
INPUT NO 13	1001-1500	000000	000000	000000	000000	000000	000000	1501-2500	000000	000000	000000	000000	000000	000000
INPUT NO 14	2501-4000	000000	000000	000000	000000	000000	000000	OVER-4000	000000	000000	000000	000000	000000	000000

Fig. 22—Trunk Transmission Maintenance Index—Loss Report

QUARTER HISTORY UPDATE ERROR MESSAGES

1. CHANGE INDICATOR INVALID — Should be “A”, “C”, or “D” (Add, Change, Delete).
2. OFFICE CODE NOT NUMERIC — Should be all numeric.
3. RECORD OUT OF SEQUENCE — Possible causes 1) A loss update record came after a noise update record. 2) A record with a high office code came before a record with a lower office code. 3) For loss records within an office, a record with a greater facility and frequency came before a record with a lesser facility and frequency.
4. RECORD TYPE INVALID — Should be either L or N (loss or noise).
5. FACILITY NOT NUMERIC — Should be all numeric — loss only.
6. FREQUENCY NOT NUMERIC — Should be all numeric — loss only.
7. NEW OFFICE CODE NOT NUMERIC — Should be all numeric and fill all columns (Columns 52 through 63).
8. ON LOSS DELETION THERE SHOULD BE NO ENTRIES IN COLUMNS 19 THROUGH 80. THE CHANGE INDICATOR IS EQUAL TO “D” AND COLUMNS 19 THROUGH 80 NOT EQUAL TO SPACES.
9. ON NOISE DELETION THERE SHOULD BE NO ENTRIES IN COLUMNS 15 THROUGH 80. THE CHANGE INDICATOR IS EQUAL TO “D” AND COLUMNS 15 THROUGH 80 NOT EQUAL TO SPACES.
10. IN ADDITION THERE SHOULD BE NO ENTRY IN COLUMNS 52 THROUGH 63.
11. COLUMNS 19 THROUGH 51 ON LOSS RECORD NOT ALL NUMERIC — Should be all numeric and leading spaces filled with zeros.
12. COLUMNS 15 THROUGH 35 ON NOISE RECORD NOT ALL NUMERIC — Should be all numeric and leading spaces filled with zeros.
13. THERE IS NO SUCH RECORD TO CHANGE — Either the office code, the facility, or frequency is incorrect or the change indicator should be “A”.
14. THERE IS NO SUCH RECORD TO DELETE — Either the office code, the facility, or frequency is incorrect or the change indicator should be “A”.
15. THIS RECORD ALREADY EXISTS ON FILE — Either the office code, facility, frequency, or the change indicator is incorrect.

Fig. 23—Quarter History Update Error Messages

OTHER QUARTER HISTORY UPDATE MESSAGES

The following are additional messages to the user. These messages are not triggered by errors in the input but are used to warn the user of specific situations.

1. LOSS QUARTER HISTORY FILE NOT UPDATED.
2. NOISE QUARTER HISTORY FILE NOT UPDATED.
3. OLD OFFICE CODE XXXXXXXXXXXXX FAC XX FREQ XX NEW OFFICE CODE
XXXXXXXXXXXXX.

This message is given when a change card has been submitted for an office. It gives the old office code, facility, and frequency for the *loss* record that was changed and the new office code it was changed to.

4. OLD OFFICE CODE XXXXXXXXXXXXX NEW OFFICE CODE XXXXXXXXXXXXX.

This message is given when a change card has been submitted for a *noise* record. It gives the old office code of the changed record and the new office code it was changed to.

Fig. 23—Quarter History Update Error Messages (Cont)