TRANSITION ADMINISTRATION
METHOD OF PROCEDURE
NETWORK ADMINISTRATION
1/1A "ESS* " SWITCHES

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1. GENERAL

1.01 The purpose of this document is to assist the network administrator in assuring continuity and reliability of service during activities connected with an addition, a rearrangement, or a modification of existing 1/1A ESS switching equipment. It outlines the planning, strategies, and meetings associated with a transition.

1.02 This section is reissued to supplement each transition item with a flowchart and checklist reference. Since this reissue is a general revision, no revision arrows have been used to denote changes.

1.03 The title for each figure includes a number(s) in parentheses which identifies the paragraph(s) in which the figure is referenced.

1.04 This section does not cover all phases, situations, or problems that may be encountered in an office transition. However, it does provide a check of important tasks to be performed before, during, and after the transition period.

1.05 The functions, tasks, and duties listed herein are often the primary responsibility of the network administrator. In some instances, other team members have primary responsibility or responsibilities may be shared with other members of the transition team. However, since the network administrator is primarily responsible for assuring the quality of service, there is no transition activity totally outside the network administrator's concern.

1.06 When it becomes necessary to add, rearrange, or modify equipment in a working central office, the effect on service will vary according to the way in which the work is performed. Successful transitions require good communication, interdepartmental involvement, transition team effort, planning, scheduling, and coordination.

1.07 Other sections relating to transition management are listed in Part 23.

2. NETWORK ADMINISTRATION TRANSITION RESPONSIBILITIES

2.01 Figure 1 identifies in block diagram, the events taking place with an addition or a modification to a 1/1A ESS switch. It outlines network administration transition responsibilities. The responsibilities and events are divided into four phases:

(a) Traffic order activites

(b) Traffic order review

(c) Job contact activity and method of procedure

(d) Job in progress.

2.02 In Fig. 1 the major tasks or accomplishments are numbered in the sequence in which they may occur. These item numbers are related to the item numbers on the task performance flowcharts (Fig. 2 through 14) and on the checklist provided in the back of this section.

2.03 For additional information, refer to Section 780-125-007 NAC Responsibilities Transmission Management.

3. FLOWCHART DESCRIPTION

3.01 The flowcharts provided in Fig. 2 through 14 are intended to be thought-provoking guides to assist the network administrator in the process of performing the various tasks required in a transition period. The major task numbers are related to the item numbers on the responsibility chart (Fig. 1) and the checklist located in the back of this section.

4. TRANSITION TASK CHECKLIST

4.01 The checklist of transition tasks (Table A) consists of:

(a) A reference to the figure and item number where the task is covered in more detail.

(b) Responsibilities and tasks to be performed before, during, and after the transition period.

(c) A list of references to other documentation.

(d) A planning schedule for each accomplishment or task.

4.02 The checklists (Table A) are provided at the back of this section. They should be reproduced locally as required.

5. PRE-TRAFFIC ORDER ACTIVITIES

5.01 Before a traffic order is written, a meeting will be scheduled by the traffic engineer to discuss office performance, past and present traffic data, present shortages, advance turnovers, and any other pertinent topics. This meeting requires advance preparation by the network administrator and the traffic engineer.

5.02 Prior to traffic order preparation, the interaction of the network administrator and the traffic engineer is essential. This interaction is especially required in the areas of traffic load, equipment capacity, translations, recent change, and loading plans.

5.03 The approximate installation date and the proposed exhaust period for the new equipment may be determined by referring to the Demand and Facility Chart. The traffic data should be reviewed based on these intervals. Service levels should be projected and recommendations made concerning future provisions.

5.04 The pre-traffic order activities may be performed with the aid of the flowchart in Fig. 2.

5.05 Refer to Part 13, Translation Preparation, for an explanation of abbreviated class codes.

5.06 Refer to Part 21 for an explanation of loading plans.

6. REVIEW OF TRAFFIC ORDER, EQUIPMENT ORDER, AND TRUNK FORECAST

6.01 After the traffic order and equipment order have been published, these documents should be reviewed for agreement with the pre-traffic order meeting requirements and the trunk forecast (see Fig. 3). The trunk forecast must adequately reflect necessary trunking for the future engineering period as compared to the present.

6.02 Any discrepancies found in the traffic order, equipment order, or trunk forecast must be resolved with the engineering group involved. If the provision of equipment requires a change, the traffic engineer will coordinate, resolve, and implement the changes via a revised traffic order.

7. REVIEW HEAD TABLE REQUIREMENTS

7.01 Review the head table requirements by comparing the quantities on the existing 1500A form with the proposed head table requirements.

7.02 If a change is necessary, the 1500A form will require updating. See Fig. 4.

8. PARTICIPATION IN PRE-SHIP AND SUBSEQUENT CONTACT MEETINGS

8.01 The engineering group will arrange for the pre-ship meeting. Network administration, central office maintenance, and Western Electric will be requested to participate.

8.02 The installation representative will indicate what equipment will be turned down during each step of the job and the anticipated duration of the outage. Special attention should be given to service levels and required in-service equipment quantities. Any special study data collection that could be distorted by the transition should be identified and steps taken to ensure valid data. See Fig. 5 for the tasks involved with participation in pre-ship and subsequent contact meetings.

9. FINALIZING METHOD OF PROCEDURE

9.01 The traffic data should be reviewed (see Fig. 6) and the following should be determined:

(a) Can the requested duration be tolerated?

(b) How many circuits may be turned down on a particular day for the requested time frame?

9.02 These quantities and time frames are to be documented and submitted to the installation representative for inclusion in the MOP. Worksheets are provided in Fig. 15 and 16 for documenting by day and hour the minimum equipment requirements during transition. These worksheets should be reproduced locally as required. Refer to the Fig. 17 for an example of the minimum requirements during transition worksheet.

10. ANALYSIS OF JUNCTOR ASSIGNMENT PROGRAM DOCUMENT

10.01 After obtaining the junctor assignment program (JAP) printout, the proposed junctor configuration should be carefully analyzed to determine the following:

(a) Are any interim JAP runs required?

(b) Have line-to-line junctors and intraoffice trunks been adequately provided?

(c) Are any line transfers or early trunk turn-ups necessary?

(d) Will network isolations occur?

10.02 The service levels in an office during the junctor transition depend on an accurate analysis of proposed junctor configurations. ***The***

analysis should begin as soon as the JAP document is available.

10.03 Refer to Fig. 7 for JAP document analysis procedures. Refer to Section 231-070-326 for junctor transition analysis procedures.

NETWORK ISOLATIONS DURING JUNCTOR TRANSITION

10.04 During the junctor transition, some junctor subgroups may be totally disconnected for a period of several hours. In certain instances, an entire network may be totally isolated from other networks.

10.05 The present JAP checks for line-to-trunk (L-T), line-to-line (L-L) and trunk-to-trunk (T-T) isolations. However, if T-T isolations are encountered, they will only be printed if

- L-T isolations were also found or
- T-T isolation only encountered ***and*** traffic engineer entered the appropriate yes on the E8070 questionnaire card.

10.06 If L-T and/or L-L and T-T isolations are discovered, a "special fourth shelf plug-up" is provided to assure at least one L-T subgroup is available between all line networks and all trunk networks. This one L-T subgroup does ***not*** assure that service objectives will be met.

10.07 In larger 1/1A ESS switches, the "special fourth shelf plug-up" may not care for all L-T T-T isolations.

10.08 The traffic engineer and the network administrator should make a detailed analysis of the JAP output (ESS 1713 forms) to determine if there will be any network isolations during the junctor reconfiguration.

10.09 If isolations are found that have a potential to degrade customer service, the traffic engineer should arrange for equipment engineering to secure additional plug-ups from Western Electric Regional Engineering. These additional plug-ups should be reviewed and approved by maintenance via a MOP before being installed by Western Electric.

11. REVIEW OF PARAMETER DATA ASSEMBLER DOCUMENT

11.01 The parameter data assembler (PDA) listing is a computer-generated document by which equipment quantities and office limits are defined. The specific area of parameters to be concerned with is the SET CARD listing.

PDA QUANTITIES VERSUS TRAFFIC ORDER REQUEST

11.02 The SET CARD values for equipment quantities must be verified against the traffic order and any appendices as soon as possible. Any discrepancies should be promptly resolved with the traffic engineer.

PDA QUANTITIES VERSUS ASSIGNMENT AND TRAFFIC SENSITIVE REQUIREMENTS

11.03 Assignment-sensitive and traffic-sensitive SET CARD quantities in the PDA should be reviewed by network administration. Refer to Tables B and C for examples of SET CARDS that should be verified in parameters. The tables are not all inclusive, but should be representative of the most important items. Refer to Fig. 8 for the PDA review procedures.

PDA QUANTITIES VERSUS TRANSLATION HEAD TABLE REQUIREMENTS

11.04 Faulty relationships between the Translation Head Table, set cards, and the actual assignments in translations can cause severe service difficulties upon cutover or after translation or parameter changes.

11.05 The Translation Head Table (Form 1500A) should be reviewed any time there is parameter activity involving any set cards listed in Table D. Refer to the PG-1 or PG-1A for individual set card descriptions for detailed relationships. Refer to the Translation Guide TG-1A, Division 3, Section 5A for a complete description of the Translation Head Table.

11.06 Translation Head Table (Form 1500A) and parameter set card relationship areas in general to watch for:

(1) Beware of decreasing set card values on growth additions. Make sure that the decreases are permitted by existing assignments.

(2) Use extreme caution when assigning group numbers in translations that are equal to or greater than the set card value. Check individual set card descriptions since there is not a uniform rule.

(3) Beware when skipping member numbers in translation assignments. Make sure that the skips are premitted by the set card.

11.07 The traffic engineer and the network administrator must jointly determine the 1500A values.

11.08 The traffic engineer is responsible (Section 231-060-100) for the service of traffic sensitive set cards and acceptance or rejection of the PDA run. The administrator should verify values using the capacity determination worksheet.

11.09 Refer to Section 231-070-435, parameter and call store information for 1ESS switch parameters. It describes the factors involved in the development of parameters and also includes the precutover and postcutover responsibilities of the network administrator.

11.10 Refer to Section 231-070-427, Memory Administration, for more information on 1A ESS switch parameters. It provides methods and procedures to administer the parameters. It also describes network administration responsibilities.

12. UPDATE DATA COLLECTION RECORDS

12.01 Update all data collection records. This includes any data base (ie, Engineering ad Administrative Data Acqusition System [EADAS], Central Office Equipment Reports [COER], etc) that needs an update. This also includeds the 1/1A ESS switch and associated 1400 form.

12.02 Refer to Fig. 9 for data collection record update procedures.

12.03 Coordination of data bases may be required when equipment or PDAs are put in service throughout the transition. This will assure the data collection records accurately reflect quantities and capacity of the switch.

13. TRANSLATION PREPARATION

13.01 Network administration is responsible for preparing, coordinating, and furnishing all assignment information to the central office supervisor and to the Western Electric representative.

13.02 Translations include trunks, service circuits, routing, charging, traffic registers and lines. Associated with lines are line class codes, abbreviated class codes, and CENTREX/ESSX-1 supplementary abbreviated class codes.

13.03 Abbreviated class codes are discussed in this section because of their importance in the translation process. The impact of abbreviated class codes on the memory is discussed in Section 231-070-425 for 1ESS switch and in Section 231-070-427 for the 1A ESS switch.

> ***Note:*** The translation area analysis (TAA) can be run to check the abbreviation efficiency of an office and enable the administrator to delete unused or little used abbreviated codes.

13.04 The translation procedure also includes inputs to the Trunk Records Update Support Technique (TRUST). This is a Western Electric Company mechanized trunk assignment program.

13.05 Translation procedures are provided in Fig. 10.

CENTREX/ESSX-1 SUPPLEMENTARY ABBREVIATED CLASS CODES (FORM 1503)

13.06 If a sufficient number of CENTREX/ESSX-1 stations within a specific customer group have identical originating and/or terminating characteristics, each major grouping of characteristics can be entered in a common auxiliary block of memory. All CENTREX/ESSX-1 lines should be thoroughly analyzed to determine which blocks of memory can be established in this manner. It is the responsibility of the network administrator to determine which lines should be abbreviated. A high per-

centage of centrex lines should utilize abbreviated class codes (see paragraph 13.12).

13.07 Significant memory can be saved through proper use of abbreviated class codes. When the abbreviation scheme is used, the common information need only be listed once in the auxiliary block. The amount of memory saved depends on the number of CENTREX/ESSX-1 lines which can be abbreviated.

ABBREVIATED CLASS CODES (FORM 1502)

13.08 The ESS 1502 form is used to abbreviate lines that have common classes of service and features. Most offices will have many large groups of lines for which the originating and/or terminating class-of-service data are identical. Because there is a limited quantity of abbreviated codes, they will have to be used efficiently. Some will have to be reserved for future growth. However, a high percentage of lines should utilize abbreviated class codes (see paragraph 13.12).

13.09 As an aid in obtaining a high level of abbreviation when manually checking abbreviation levels, some initial guidelines for eligibility should be set (for example, 25 to 50 working lines in a class). Consideration must also be given to the size, type (class-of-service distribution), and growth pattern (declining, growing, or potential new classes and features) of the office.

13.10 Translation Repack to Implement Memory Savings (TRIMS) is a mechanized program that deals with abbreviated class codes. Refer to paragraph 18.11 for TRIMS information.

13.11 Caution must be used not to assign all the abbreviated class codes. Some codes should be reserved for growth. This consideration is required for a manual or mechanized (TRIMS) procedure.

ABBREVIATED CLASS CODE UTILIZATION

13.12 By using the abbreviated class code method, the requirement for redundant auxiliary blocks can be avoided and significant amounts of translation memory can be saved. At least 95 percent or more of all the lines and directory numbers which can be abbreviated should have abbreviated codes. ***The translations area should never have less than 80 percent of all plain old telephone service (POTS) lines and numbers abbreviated (including those which cannot be abbreviated) while a 95 percent abbreviation level should be the goal. For additional information, refer to Section 231-070-605, Line and Number Administration Considerations.***

TYPE OF MAIN FRAME AND ASSIGNMENT PROCEDURES

13.13 The type of main frame is a consideration for the line portion of the translations. Assignment procedures may vary with the type of main frame installation. The three basic main frames are:

- Conventional (zoned or unzoned)
- Modular
- Common Systems Main Interconnection Frame (COSMIC).

13.14 The translation process may also include inputs to a mechanized line assignment program, eg, Computer System for Main Frame Operations (COSMOS). The type of mechanized assignment may vary the assignment procedures.

MECHANIZED PROGRAMS

13.15 Refer to Part 18 for a brief description of the mechanized programs associated with translation preparation.

14. SERVICE AND LOAD MONITORING

14.01 Although monitoring service and load is an integral part of the network administrator's daily job, it becomes even more important during a transition. The service and load must be monitored during busy and nonbusy periods. Monitoring is required because of reduced equipment quantities or talk paths and increased probability of service deterioration. This monitoring can be accomplished on a near real-time basis with Network Operations Report Generation (NORGEN). For more information, refer to Section 190-512-020.

> ***Note:*** Raw register dumps of junctors may be required to monitor interim JAP runs for capacity and overload conditions.

14.02 Should a service disruption occur, the traffic data could facilitate identification of the problem and reinforce suggested solutions. Refer to Fig. 11 for service monitoring procedures.

15. JOB STATUS REPORTS

15.01 Throughout the transition, the equipment engineer along with the network administrator are responsible for informing other departments of the equipment addition status.

15.02 Refer to Fig. 12 for a job status report flowchart.

16. ACCEPTANCE TESTING ACTIVITIES

16.01 The network administrator's role in acceptance testing activities includes determining which tests are necessary from a network viewpoint. It may include scheduling network administration items (eg, translation verification, call-through testing, recorded announcements). Refer to Fig. 13 for a flowchart of acceptance testing activities.

16.02 All other acceptance responsibilities lie with the equipment engineer, maintenance engineer, and the central office maintenance supervisor.

17. POSTCUTOVER ACTIVITY

17.01 After the cutover, a meeting is held to analyze the cutover process to modify future transition methods and procedures. Be sure to participate in these meetings.

17.02 Refer to Fig. 14 for the postcutover activity flowchart.

18. MECHANIZED TRANSLATION PROGRAMS

GENERAL

18.01 Telephone companies will send various input documents to Western Electric. Western Electric will verify the data, process it to develop assignments, generate the resulting translations, and convert the translations to the binary code to be loaded into 1 or 1A ESS switches. To accomplish these tasks, a set of engineering procedures and computer systems have been developed. The results of these activities are made available to the telephone companies through various printouts. Computer program runs are requested from Western Electric by the engineer.

18.02 Some of the computer systems are briefly described in the following paragraphs. More detail is provided in PA-591092. Other computer systems are described in the Translation Guide, TG-1A, Division 1, Section 5.

TRANSLATION AREA ANALYSIS

18.03 The Translation Area Analysis (TAA) system is used to analyze the program store addresses and memory utilization for translations. Four basic reasons for making the analysis are as follows.

(1) To validate pointers. This check ensures that addresses do indeed point to the proper place. Furthermore, the check will identify both invalid and duplicate pointers.

(2) To check for overlapping. Verification is made that a table of translation data from one translator does not overlap with a different table, or tables, of translation data from the same or a different translator.

(3) To verify that link list entries do not overlap and that duplicate areas are not assigned to tables of valid translation data.

(4) To identify all program store locations that are not assigned to translators or link lists. Such space is referred to as lost space.

18.04 In addition to the list of defects, right and left half program store word listings, and functional listings are produced. Together these three listings provide a complete picture of the office translations at the time they were copied. Actions required to clear any defects may be determined by an analysis of the listings.

18.05 Once the corrective actions decided upon from the analysis of the translation area analysis outputs have been prepared, the TAA is rerun. A new set of listings is produced. This cycle is repeated until a satisfactory translation configuration results.

TRANSLATION RETROFIT REPACK

18.06 Following a successful TAA, the Translation Retrofit Repack (TRR) system may be run. This system relocates the subtranslators, auxiliary blocks, and tables to better utilize the program store memory.

18.07 Except for the adjustment of the pointer addresses, and necessary updates, the translation data is identical with the data recovered from the office being processed.

18.08 The primary reason for a repack is the relocation of translation data for the purpose of a generic program retrofit. However, the repack may also be used to identify and recover lost space.

18.09 If the TRR is being executed in conjunction with a 1ESS generic program retrofit in which the new generic program will occupy program store modules filled with translation data for the old generic program, the TRR will relocate the translation data as necessary. This includes the master head table and/or the pointer addresses within it.

18.10 Magnetic and functional listings are produced for the office showing the relocated data. A tape is also created for use with either the 1ESS memory card magnetization and verification machine or 1A ESS tape drive.

TRANSLATION REPACK TO IMPLEMENT MEMORY SAVINGS

18.11 The Translation Repack to Implement Memory Savings (TRIMS) system uses a number of methods to recover translation program store space. If a TRIMS run seems appropriate, the engineer should be consulted, as the engineer must request the run from Western Electric (WE).

18.12 Space can be recovered by the conversion of data represented by auxiliary blocks to the abbreviated code format.

18.13 When a complete number group is deleted, the translation program store space can be recovered by zeroing the directory number head table and number group number table entries associated with that number group. This applies to centrex number groups also.

18.14 When the service pattern in an office changes, some of the abbreviated codes are infrequently referenced. This condition makes it desirable to convert the data represented by these codes to auxiliary blocks and replace them with data that is more frequently referenced.

18.15 To ensure up-to-date and accurate office records, the TRIMS system produces data which may be transcribed to ESS switch forms to document the changes made by the system.

TRANSLATION GROWTH PROCESS

18.16 The Translation Growth Process (TGP) is a WE support program designed to reduce telephone company effort for large line growth in 1 and 1A ESS switches.

18.17 The large line growth to the 1/1A ESS switch could be the result of an area transfer or a new centrex customer. The TGP provides the option of activating all lines simultaneously or by number group.

18.18 The TGP is a subsystem associated with the Translation Data Recovery and Reprocessing System Service (TDRRSS). The TGP will merge the new line translation information with the existing translation data in an in-service office.

18.19 The economic break-even point of TGP versus recent change of the new lines is approximately 7,000 lines. Below this amount the recent change procedure is cheaper. However, there may be instances where TGP might still be more convenient.

18.20 Refer to TG-1A, Division 10, Growth, for details on the TGP process.

TRUNK RECORD UPDATE SUPPORT TECHNIQUE

18.21 The Trunk Record Update Support Technique (TRUST) system is intended to satisfy several needs of the telephone companies and WE. Some of these needs are as follows:

(1) To minimize the network administrator's effort to prepare and maintain the trunking records

(2) To provide an interface with the Trunk Network Number Generation systems (TNN GEN)

(3) To provide a method for implementing trunking changes and additions for office growth activities

(4) To maintain the library tapes retained in the regional centers in a current condition so they will be ready for utilization at the time of WE engineered growth.

18.22 To accomplish these objectives, TRUST is designed to work with the trunk network number generation, mechanized assignments processing, and mechanized regional growth entries.

19. GENERAL GROWTH DESCRIPTION

BASIC CONCEPTS

19.01 In the 1/1A ESS switch frames can be added to a working system with relatively few wired connections. Parameter and translation changes provide the information required by the 1/1A ESS switch as new frames are added.

19.02 When new equipment is added to a 1/1A ESS switch, it is added with minimum interruption in telephone service. The duplicate design of the 1/1A ESS switch permits numerous working configurations among the duplicated system units.

19.03 The parameter data assembler (PDA) listing is a computer-generated document which gives the input and output of the PDA program. The listing is always required during office growth to obtain set card values and program store addresses.

GROWTH RECENT CHANGE FORMS

19.04 Growth recent change (GRC) forms are used for the transmittal of information between the WE regional engineer and the telephone company. The assignment of central pulse distributor (CPD) points, master scan (MS) points, and signal distributor (SD) points for trunks and growth frames is made by the WE regional engineer. Up to three types of GRC forms (xxxx.1, xxxx.2, and xxxx.3) are provided for each type of frame. The GRC forms are numbered as follows:

GRC xxxx.y

xxxx = Basic GRC number of the frame being added

y = 1, 2, or 3 as explained below.

(a) ***GRC xxxx.1 Form:*** This form contains the recent change (RC) messages needed to determine if sufficient head table and/or subtranslator capacity exists for the frame type specified by the GRC number xxxx. This form also contains the RC messages necessary to seize and reserve only blocks of memory that the addition requires.

(b) ***GRC xxxx.2 Form:*** This form contains the RC messages necessary to update translations.

(c) ***GRC xxxx.3 Form:*** This form contains the RC messages necessary to update parameters.

GROWTH MEMORY CHANGES

19.05 Memory changes are divided into translation changes and parameter changes. Translation changes are performed first and are sometimes completed before parameter changes are started for a particular equipment item. Memory changes are made by telephone company personnel at times agreed to jointly with Western Electric installation personnel.

TRANSITIONAL PARAMETERS

19.06 Transitional parameters are a set (or sets) of parameters to be used for operating an office during the addition of specified growth equipment. The need for transitional parameters will be determined by the types of frames and the installation sequence of the frames and/or equipment. These parameters allow growth and diagnostic programs access to the growth frames and/or equipment while denying access by the call-processing programs. Transitional parameter updates are performed by the telephone company.

SEQUENCE OF FRAME ADDITIONS

19.07 Equipment is added to a 1/1A ESS switch in a sequence engineered by WE. The sequence for each addition must be made by considering frame interdependencies as well as the hardware and software interrelationships.

MAJOR GROWTH OBJECTIVES

19.08 Major objectives during growth of an office are as follows:

(a) Minimize the possibility of service interruption or impairment.

(b) Minimize changes required to normal operating procedures of the telephone company.

(c) Permit allowable margins and overlap of installation effort to allow efficient job schedules and utilization of the work force.

19.09 These objectives can best be implemented with the following procedures:

(a) Provide a safe and well defined environment in which growth frames can be tested without interference to the working system.

(b) Minimize the intervals where simplex operation (no duplication) of equipment is required.

(c) Installation procedures are sequenced to allow growth frames to be integrated into the system in small steps that can be easily verified.

(d) Several safe stopping points are provided in the growth procedures to allow for unforeseen difficulties that may arise.

(e) The procedures are kept clear and simple.

(f) Computer-generated data is used when available.

19.10 For more information on growth, refer to Section 231-319-001.

20. METHOD OF PROCEDURE OVERVIEW

20.01 The method of procedure (MOP) is a detailed step-by-step plan for the installation of a particular job which has been agreed upon and signed by both the telephone company and vendor representatives. For additional MOP details, refer to Section 780-200-112, Transition Management—MOP.

20.02 A cooperative effort between the telephone company and vendor is absolutely essential when adding equipment frames to an in-service 1/1A ESS switch.

20.03 During the planning stage of each office addition, vendor installation personnel and telephone company personnel prepare a MOP which specifies the sequence of all activities to be performed. The MOP may be a formal or informal document, depending on the magnitude of the job.

20.04 Methods of procedure are required whenever vendor activity involves:

(a) Equipment additions

(b) Equipment modifications

(c) Equipment removal

(d) Program changes.

20.05 Installation events which warrant defining responsibilities are those dealing with:

(a) Equipment to be added

(b) Live equipment affected

(c) Choice of periods for taking equipment out of service

(d) The determination of whether special working hours are required because of service affecting work.

20.06 The following list may be used as a guideline for what should be included in a MOP:

(a) Equipment to be added

(b) Time interval for transition or replacement

(c) In-service equipment affected which may require special considerations depending on the work performed

(d) Time of day or night during which the work will be performed

(e) Length of time the equipment will be taken out of service

(f) Allocation of responsibilities

(g) Installation and testing procedures

(h) Translation and parameter update procedures

(i) Where necessary, a detailed step-by-step procedure for doing a transition or a rearrangement

(j) Type of protection and special precautions for each step of the job.

21. LOADING PLANS

21.01 A loading plan is a strategy for spreading the wire center main station demand across all traffic units in the wire center. This must be accomplished within the capability and capacity constraints of each traffic unit. The primary objective is to achieve optimum utilization of installed equipment while providing an objective grade of service to all customers.

21.02 Loading plan in this context is not to be confused with the load balance plan for a traffic unit. In the case of a single-traffic unit wire center, however, the loading plan essentially equates to the load balance plan.

21.03 An initial loading plan is necessary for a new or replacement wire center and must be maintained on an ongoing basis throughout the wire center life. The loading plan should be revised any time there is a change in a forecast or calling characteristics, a traffic unit addition or growth, or an area transfer. For more detail on the ongoing loading plan for an office, refer to Section 780-200-018, Loading Plans.

21.04 Loading plan reviews are identified in the flowcharts in Fig. 2, Sheet 3 and Fig. 10, Sheet 5.

22. AUXILIARY TEST PROGRAMS

22.01 Auxiliary test programs consist of software information that enable the central processor to perform specialized low-priority tests. The tests are requested by messages input by maintenance personnel. The tests are called auxiliary programs telephone company (APT) tests.

22.02 The 1ESS switch APT packages 02, 03, 04, and 06 were used as examples. Similar programs are available for the 1A ESS switch.

A. APT-02 Package

22.03 The automatic message accounting (AMA) data retrieval and insertion program, XDRI, is used to record program store data on the AMA tape in a standard tape format. The program can also record call store data on AMA tape in a nonstandard tape format designed to be read by the AMA unit and, under control of XDRI, inserted back into call store. This facility will be used to expedite the translation repack procedure.

22.04 The data mapping program, XMAP, has been designed to eliminate the principal service interruptions caused by planned office restarts. This program is used when any of the following changes are made: (1) generic program replacement, (2) office parameter data changes, or (3) translation data regeneration. This program limits service interruptions to subscriber lines in the process of being set up. These lines are simply restored to idle and treated as originations following the restart.

B. APT-03 Package

22.05 The translation check program, XLCK, is used to detect certain irregularities in an office's translation data, primarily in its allocation of memory. The program is designed to detect the following errors: (1) lost memory; that is, memory that is not on the link list nor a part of any translation, (2) overlapping memory invalidly shared by two or more translations, (3) a link list that loop or point outside the translation area of program store, and (4) auxiliary blocks longer than 2050 words.

22.06 The program store copy, compare, and dump program, XCMP, allows a block of program store data to be relocated via the recent change area.

The need for such a capability often arises during retrofit and growth activities.

C. APT-04 Package

22.07 The board-to-board test program, XBBT, is used in conducting tests on lines that are being transferred from an old office to be removed from service or a working office on an area transfer basis to a new or growth 1ESS switch. The purpose of XBBT is to ensure that the connection of these lines to the new office is correct with respect to the existing connections in the older office. The XBBT, under program control, connects to lines in the old office effectively simulating the test actions manually done by test desk maintenance personnel at the test desk using "No-Test" trunks.

D. APT-06 Package

22.08 The parameter/translation verification program, XPTV, is used to compare new parameter data with existing parameter data prior to the office using the new data. Set card value differences are found and printed.

22.09 For additional 1ESS switch APT information, refer to Section 231-147-301.

22.10 Additional 1A ESS switch APT information may be found in Sections 231-311-000 through 231-311-011.

23. REFERENCES

23.01 Refer to Section 780-100-022 for a complete list of recommended documents.

23.02 The following documents provide information in related areas to transition management.

SECTION	TITLE
Equipment Description	
231-045-105	Software Description—Call Processing
231-061-400	CP and SP Description—1ESS
231-062-400	Central Processor Description—1A ESS
231-070-320	Network and Junctor Description
231-070-305	Service Circuit Description
231-070-430	Call Store Items
Traffic Measurements	
231-070-505	General
231-070-510	Quarter Hour Schedules
231-070-515	Hourly Schedules
231-070-520	Daily Schedules
231-070-525	Weekly Schedules
Capacity and Load	
231-061-420	CC and SP Postcutover Capacity—1ESS
231-062-420	Central Processor—Postcutover Capacity—1A ESS
231-070-155	Capacity Administration—General
231-060-130	Capacity Determination
231-060-890	Capacity Determination Worksheets
231-070-325	Network and Junctor Capacities and Transitions
Parameter	
231-070-427	Memory Administration—1A ESS
231-070-435	Parameter and Call Store Administration—1ESS
Service Monitoring	
231-070-710	Dial Tone Speed Delay
231-070-715	Matching Loss
231-070-725	Receiver Attachment Delay

SECTION	TITLE
231-070-755	Service Surveillance
General	
780-125-007	NAC Responsibilities—Transition Management
780-200-112	Transition Management—MOP

TABLE A

1/1A "ESS" SWITCH TRANSITION ADMINISTRATION CHECKLIST

FLOWCHART REFERENCE		TASKS TO BE PERFORMED	DOCUMENTATION	SCHEDULED DATE		ACTUAL DATE		COMMENTS
FIGURE	ITEM			START	COMPL.	START	COMPL.	
2	2.	PERFORM PRE-TRAFFIC ORDER ACTIVITIES	Section 780-200-112 — Transition Management — MOP Section 231-070-325 — Network and Junctor Capacities and Transitions TG 1A, Div. 10, Sec. 1					Starts with notification from traffic engineer that traffic order is to be written.
	2.1	Review general planning forecast and CENTREX/ESSX-1 forecast for projected growth.	Section 780-400-260 — Demand and Facility Chart, End Office Section 231-070-630 — CENTREX/ESSX-1 General Description Section 231-070-635 — Centrex Planning and Cutover TG 1A, Div. 2 and Div. 5					General planning forecast, CENTREX/ESSX-1 forecast, demand and facility chart and current working line number records. CENTREX/ESSX-1 forecast, line/number data, and switching capacities. Detailed analysis of centrex equipment
	2.2	Review hardware and software requirements — traffic sensitive and assignment sensitive.	Section 231-070-110 — System Description Section 231-070-120 — Call Processing Description Section 231-060-130 — Capacity Determination Worksheets TG 1A, Div. 3					Review traffic usage data (via COER and/or EADAS printouts for all components) ESS switch traffic printouts. EADAS printouts. COER printouts
			Section 231-070-505, 510, 515, 520, and 525 — Traffic Measurements Section 190-510-061 and 100 — EADAS Section 190-511-061 — EADAS Section 190-512-000, 015, 020 — EADAS/NORGEN					

TABLE A (Contd)

1/1A "ESS" Switch Transition Management Checklist

FLOWCHART REFERENCE		TASKS TO BE PERFORMED	DOCUMENTATION	SCHEDULED DATE		ACTUAL DATE		COMMENTS
FIGURE	ITEM			START	COMPL.	START	COMPL.	
2 (Contd)	2.2 (Contd)	Section 231-070-555, 556, 557, 558, 559, 560, 561 — COER COER Lessons						
	2.3	Review recent change area size for transition	Section 231-048-307 — Traffic Measurements — Recent Change Section 231-070-520 — Traffic Measurements — Daily (TC 24A) Section 231-318-301 — General Recent Change (1A) Section 231-070-410 — Concepts of Translations (1A)					TC 24A printouts; Consultation with central office maintenance.
	2.4	Review translation word space	Section 231-070-405 — Memory Administration — General Description Section 231-070-425 — Translations — Spare Word Administration Section 231-070-427 — Memory Administration (1A) TG 1A, Div. 3, Sec. 5 Section 231-061-450 — Program Store PA 591092 — User Manual for TAA — TRR — TRIMS					Verify space printout, report of working main stations and projected main station growth. Abbreviate all feasible line class codes, if required (Current ESS 1502 and 1503 Forms). The traffic engineer will request one or more of the following computer programs, if required: TAA = Translation area analysis TRR = Translation retrofit repack TRIMS = Translation repack to implement memory savings

TABLE A (Contd)

1/1A "ESS" SWITCH TRANSITION ADMINISTRATION CHECKLIST

FLOWCHART REFERENCE		TASKS TO BE PERFORMED	DOCUMENTATION	SCHEDULED DATE		ACTUAL DATE		COMMENTS
FIGURE	ITEM			START	COMPL.	START	COMPL.	
2 (Contd)	2.5	Determine if a network change is required.	Section 231-070-325 — Network transition considerations					Consider BCRC, MCRC, MERGE and loop range extension transitions.
	2.6	Review processor capacity	COER CAPFIT Lessons COER EECAP Lessons Section 231-070-559 COER CAPFIT Real-Time Capacity Section 231-061-400 — CC/SP Processor Capacity Considerations					• COER CAPFIT or EECAP reports • Busy season review records
			Section 231-061-410 — CC/SP Precutover Capacity Determination Section 231-061-420 — CC/SP Post Cutover Capacity Determination Section 231-060-130 Capacity Determination Section 231-062-400 — Capacity Consideration — Processor Community Engineering (1A) Section 231-062-410 — Precutover Capacity Determination (1A) Section 231-062-420 — Post Cutover Capacity Determination. (1A)					
	2.7	Attend pre-traffic order meeting						Using data gathered in preceding tasks, compile list of all equipment shortages and necessary advance installations.

TABLE A (Contd)

1/1A "ESS" SWITCH TRANSITION ADMINISTRATION CHECKLIST

FLOWCHART REFERENCE		TASKS TO BE PERFORMED	DOCUMENTATION	SCHEDULED DATE		ACTUAL DATE		COMMENTS
FIGURE	ITEM			START	COMPL.	START	COMPL.	
3	3	REVIEW TRAFFIC ORDER, EQUIPMENT ORDER, AND TRUNK FORECAST	TG 1A, Div. 4, Sec. 2C Section 780-200-112 — Transition Management — MOP Section 780-403-XXX — Trunking Section 231-060-100 — Traffic Order Preparation — General					Traffic order, equipment order, trunk forecast, and pre-traffic order agreements.
4	4	Review head table requirements	TG 1A, Div. 3, Sec. 5A					This may require 1500A Form entries
5	5.	PARTICIPATE IN PRESHIP AND SUBSEQUENT CONTACT MEETINGS	Section 780-200-112 — Transition Management — MOP TG 1A, Div. 10, Sec. 1					Pre-ship meeting generally called by equipment engineer.
	5.1	Review current load data	TG 1A, Div. 3, Sec. 4 Section 231-070-505 — Traffic Measurements, General Section 231-070-755 — Service Surveillance					TC-15, TC-24A H&C printouts.
	5.2	Based on current data, identify heavily loaded equipment which could have service impact.	Section 231-060-130 — Capacity Determination Section 231-070-325 — Networks and Junctors — Capacities and Transitions					
	5.3	Identify data-affecting items	Section 231-070-515 — Traffic Measurements — Hourly Schedules					Installation — Schedule of data collection.
6	6.	PARTICIPATE IN FINALIZING METHOD OF PROCEDURE (MOP)	Section 780-200-112 — Transition Management — MOP TG 1A, Div. 10, Sec. 1					

TABLE A (Contd)

1/1A "ESS" SWITCH TRANSITION ADMINISTRATION CHECKLIST

FLOWCHART REFERENCE		TASKS TO BE PERFORMED	DOCUMENTATION	SCHEDULED DATE		ACTUAL DATE		COMMENTS
FIGURE	ITEM			START	COMPL.	START	COMPL.	
6 (Contd)	6.1	Review in-service requirements for hardware items	Sectin 780-200-030 — Data Administration, General Section 780-400-211 — Load/Service Relationship Section 231-070-155 — Capacity Administration, General					Traffic order and/or equipment order, current data and installation MOP.
	6.2	Establish positive feedback procedures	TG 1A, Div. 10, Sec. 1					Subcommittee, interdepartmental committee, individuals.
	6.3	Prepare traffic MAP	Section 231-070-505 — Traffic Measurements, General					Data Schedule and input manual.
	6.4	Establish priorities for equipment to be rearranged, relocated, etc.	Section 780-200-112 — Transition Management — MOP Section 780-400-211 — Load/Service Relationships Section 231-070-155 — Capacity Administration, General					MOP, known service requirements TLN and LLN balance and subcommittee minutes.
	6.5	Determine if emergency action is required	Parameter Guides: PG-1 (1ESS switch) PG-1A (1A ESS switch)					MOP, parameter changes, generic program changes, office characteristics.
	6.6	Final MOP document approved and signed						Monitor compliance of approved procedures.
7	7.	ANALYZE JUNCTOR ASSIGNMENT PROGRAM (JAP) DOCUMENT	Section 231-118-326 — Junctor Redistribution — RC procedures Section 231-070-326 Junctor Transition Analysis Procedures					JAP run, ABS junctor usage, ABS working main stations, current junctor usage.
	7.1	Analyze junctor load and capacity (ESS 1709 Form)	Section 231-061-330 — Junctors and IAO Trunks Section 231-061-340 — Junctor Assigment Procedures TG 1A, Div. 10, Sec. 4 TG 1A, Div. 4, Sec. 6					Analyze junctor capacities for sufficiency in all network configurations and phases of the transition

TABLE A (Contd)

1/1A "ESS" Switch Transition Management Checklist

FLOWCHART REFERENCE		TASKS TO BE PERFORMED	DOCUMENTATION	SCHEDULED DATE		ACTUAL DATE		COMMENTS
FIGURE	ITEM			START	COMPL.	START	COMPL.	
7 (Contd)	7.1 (Contd)		Section 231-070-326 — Junctor transition analysis					
	7.2	Check for LL, LT, and TT junctor isolations (ESS 1713 Form)						
8	8.	REVIEW PARAMETER DATA ASSEMBLER (PDA) DOCUMENT	Section 231-070-435 — Memory Parameters and Call Store Administration (1ESS) Parameter Guides: PG-1 and PG-1A Section 231-070-427 — Memory Administration — 1A ESS Switch Section 231-070-425 — Parameter and Call Store Administration — 1ESS Switch					
	8.1	Determine if correct issue is installed	Same as 8.					
	8.2	Compare new quantities with Traffic order and appendices	Same as 8.					
	8.3	Compare new traffic sensitive set cads and assigment sensitive set cards with exhaust and/or cutover requirements	Same as 8.					
	8.4	Compare head table sensitive set cards versus head table capacity (1500 A Form)	Same as 8.					
9	9.	Update data collection records	TG 1A, Div. 3, Sec. 4 Section 231-070-505, 510, 520, and 525 — Traffic Measurements					Data base requirements. List of measurable items to be added or changed.

TABLE A (Contd)

1/1A "ESS" SWITCH TRANSITION ADMINISTRATION CHECKLIST

FLOWCHART REFERENCE		TASKS TO BE PERFORMED	DOCUMENTATION	SCHEDULED DATE		ACTUAL DATE		COMMENTS
FIGURE	ITEM			START	COMPL.	START	COMPL.	
10	10.	PREPARE TRANSLATIONS	TG 1A, Div. 3, Sec. 2 and 3 Section 231-070-410 — Concepts of Translations Section 231-070-415 — Translations/Office Records Section 231-118-XXX — Translations — Description and Procedures					Traffic order, equipment order.
	10.1	Trunk and service circuit translatins — manual assignments	TG 1A, Div. 4, Sec. 2; TG 1A, Div. 7, Sec. 27; TG 1A, Div. 10, Sec. 2 and 3 TG 1A, Div. 3, Sec. 2 — Translation Preparation					Traffic order, equipment order, trunk forecast, master code list, TRUST.
	10.2	Trunk and service circuit translations — mechanized						
	10.3	Routing and charging translations	TG 1A, Div. 4, Sec. 3, TG 1A, Div. 3, Sec. 3, — Translation Preparation					Traffic schematics, trunk order, equipment order, rate book, routing sheets.
	10.4	Register assignment translations	TG 1A, Div. 3, Sec. 4 Section 231-070-505, 510, 515 — Traffic Measurements					Traffic order, call store worksheet, trunk order, PDA printout, register layout record record.
	10.5	Line translations	TG 1A, Div. 4, Sec. 7 TG 1A, Div. 3, Sec. 1					Traffic order, line assignment, policy, load balance data, loading plan
11	11.	MONITOR SERVICE AND LOAD THROUGHOUT THE TRANSITION	Section 231-070-555 — COER COE Reports Section 231-070-565 — COER Processor Capacity (1ESS Switch) Section 231-070-575 — COER Program Store Reports Section 231-070-755 — Service Surveillance					Schedule of Western Electric activities, printout of COER, EADAS, TC 15, TC 24A, H and W Schedules.

TABLE A (Contd)

1/1A "ESS" SWITCH TRANSITION ADMINISTRATION CHECKLIST

FLOWCHART REFERENCE		TASKS TO BE PERFORMED	DOCUMENTATION	SCHEDULED DATE		ACTUAL DATE		COMMENTS
FIGURE	ITEM			START	COMPL.	START	COMPL.	
12	12.	ISSUE JOB STATUS REPORTS THROUGHOUT THE TRANSITION						
	12.1	Identify groups to be advised	TG 1A, Div. 10, Sec. 1					Interdepartmental responsibilities, installation schedule.
13	13.	PARTICIPATE IN ACCEPTANCE TESTING ACTIVITIES						Identify any joint tests in which the network administrator participates
14	14.	PARTICIPATE IN POST-TRANSITION EVALUATION						Analyze cutover process to modify future transitions.

TABLE B

1/1A "ESS" SWITCH PARAMETERS
ASSIGNMENT SENSITIVE SET CARD EXAMPLES

SET CARD	DESCRIPTION
CNSG	Centrex Console Groups
CSL	Counters in C-Schedule
CTG	Centrex Groups
HSL	Counters in H-Schedule
LLN	Line Link Networks
MHG	Multiline Hunting Groups (1ESS Switch)
MLHG	Multiline Hunting Groups (1A ESS Switch)
NATG	Autovon Trunk Groups
NSF	Simulated Facilities Registers
NSL	Lines Selected for Traffic Counts
NTG	Trunk Groups Active in Present Engineering Period
RAF	Recorded Announcement Frames
SFG	Simulated Facilities Groups
SLC	Concentrators Selected for Traffic Counts
SQHTC	Items for Quarter Hour Traffic Schedule
TAI	Trunk Answer Pickup Groups
TLN	Trunk Link Networks
TSS1	Maximum Items S-1 Schedule
TSS2	Maximum Items S-2 Schedule
TSS3	Maximum Items S-3 Schedule
UTF	Universal Trunk Frames

TABLE C

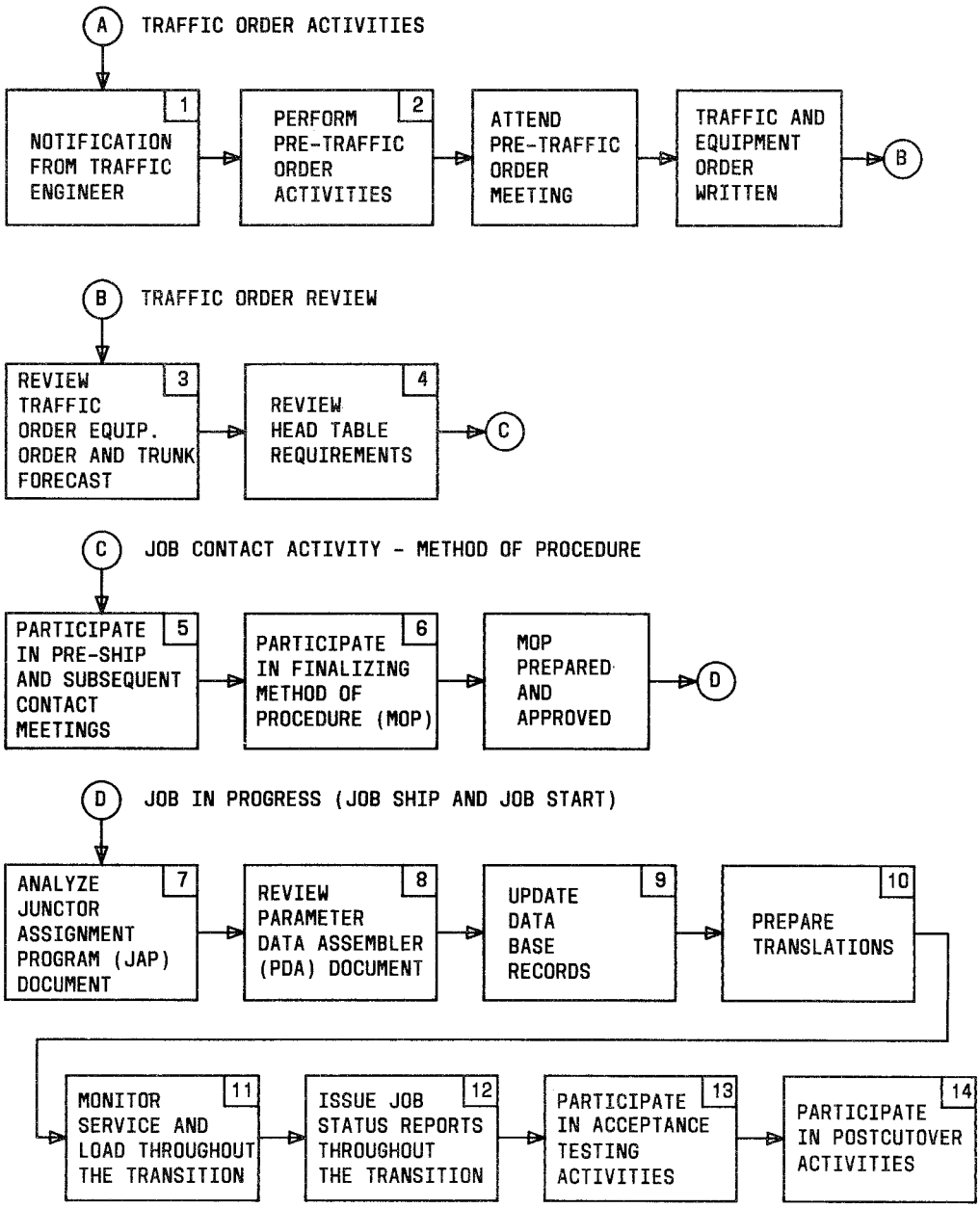
1/1A "ESS" SWITCH PARAMETERS
TRAFFIC SENSITIVE SET CARD EXAMPLES

SET CARD	DESCRIPTION
NAC	Conference Assistance Registers
NAM	13 Word AMA Registers
NAMSS	18 Word AMA Registers
NAM 9	9 Word AMA Registers
NCC	Coin Charging Registers
NDR	Disconnect Registers
NFL (1ESS Switch)	Trunk Flash Timing Senior Registers
NHT (1ESS Switch)	Hit Timing Junior Registers
NHM	Hotel-Motel Registers
NOP	Operator Trunk Registers
NPB	Peripheral Order Buffers
NRV	Reverting Call Registers
NTM	Path Memory for Trunk-Trunk Junctors Registers
NTR	Call Forwarding Registers
NTS	Timed Scan Junior Registers
SXOR (1ESS Switch)	Bylink Dialing Senior Registers
BLJS (1ESS Switch)	Bylink Dialing Junior Registers
FXOR	Foreign Exchange Area Registers

TABLE D

1/1A "ESS" SWITCH PARAMETERS TRANSLATION HEAD TABLE SENSITIVE SET CARD EXAMPLES

1A "ESS" SWITCH		1 "ESS" SWITCH	
1500A ITEM	SET CARD	1500A ITEM	SET CARD
01	LLN	01	LLN
05	UTF	05	UTF
07	MSF	07	MSF
08	NTG	08	NTG
11	MLHG	11	MHG
15	CTG	15	CTG
17	CPD	17	CPD
22	HSL	22	HSL
23	CSL	23	CSL
28	SFG	24	SLC
30	DAG	25	NSL
31	ASP	28	SFG
35	DLG	30	DAG
36	CFG	31	ASP
		35	DLG
		36	CFG



NOTE: NUMBERS 2 THROUUGH 14 CORRESPOND TO THE ITEM NUMBERS ON THE FLOWCHARTS (FIG. 2 THROUGH 14) AND THE TRANSITION MANAGEMENT CHECKLIST.

Fig. 1—Central Office Equipment Addition Network Administration Responsibility (2.01, 2.02, 3.01)

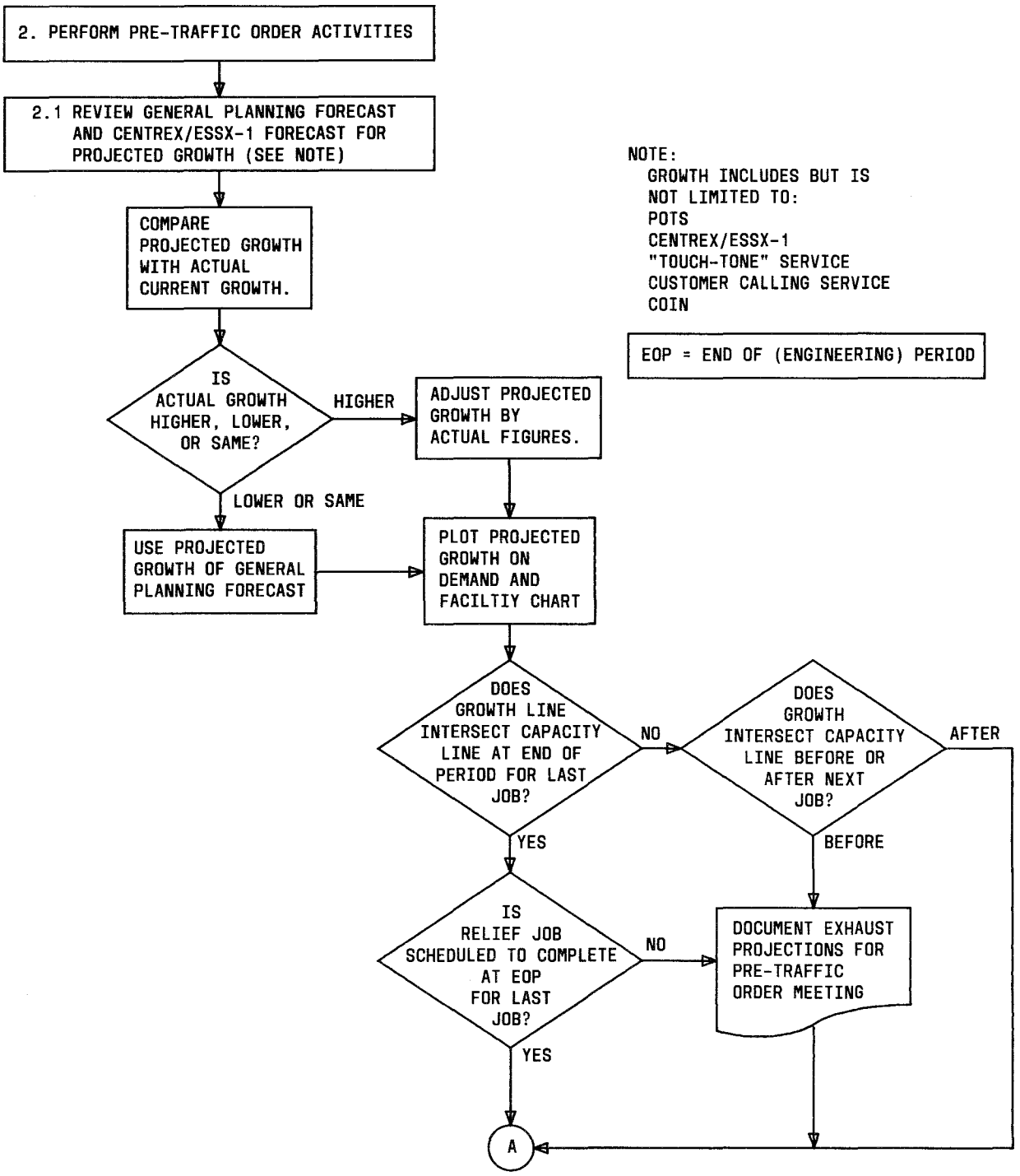


Fig. 2—Pre-Traffic Order Activities Flowchart (Sheet 1 of 7) (2.02, 3.01, 5.04, 21.04)

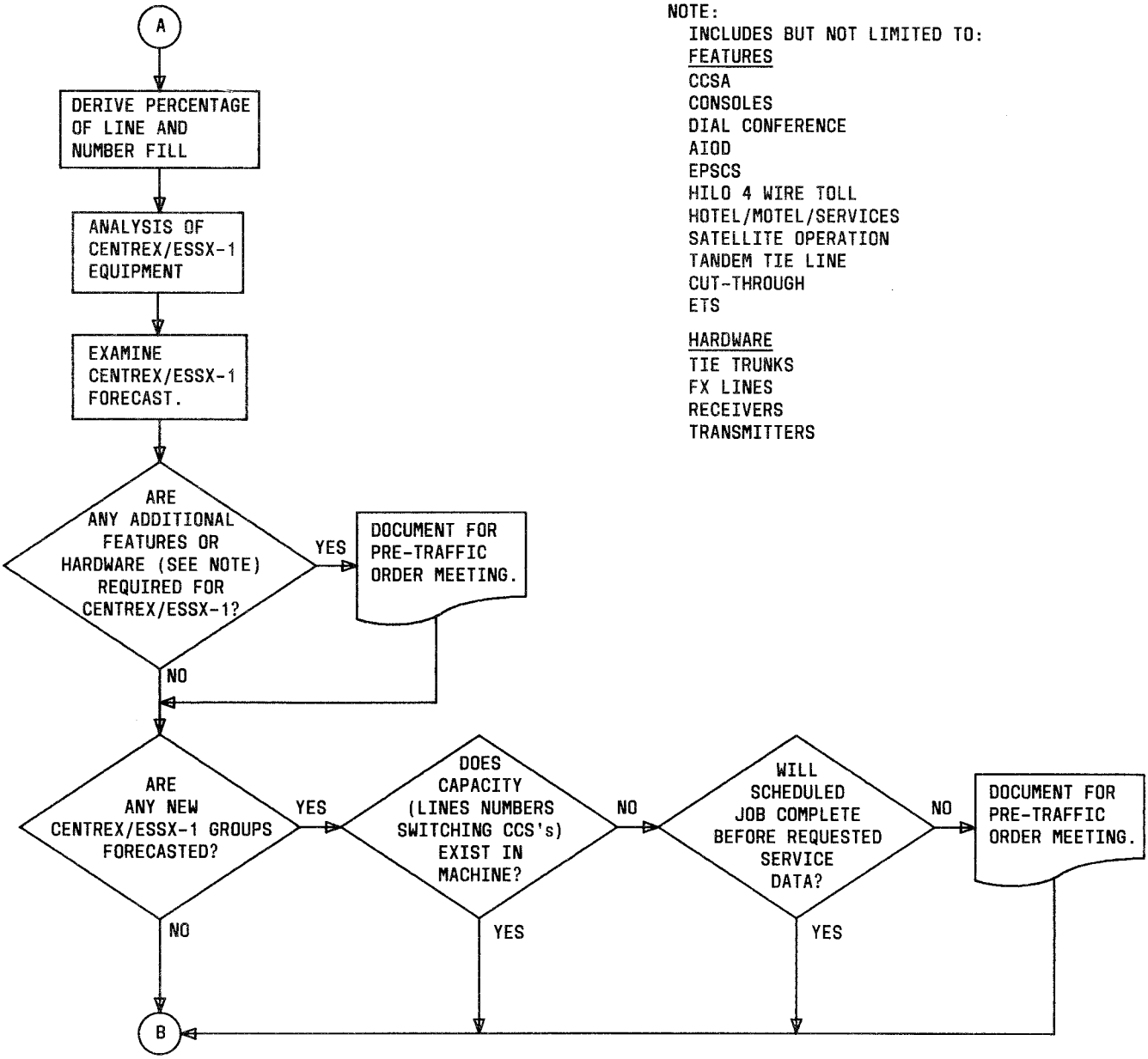
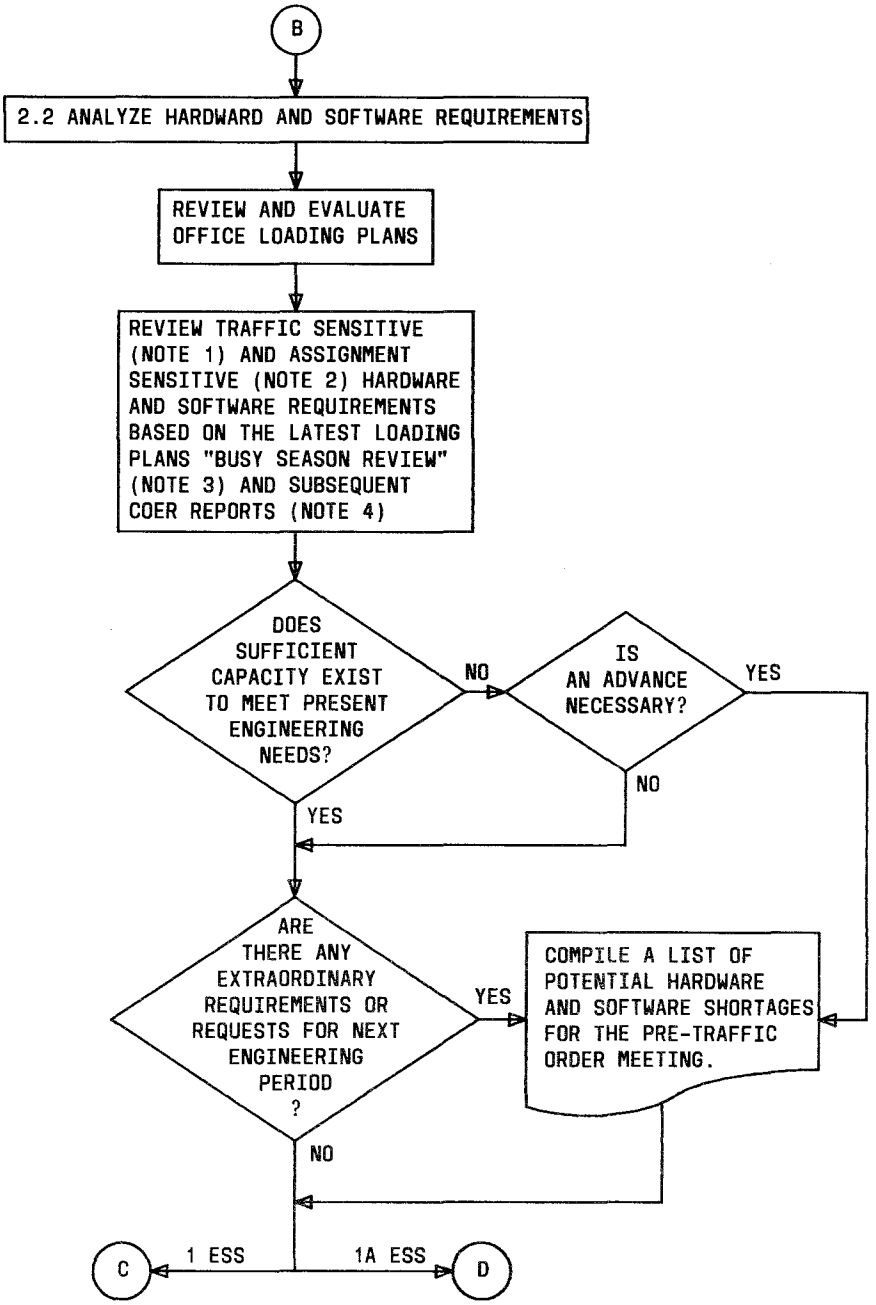


Fig. 2—Pre-Traffic Order Activities Flowchart (Sheet 2 of 7) (2.02, 3.01, 5.04, 21.04)



NOTES:

1. INCLUDES BUT NOT LIMITED TO:
   HARDWARE (TRAFFIC SENSITIVE)
   CDPRS-CTTRS
   TRANSMITTERS
   RECEIVERS
   RECORDED ANNOUNCEMENT TRUNKS
   TONE TRUNKS
   RINGING TRUNKS
   L-L, L-T, AND T-T JUNCTORS
   COIN ZONE TRUNKS
   IAO TRUNKS
   CONFERENCE CIRCUITS
   COIN CONTROL CIRCUITS

   SOFTWARE (TRAFFIC SENSITIVE)
   T-T PATH MEMORY REGISTERS
   COIN ZONE REGISTERS
   CALL FORWARDING REGISTERS
   DISCONNECT REGISTERS
   OPERATOR TRUNK REGISTERS
   TIME SCAN REGISTERS
   POBS
   AMA REGISTERS
   COIN CHARGING REGISTERS
   CONFERENCE ASSIST REGISTERS
   HOTEL/MOTEL REGISTERS
   TRUNK FLASH TIMING REGISTERS
   REVERTIVE CALL REGISTERS
   BY-LINK DIALING SR. REGISTERS
   BY-LINK DIALING JR. REGISTERS
   HIT TIMING JR. REGISTERS
   FAST ANSWER SR. REGISTERS
   FAST ANSWER JR. REGISTERS
2. INCLUDES BUT NOT LIMITED TO:
   HARDWARE (ASSIGNMENT SENSITIVE)
   SPARE LENs
   SPARE TNNs
   SOFTWARE (ASSIGNMENT SENSITIVE)
   SIMULATED FACILITY GROUPS
   CENTREX GROUPS MULTILINE HUNT GROUPS TRAFFIC MEASUREMENTS
3. REFER TO CAPACITY DETERMINATION WORKSHEETS, SECTION 231-070-215 OR SECTION 231-060-130 WHEN IT BECOMES AVAILABLE.
4. REFER TO COER ADMINISTRATIVE GUIDELINES, SECTION 231-070-555.

Fig. 2—Pre-Traffic Order Activities Flowchart (Sheet 3 of 7) (2.02, 3.01, 5.04, 21.04)

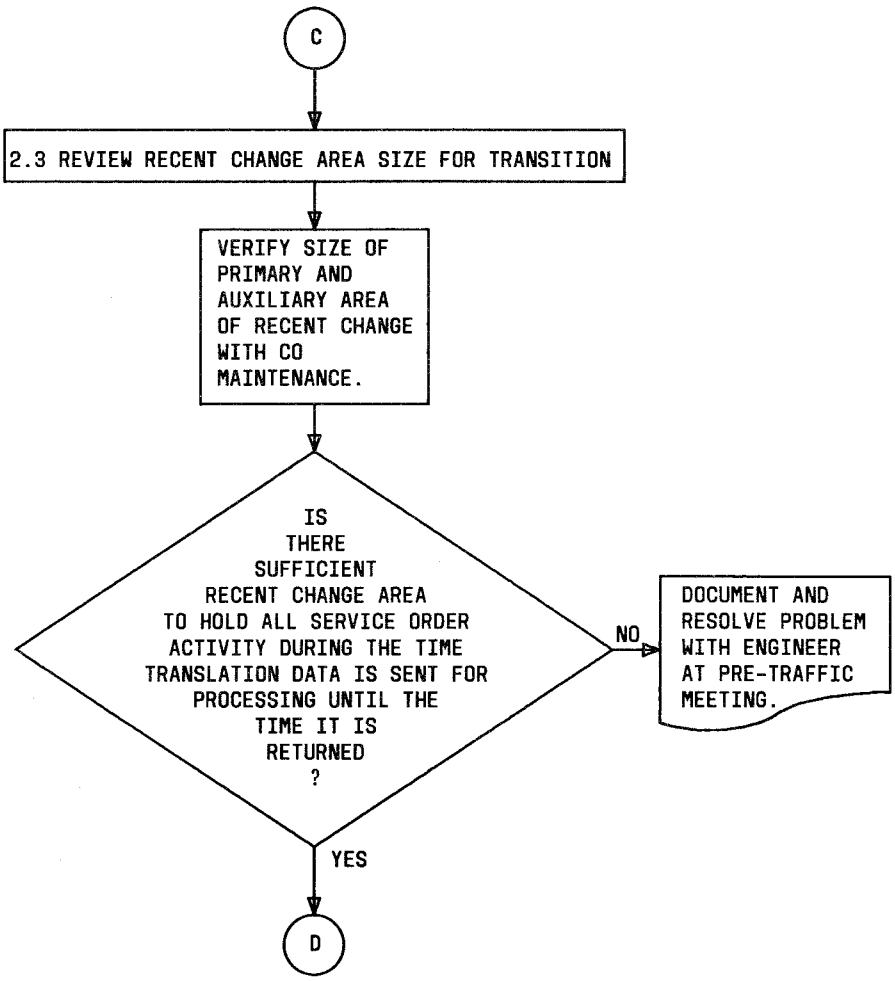
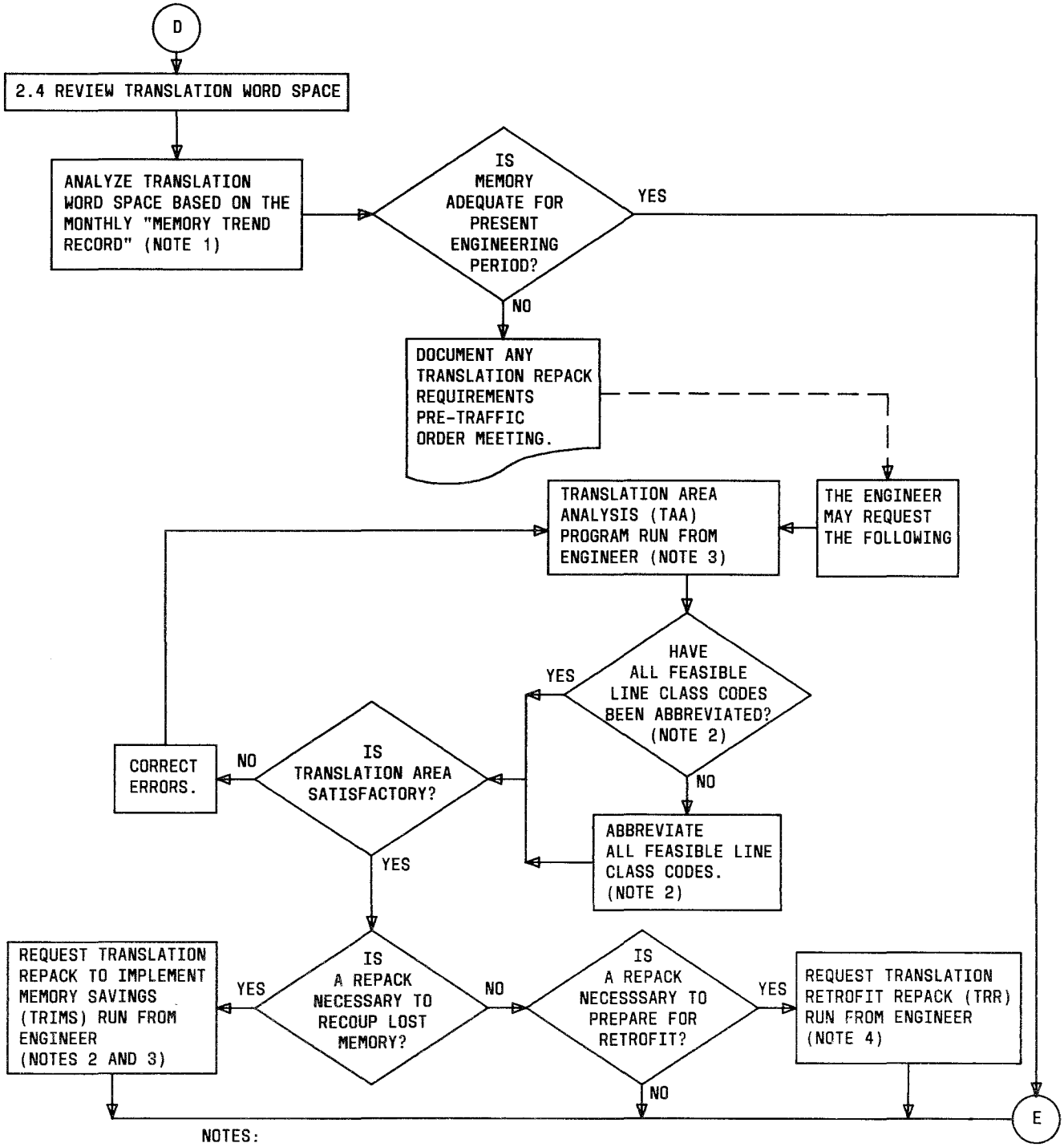
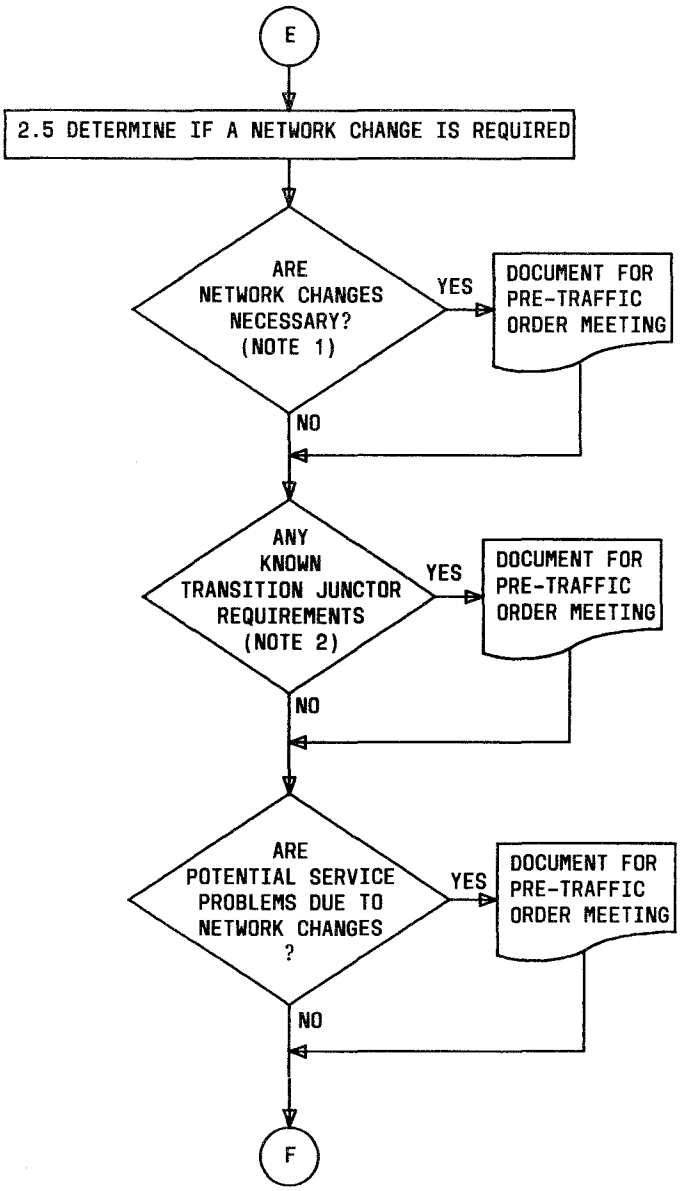


Fig. 2—Pre-Traffic Order Activities Flowchart (Sheet 4 of 7) (2.02, 3.01, 5.04, 21.04)



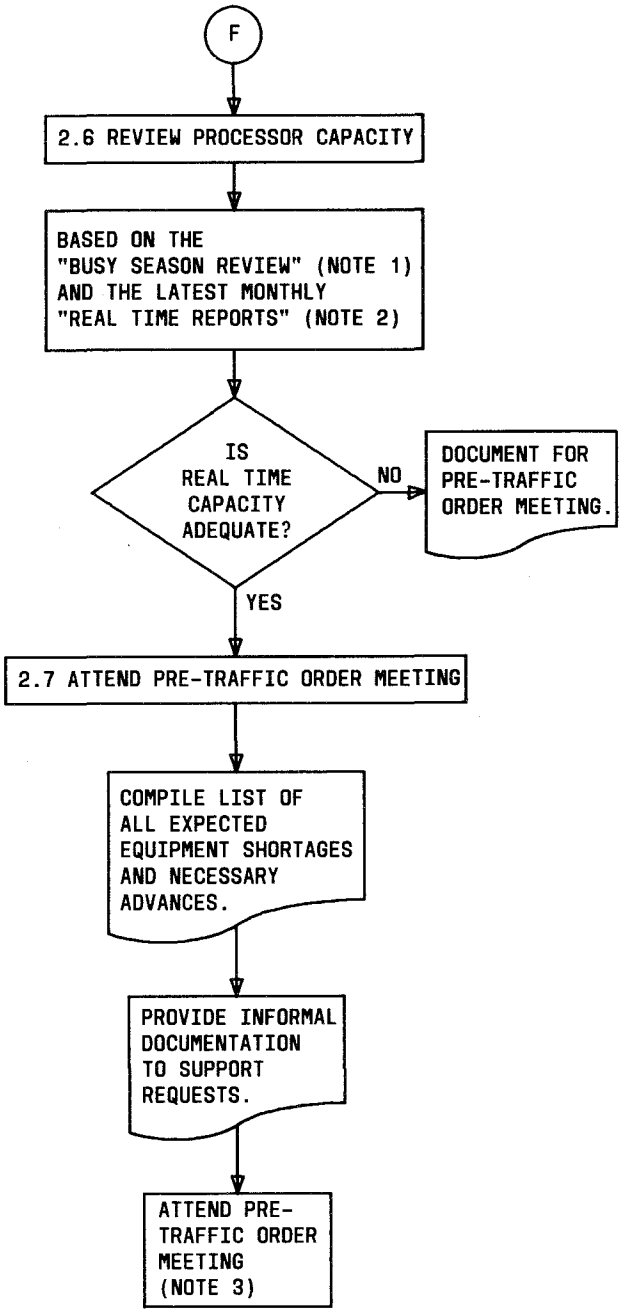
NOTES:
1. TRANSLATION WORD ADMINISTRATION REFERENCE
   1 ESS SWITCH: SECTION 231-070-425
   1A ESS SWITCH: SECTION 231-070-427
2. CAUTION - SOME ABBREVIATED CODES SHOULD BE RESERVED FOR FUTURE GROWTH
3. COMPUTER PROGRAMS ARE REQUESTED FROM THE VENDOR BY THE ENGINEER

Fig. 2—Pre-Traffic Order Activities Flowchart (Sheet 5 of 7) (2.02, 3.01, 5.04, 21.04)



NOTES:
1. DETERMINE IF NETWORK CHANGES ARE NECESSARY SUCH AS CONCENTRATION CHANGES (BCRC), CONCENTRATOR CHANGE (MCRC), TRUNK LINK NETWORK MERGE, OR LOOP RANGE EXTENSION REFER TO SECTION 231-070-325
2. THIS REFERES TO KNOWN JUNCTOR TRANSITION REQUIREMENTS BEFORE THE JAP IS PREPARED. REFER TO SECTION 231-070-326

Fig. 2—Pre-Traffic Order Activities Flowchart (Sheet 6 of 7) (2.02, 3.01, 5.04, 21.04)



NOTES:
1. REFER TO CAPACITY DETERMINATION WORKSHEETS, SECTION, 231-070-215 OR SECTION 231-060-130 WHEN IT BECOMES AVAILABLE.
2. REFER TO 1ESS COER CAPFIT REAL TIME ADMINISTRATION SECTION 231-070-559.
3. PRE-TRAFFIC ORDER MEETING MAY BE AS FORMAL AS A SCHEDULED MEETING AND AS INFORMAL AS A TELEPHONE CALL. THIS WILL DEPEND ON JOB SIZE AND LOCAL PROCEDURES.

Fig. 2—Pre-Traffic Order Activities Flowchart (Sheet 7 of 7) (2.02, 3.01, 5.04, 21.04)

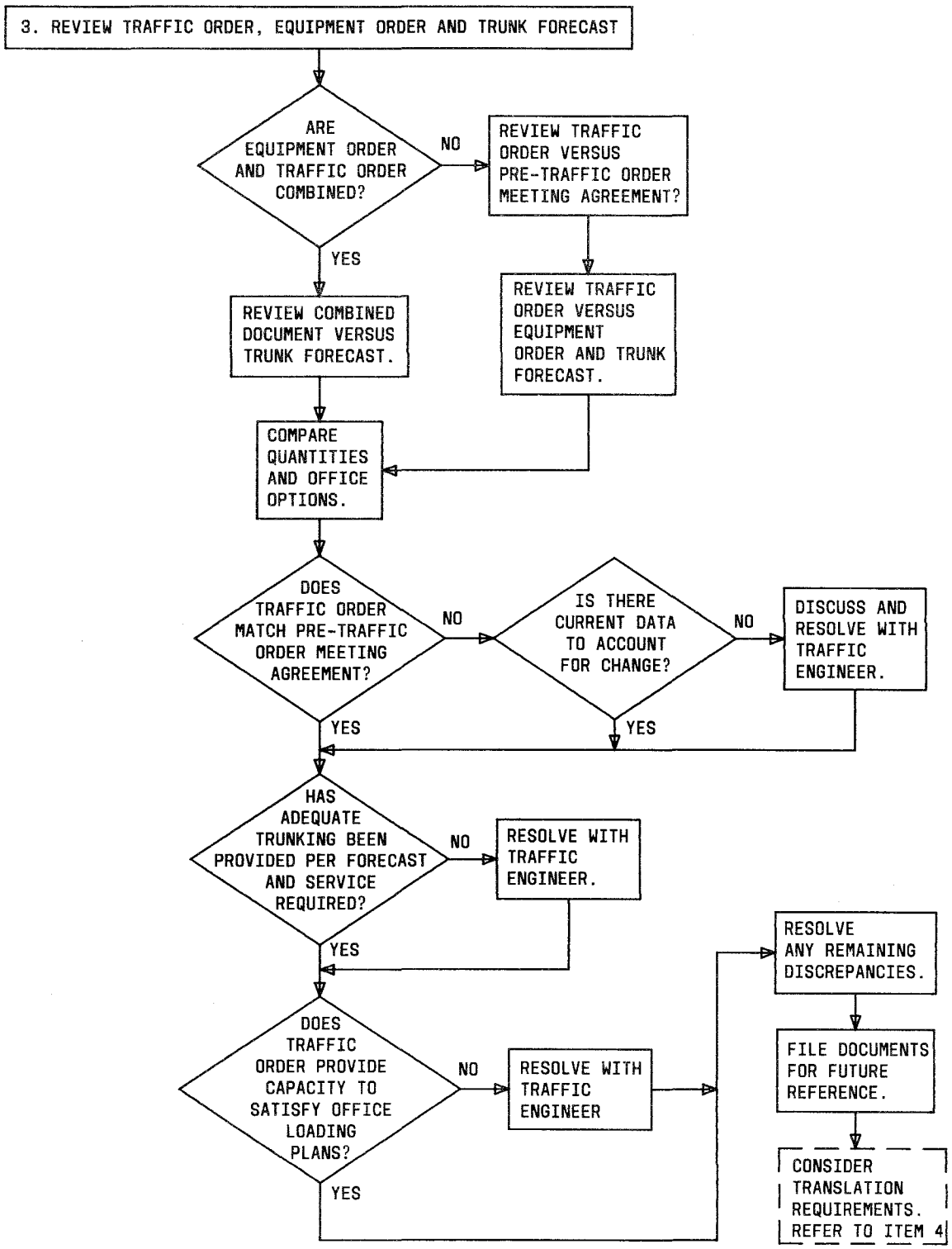


Fig. 3—Traffic Order, Equipment Order, and Trunk Forecast Review Flowchart (2.02, 3.01, 6.01)

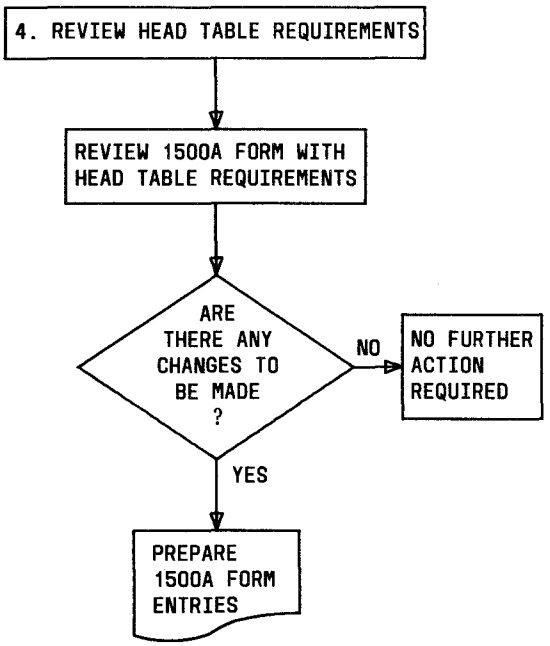


Fig. 4—Review Head Table Requirements Flowchart (2.02, 3.01 7.01)

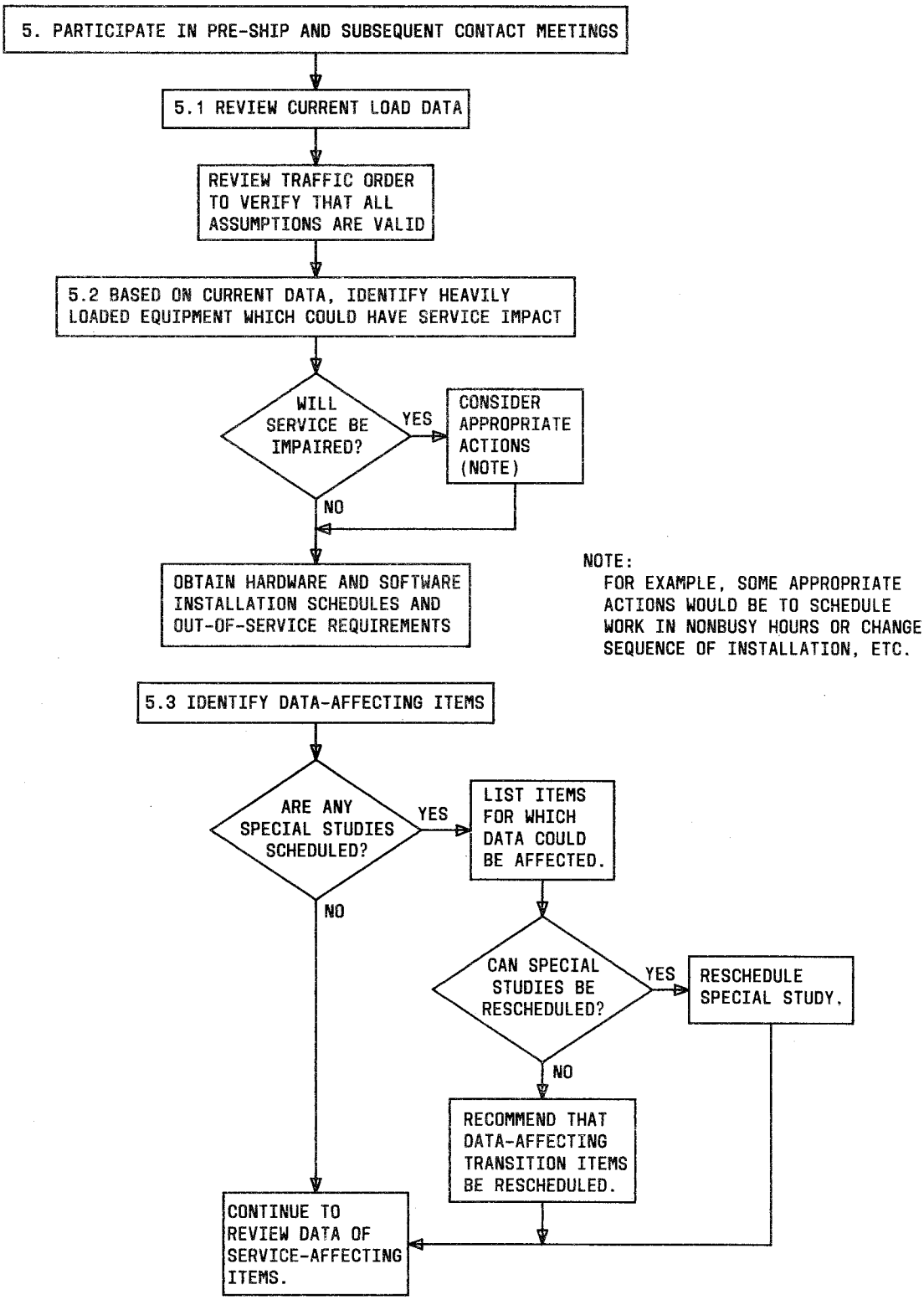


Fig. 5—Participation in Pre-Ship and Subsequent Contact Meetings Flowchart (2.02, 3.01, 8.02)

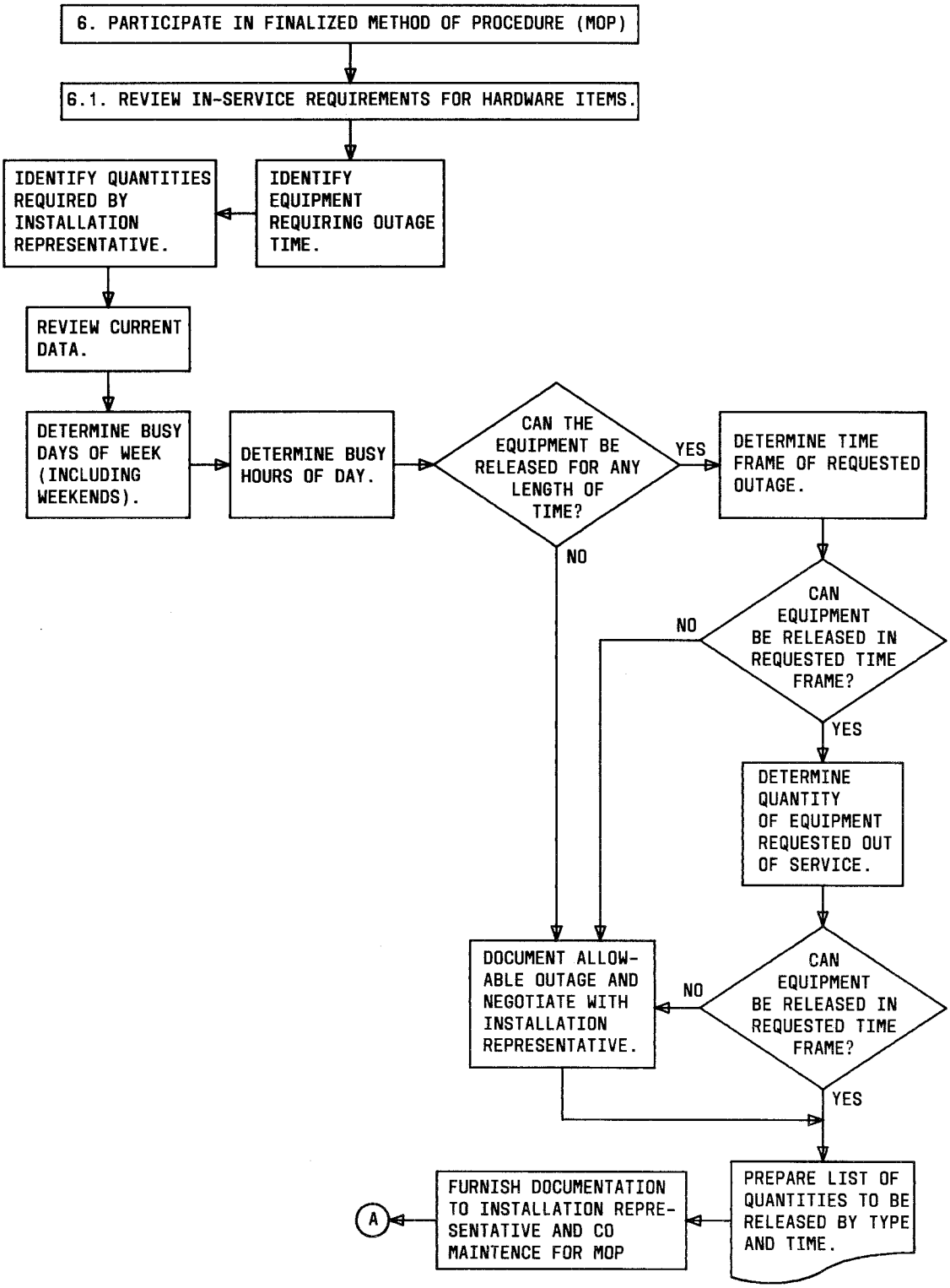


Fig. 6—Finalized Method of Procedure Flowchart (Sheet 1 of 4) (2.02, 3.01, 9.01)

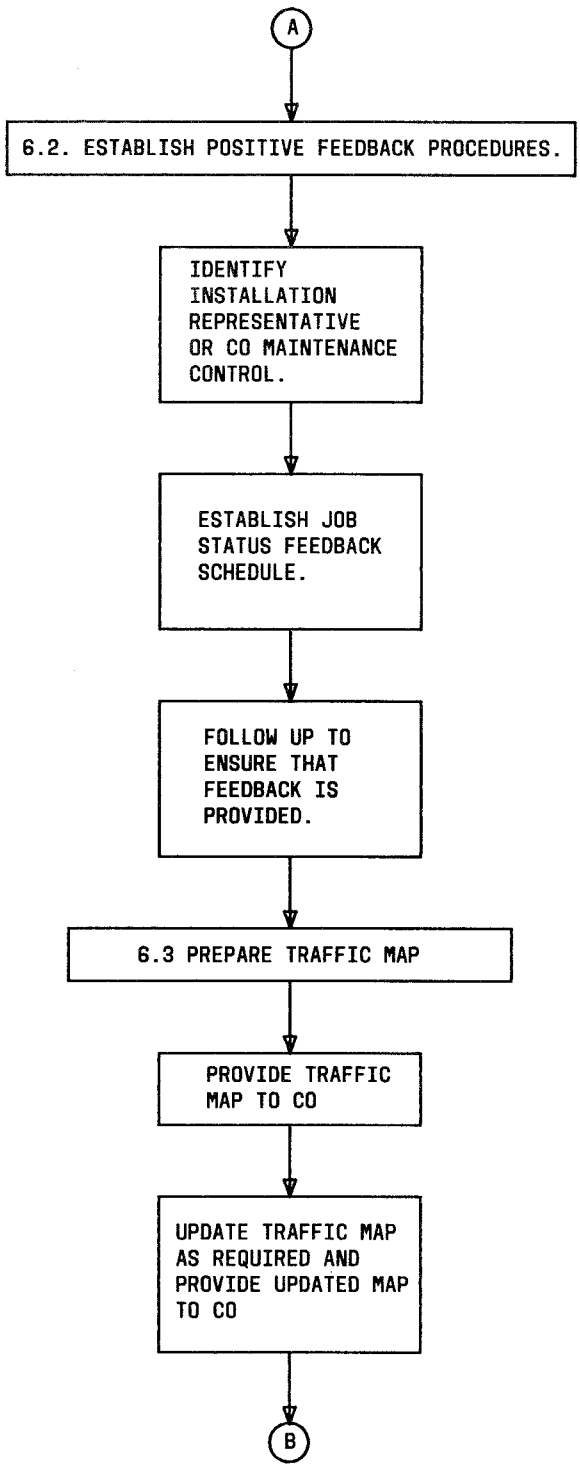


Fig. 6—Finalized Method of Procedure Flowchart (Sheet 2 of 4) (2.02, 3.01, 9.01)

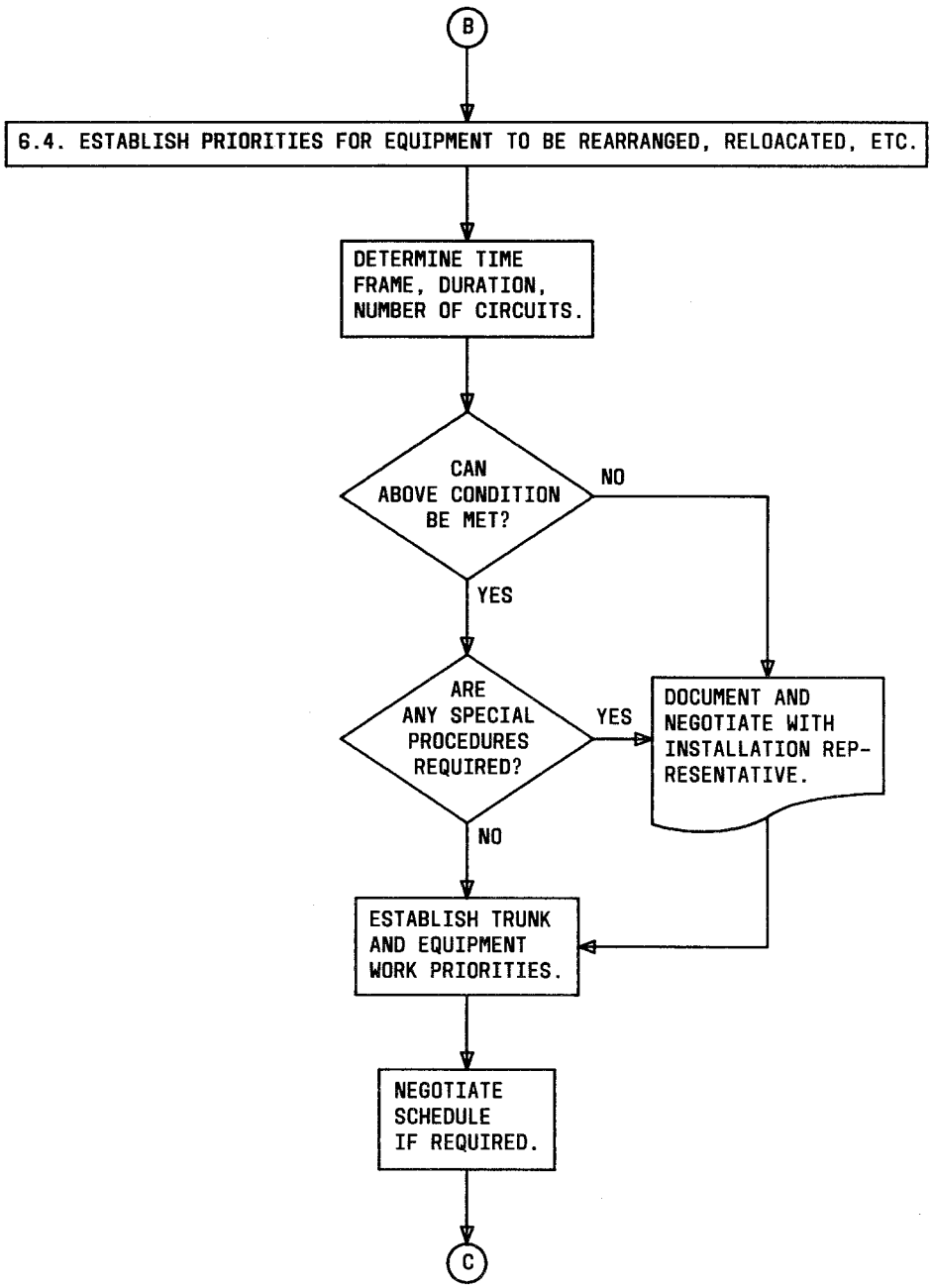
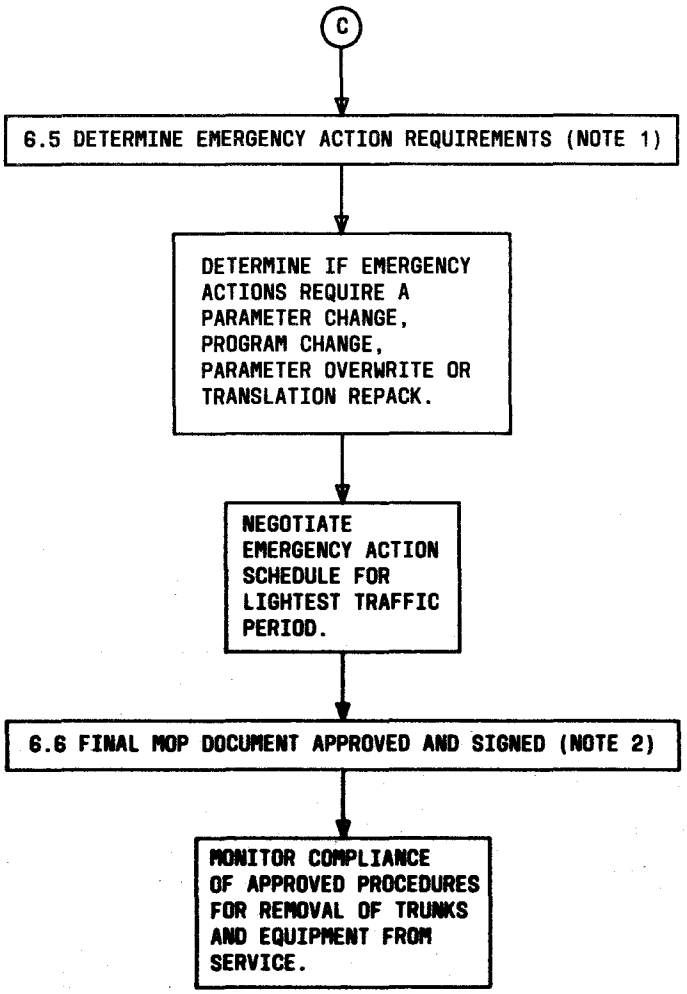


Fig. 6—Finalized Method of Procedure Flowchart (Sheet 3 of 4) (2.02, 3.01, 9.01)



NOTES:
1. THIS MAY BE DETERMINED AS A GROUP
2. THE MOP MAY BE APPROVED AND SIGNED AS A GROUP

Fig. 6—Finalized Method of Procedure Flowchart (Sheet 4 of 4) (2.02, 3.01, 9.01)

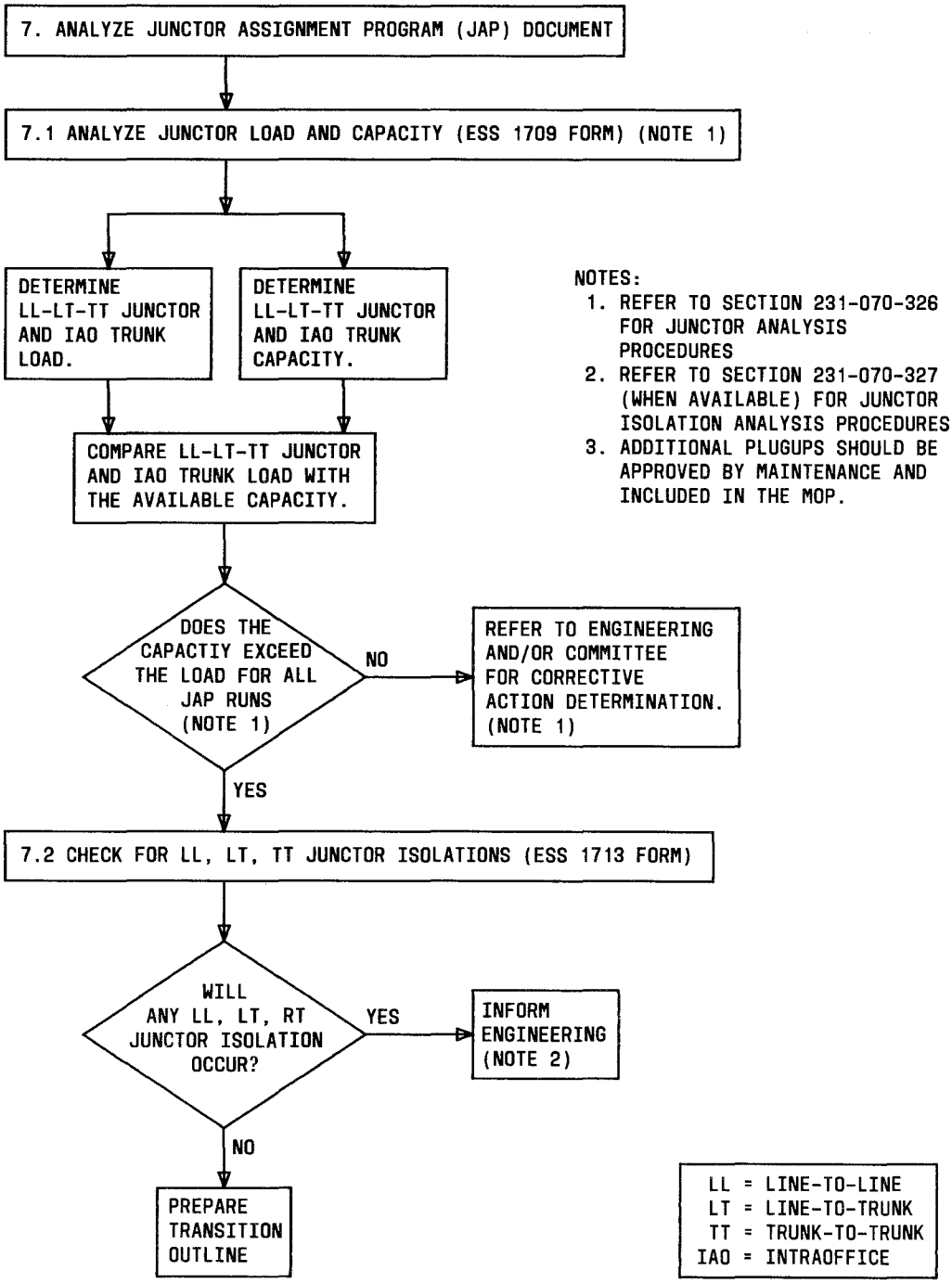


Fig. 7—Junctor Assignment Program Document Analysis Flowchart (2.02, 3.01, 10.03)

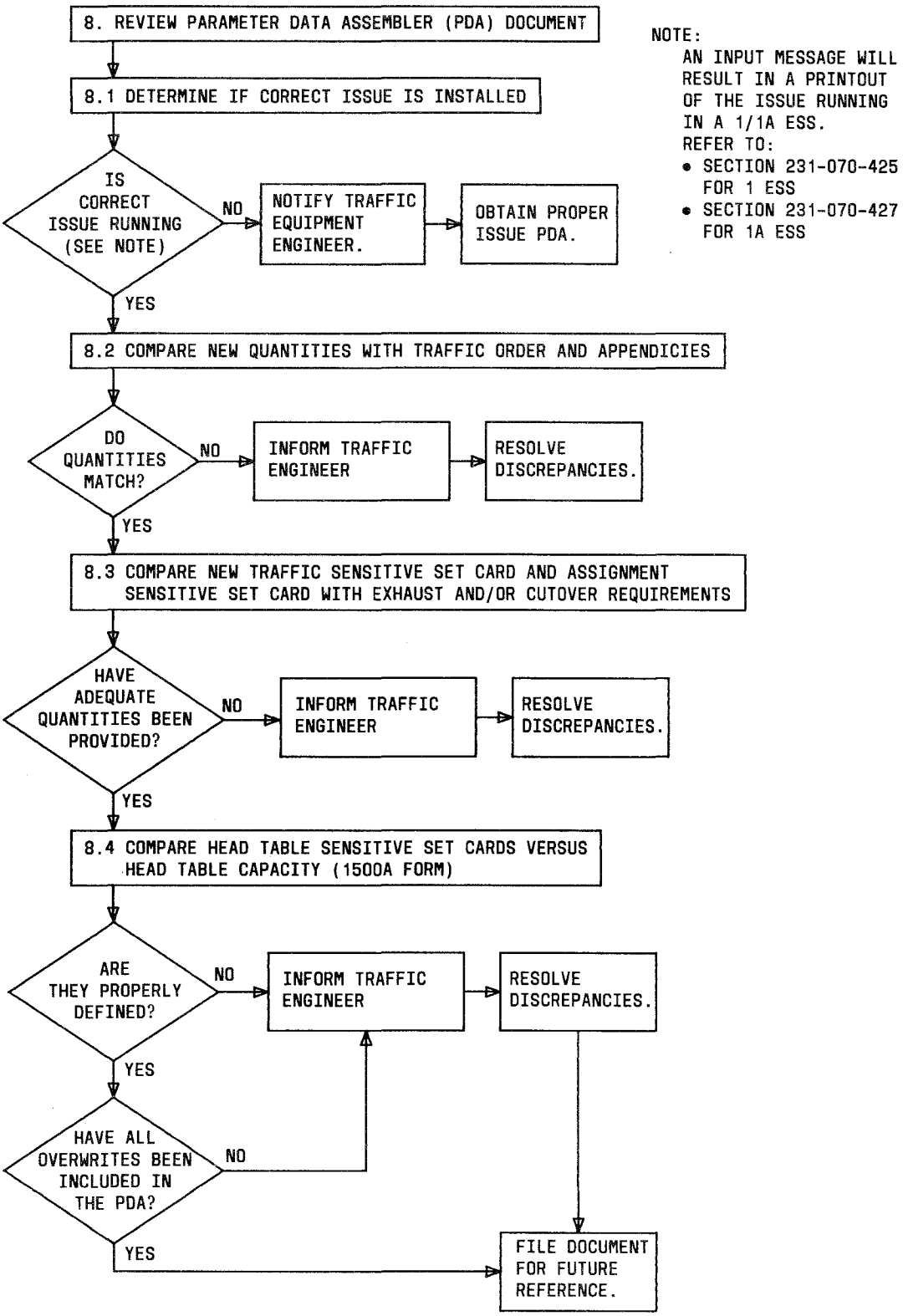


Fig. 8—Parameter Data Assembler Review Flowchart (2.02, 3.01, 11.03)

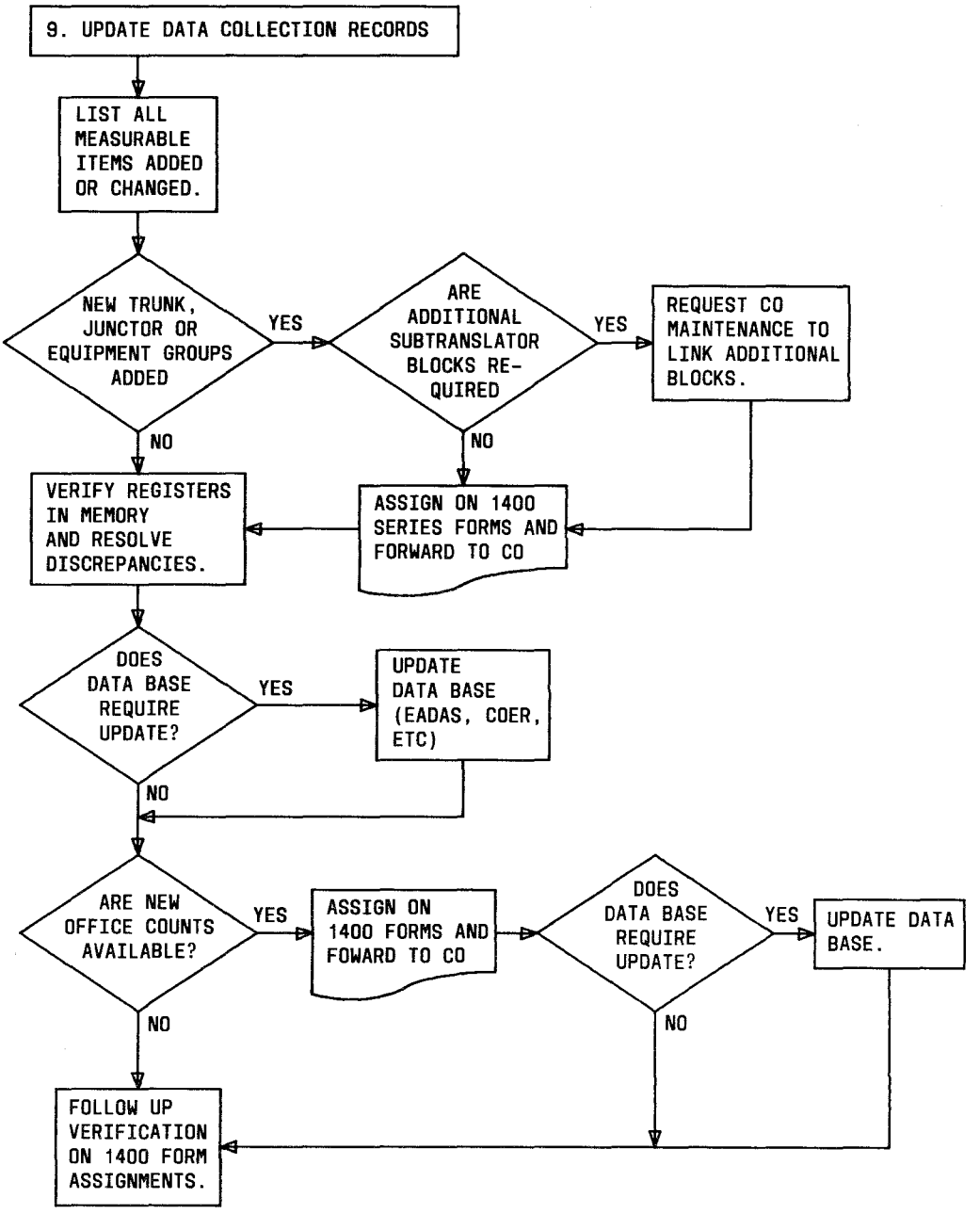


Fig. 9—Update Data Collection Records Flowchart (2.02, 3.01, 12.02)

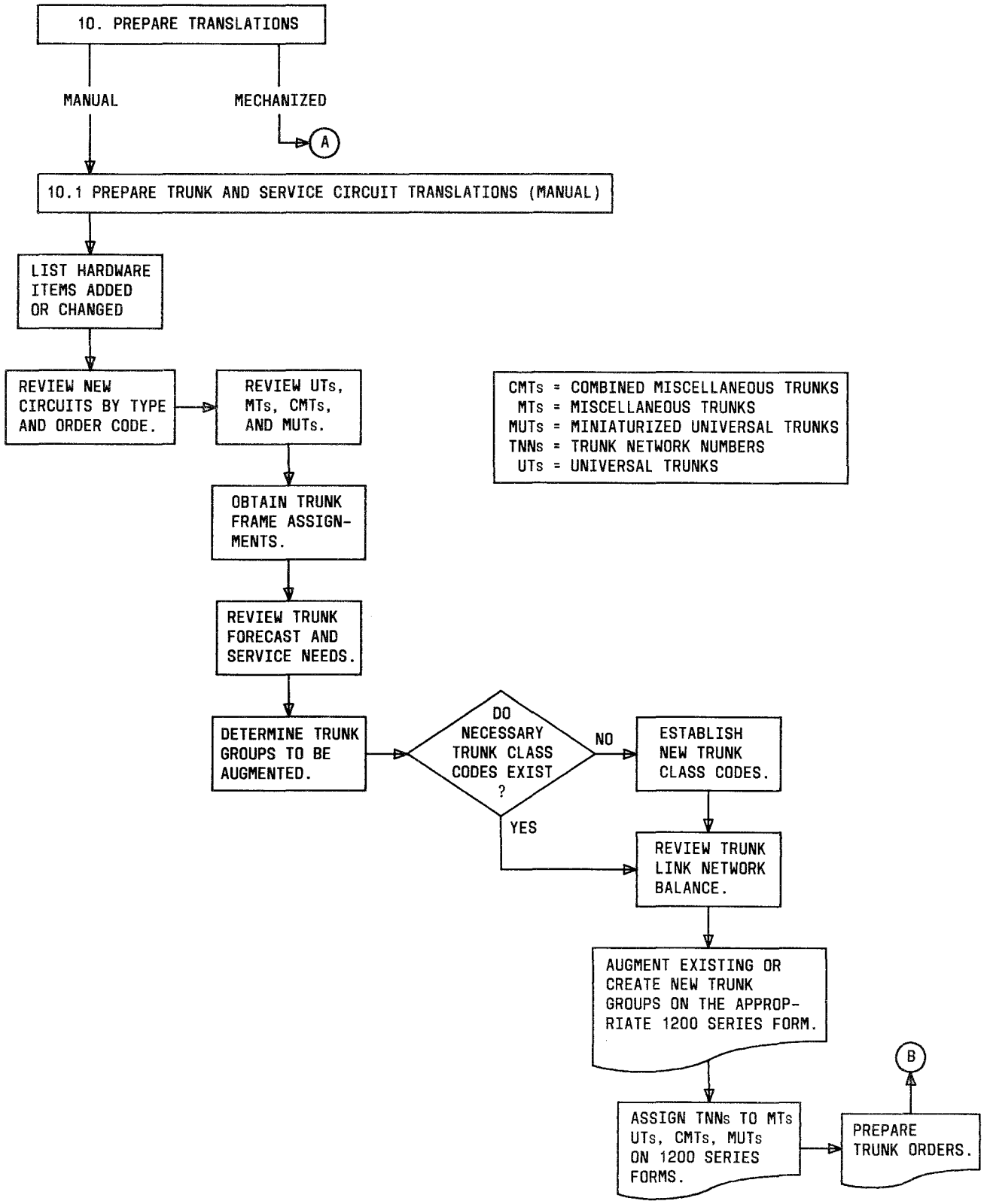


Fig. 10—Translation Preparation Flowchart (Sheet 1 of 5) (2.02, 3.01, 13.05,

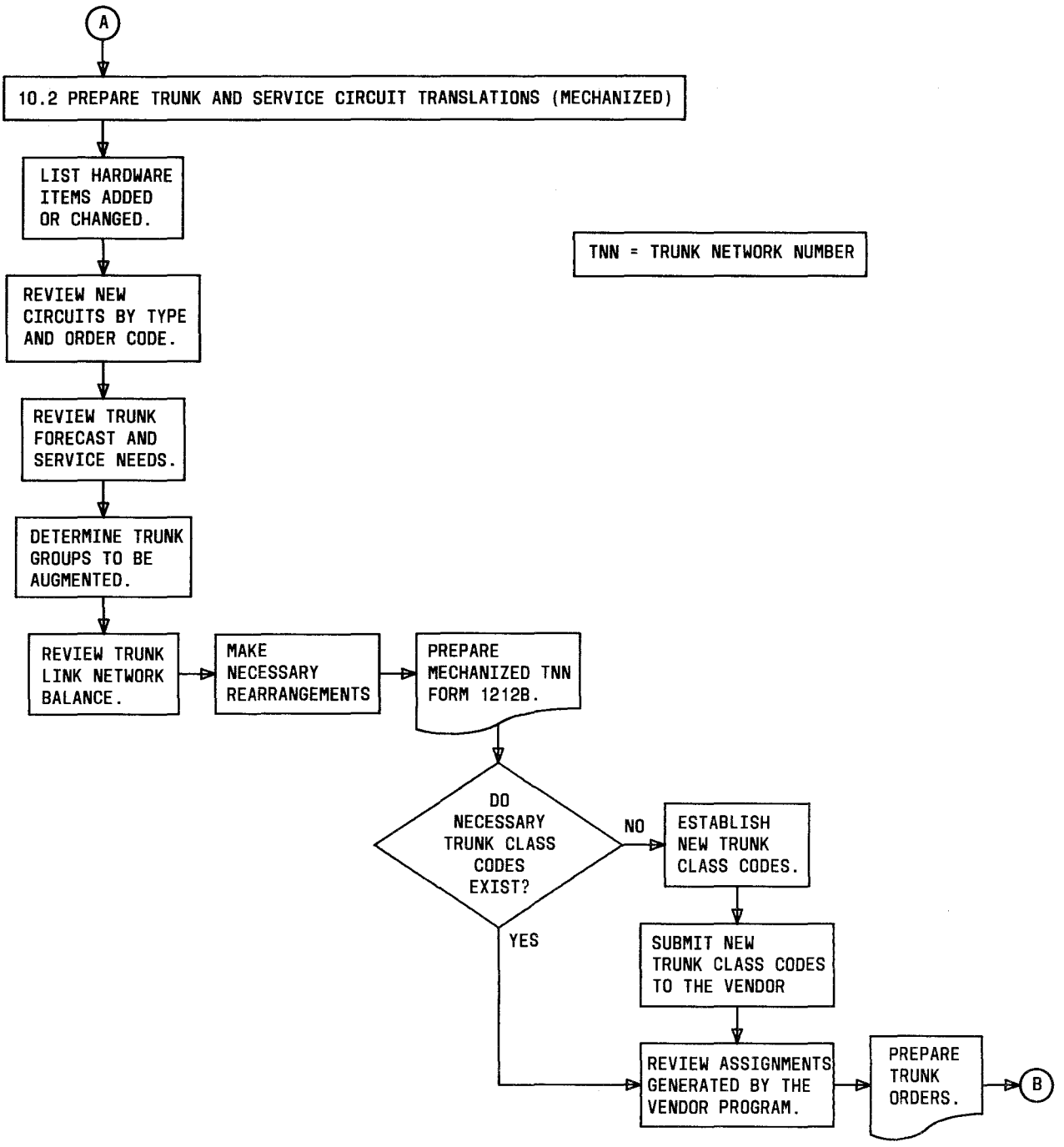


Fig. 10—Translation Preparation Flowchart (Sheet 2 of 5) (2.02, 3.01, 13.05,

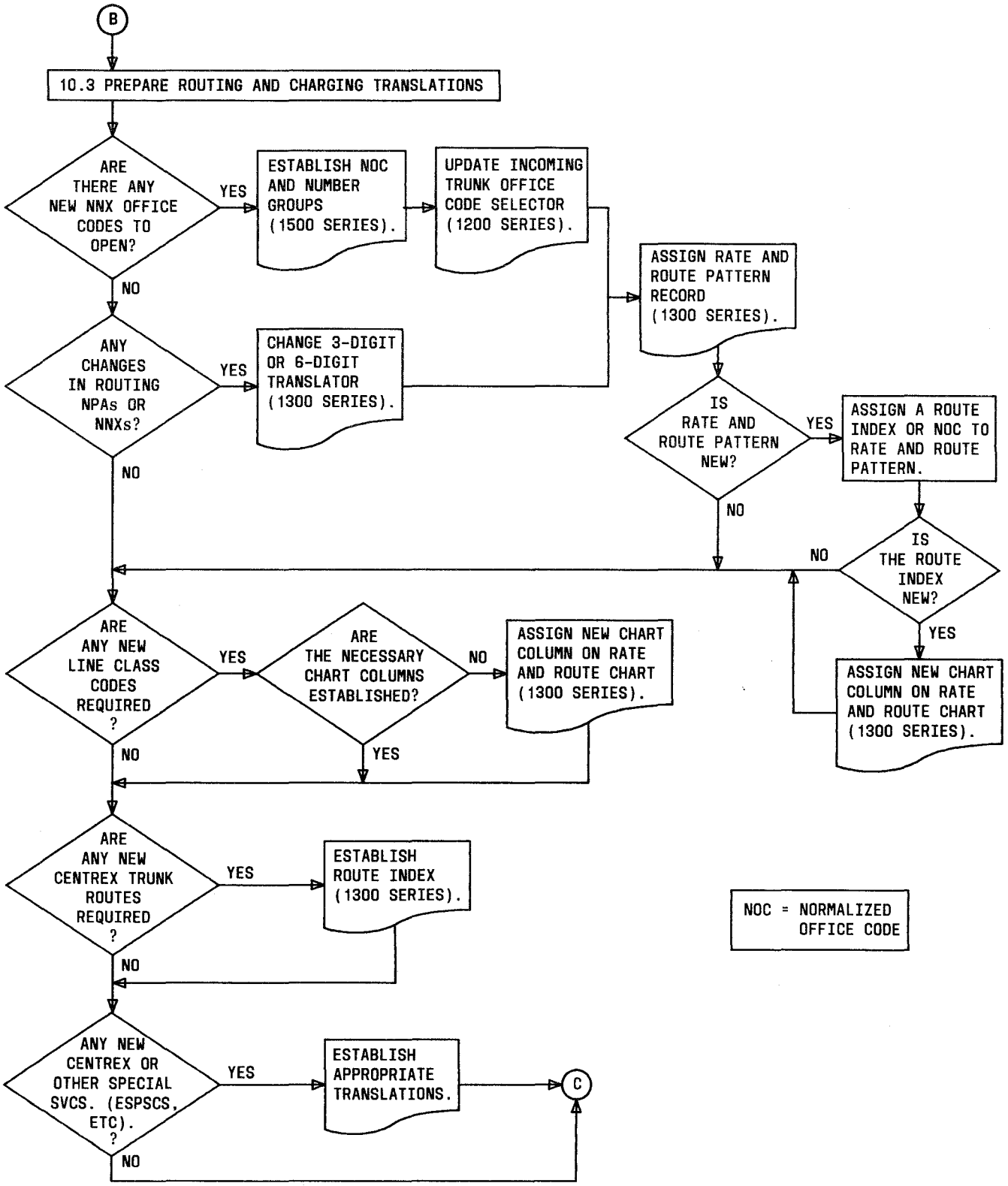


Fig. 10—Translation Preparation Flowchart (Sheet 3 of 5) (2.02, 3.01, 13.05,

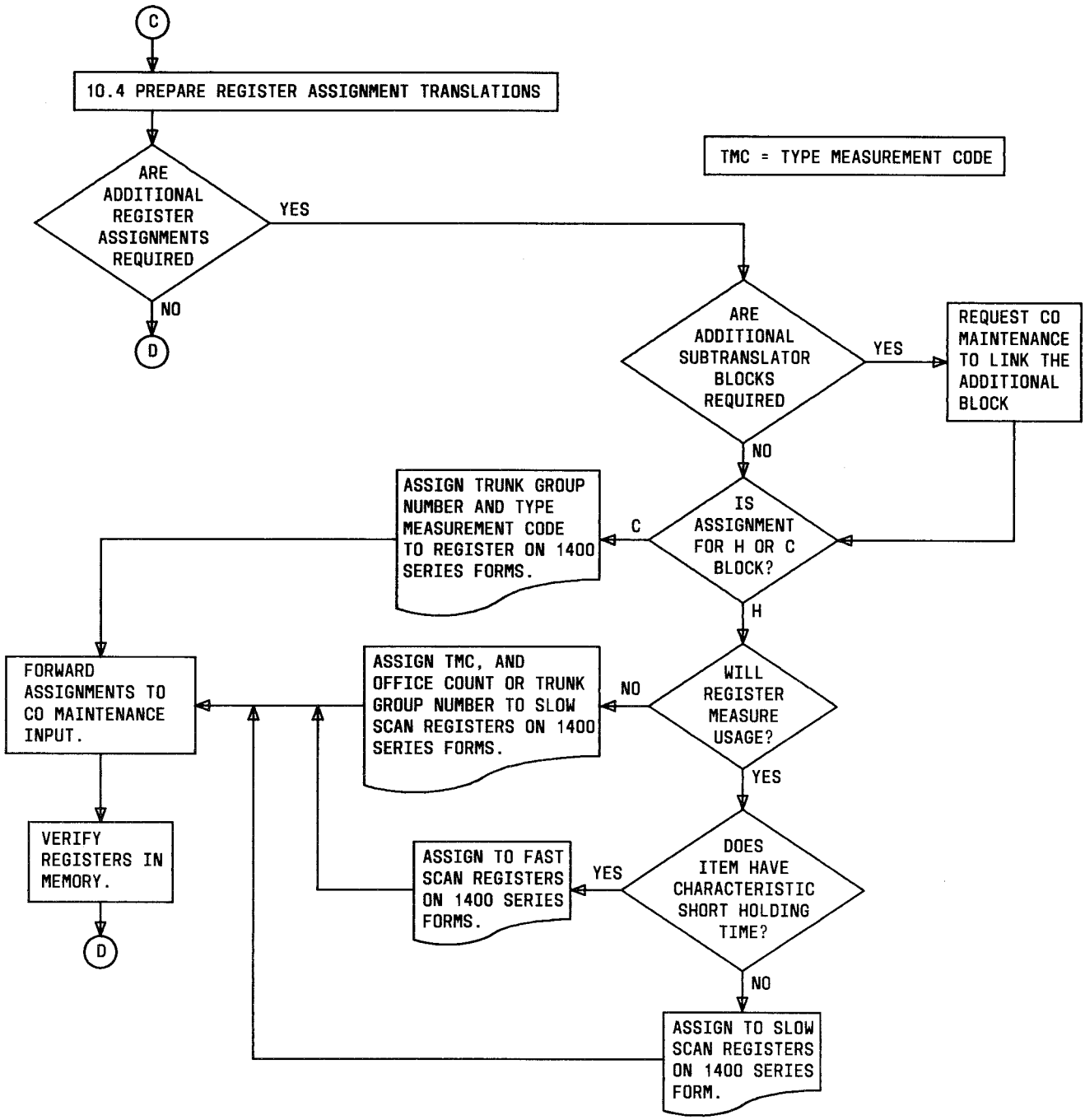


Fig. 10—Translation Preparation Flowchart (Sheet 4 of 5) (2.02, 3.01, 13.05,

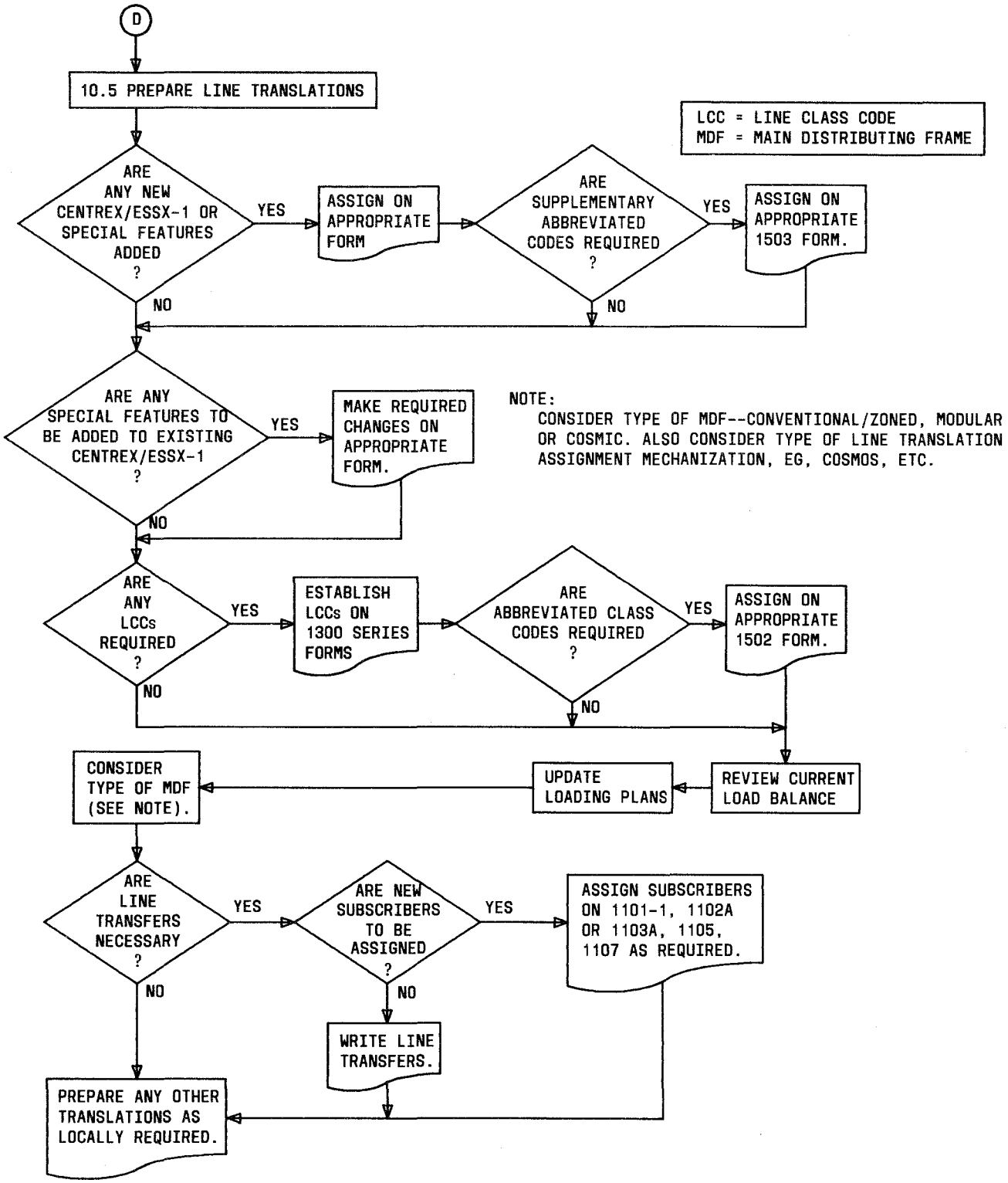


Fig. 10—Translation Preparation Flowchart (Sheet 5 of 5) (2.02, 3.01, 13.05,

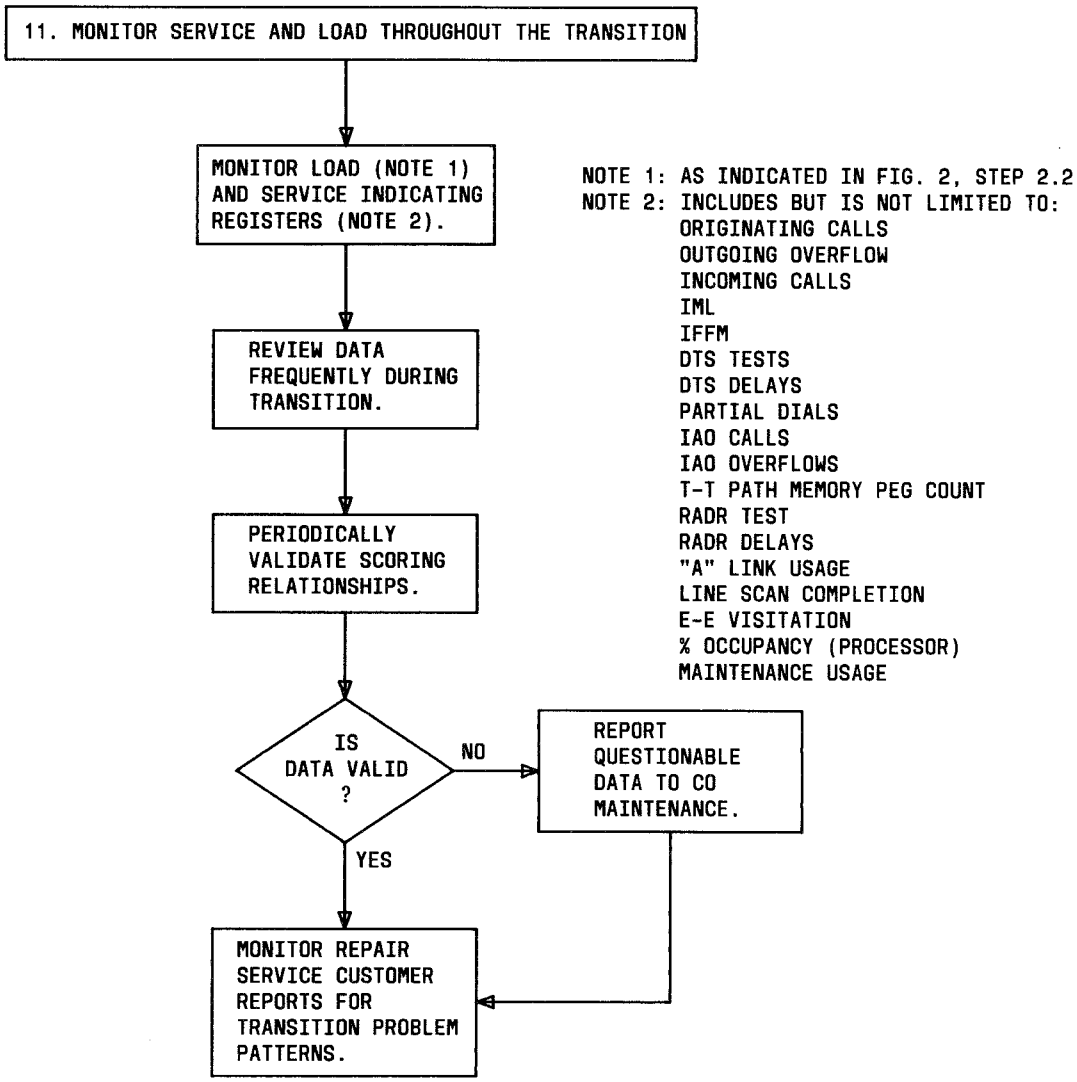


Fig. 11—Service and Lead Monitoring Flowchart (2.02, 3.01, 14.02)

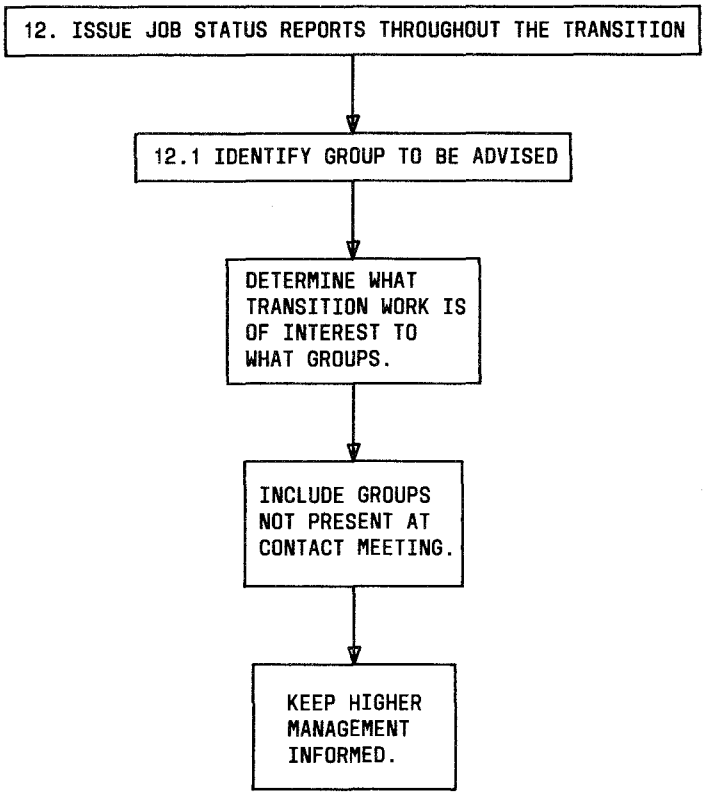
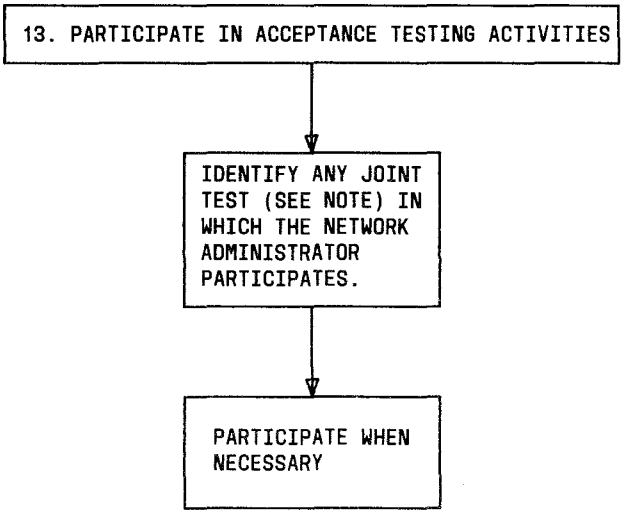


Fig. 12—Job Status Reports Flowchart (2.02, 3.01, 15.02)



NOTE:
TRANSLATION VERIFICATION
CALL-THROUGH TESTS
RECORDED ANNOUNCEMENT VERIFICATION

Fig. 13—Acceptance Testing Activities Flowchart (2.02, 3.01, 16.01)

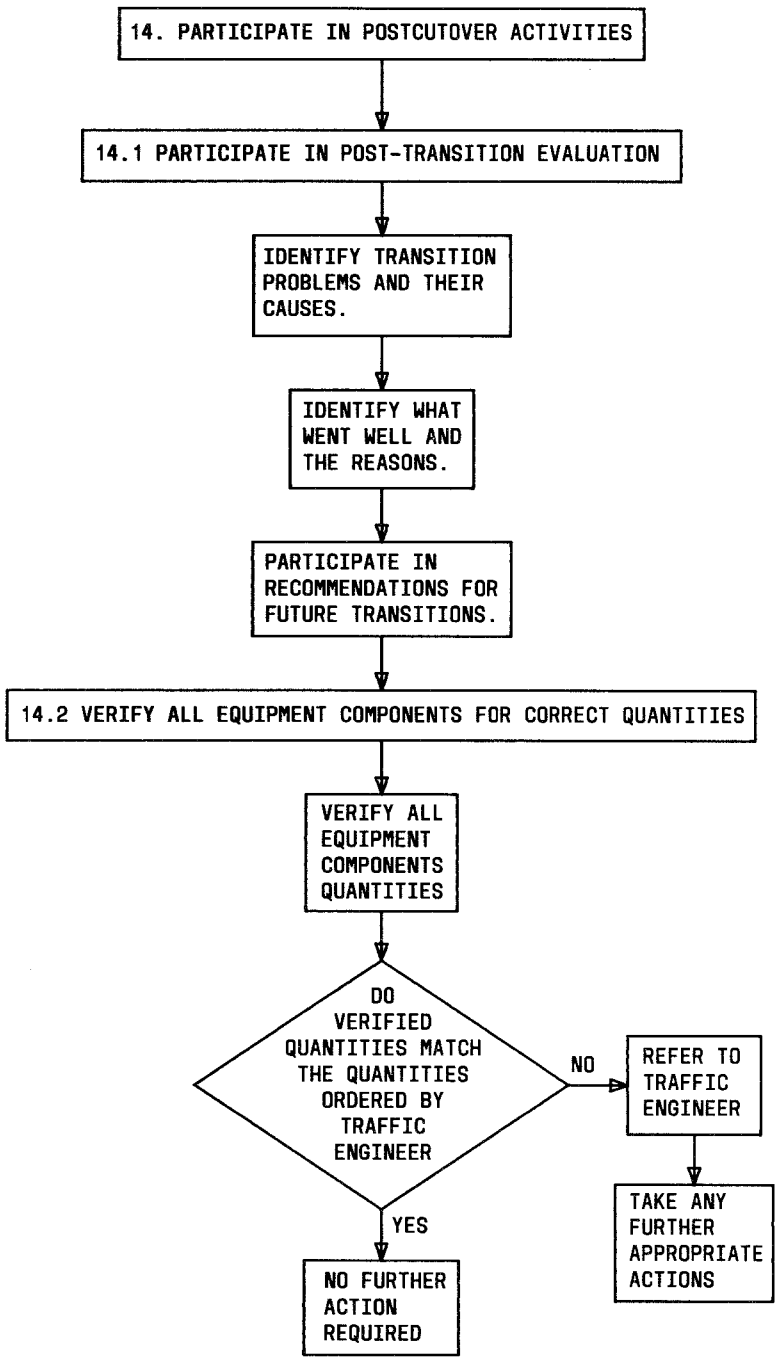


Fig. 14—Postcutover Activity Flowchart (2.02, 3.01, 17.02)

HOURLY EQUIPMENT REQUIREMENTS WORKSHEET

WIRE CENTER _____ EQUIPMENT QUANTITY INSTALLED _____

ENTITY _____ ENGINEERED/ACTUAL CAPACITY _____

EQUIPMENT ITEM _____ AVERAGE BUSY DAY/BUSY HOUR LOAD _____

DAY OF WEEK		MORNING HOURS					AFTERNOON HOURS					EVENING HOURS
		7-8	8-9	9-10	10-11	11-12	12-1	1-2	2-3	3-4	4-5	
MON.	ESTIMATED LOAD											
	QUANTITY REQUIRED											
TUE.	ESTIMATED LOAD											
	QUANTITY REQUIRED											
WED.	ESTIMATED LOAD											
	QUANTITY REQUIRED											
THU.	ESTIMATED LOAD											
	QUANTITY REQUIRED											
FRI.	ESTIMATED LOAD											
	QUANTITY REQUIRED											
SAT.	ESTIMATED LOAD											
	QUANTITY REQUIRED											
SUN.	ESTIMATED LOAD											
	QUANTITY REQUIRED											

Fig. 15—Hourly Equipment Requirements Worksheet (9.02)

MINIMUM REQUIREMENTS DURING TRANSITION

WIRE CENTER _____ ENTITY _____ TRANSITION PERIOD _____ DATE _____

SERVICE-AFFECTING EQUIPMENT ITEMS	BUSY HOUR CCS/MS (TRAFFIC DATA FROM SAME PERIOD LAST YEAR)	QUANTITY OF EQUIPMENT INSTALLED DURING TRANSITION PERIOD)	ESTIMATED MAIN STATIONS (DURING TRANSITION PERIOD)	CAPACITY INFORMATION FROM SECTION 231-060-130		MINIMUM REQUIREMENTS DURING TRANSITION					
						BUSY HOUR 10-11 AM		OTHER HOUR 2-3 PM		OTHER HOUR 7-8 PM	
				ENG. CRITERIA	PEAK FACTOR	LOAD IN CCS (COL. 2 X COL. 4)	NO. OF CIRCUITS (COL. 7 INTO CAPACITY TABLES)	LOAD IN CCS (% OF BUSY HOUR LOAD X COL. 7	NO. OF CIRCUITS (COL. 9 INTO CAPACITY TABLES)	LOAD IN CCS (% OF BUSY HOUR LOAD X COL. 7)	NO. OF CIRCUITS (COL. 11 INTO CAPACITY TABLES)
COL. 1	COL. 2	COL. 3	COL. 4	COL. 5	COL. 6	COL. 7	COL. 8	COL. 9	COL. 10	COL. 11	COL. 12

Fig. 16—Minimum Requirements During Transition Worksheet (9.02)

MINIMUM REQUIREMENTS DURING TRANSITION

WIRE CENTER _____ ENTITY _____ TRANSITION PERIOD _____ DATE _____

SERVICE-AFFECTING EQUIPMENT ITEMS	BUSY HOUR CCS/MS (TRAFFIC DATA FROM SAME PERIOD LAST YEAR)	QUANTITY OF EQUIPMENT INSTALLED DURING TRANSITION PERIOD)	ESTIMATED MAIN STATIONS (DURING TRANSITION PERIOD)	CAPACITY INFORMATION FROM SECTION 231-060-130		MINIMUM REQUIREMENTS DURING TRANSITION					
						BUSY HOUR 10-11 AM		OTHER HOUR 2-3 PM		OTHER HOUR 7-8 PM	
				ENG. CRITERIA	PEAK FACTOR	LOAD IN CCS (COL. 2 X COL. 4)	NO. OF CIRCUITS (COL. 7 INTO CAPACITY TABLES)	LOAD IN CCS (% OF BUSY HOUR LOAD X COL. 7	NO. OF CIRCUITS (COL. 9 INTO CAPACITY TABLES)	LOAD IN CCS (% OF BUSY HOUR LOAD X COL. 7)	NO. OF CIRCUITS (COL. 11 INTO CAPACITY TABLES)
COL. 1	COL. 2	COL. 3	COL. 4	COL. 5	COL. 6	COL. 7	COL. 8	COL. 9	COL. 10	COL. 11	COL. 12
MF TRANSMITTERS	.019	19	12000	ABS P.001	1.70	228	16	① 244	17	① 207	15

Note 1: To determine Other Hour Load (Columns 9 and 11), proceed as follows:

(1) Determine the percentage of busy hour load. Use some similar data period. (Divide the "other hour" CCS by the "Busy hour" CCS.)

(2) Convert the percentage to a decimal and multiply by the minimum requirement busy hour load (Column 7).

Example: % BUSY HOUR LOAD = OTHER HOUR CCS (214) divided by BUSY HOUR CCS (200) = 107% (1.07)
Column 9 = 1.07 x 228 CCS (Column 7) = 244 CCS (Column 9)

Example: % BUSY HOUR LOAD = OTHER HOUR CCS (182) divided by BUSY HOUR CCS (200) = 91% (.91)
Column 11 = .91 x 228 CCS (Column 7) = 207 CCS (Column 11)

Fig. 17—Minimum Requirements During Transition Worksheet Example (9.02)