

**SWITCHING CONTROL CENTER
ADMINISTRATIVE PROCEDURES**

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1. GENERAL

1.01 This section describes the administrative procedures associated with centralized work administration and force management operations performed in a Switching Control Center (SCC). The procedures described in this section are intended to provide SCC managers and supervisors with a standard approach to force management and centralized administration for Stored Program Control Systems

(SPCS), Electromechanical Systems (EMS), and a combined EMS and SPCS environment.

1.02 This section is being reissued to cover major changes in the forms and procedures necessary to an SCC. This section has been completely reorganized and is considered a general revision. As a result, revision arrows are not used.

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 practice is one of a series of documents referred to as the Network Maintenance Management Plan.

SCOPE

1.05 The information in this section is applicable to SCC operations for both EM and SPC switching systems and to administrative and maintenance activities associated with switching machines, trunk provisioning and maintenance, carrier systems, distributing frames, and power systems.

1.06 Appropriate Controlled Maintenance Plans (CMP) should be consulted for procedures associated with the administration and control of corrective and preventive maintenance work. Some procedures in this section involve this maintenance work and refer to these CMPs.

1.07 Refer to Section 201-200-010 for descriptive information on the Frame Force Management Plan (FFMP). The FFMP measures the work effort of a frame operation while taking into account the layout and mix of the different types of work.

1.08 Recommendations for changes to this section should be forwarded as specified in Section 000-010-015.

2. SCC WORK OPERATION OVERVIEW

2.01 These procedures and Fig. 1 through 31 are designed to assist SCC managers and supervisors in accomplishing the following objectives:

- Administering the cost-effective network maintenance operations
- Maintaining force and work load control.

2.02 The basic work operations and procedures introduced and defined in this section include:

- Force Management
- Work Load Administration
- Work Inputs
- Prices and Priorities
- Work Files
- Preparation of Job Assignments
- Loading
- Work Completion Control
- Other Administrative Functions
- Status Boards.

FORCE MANAGEMENT

2.03 Force management is a management method designed to effectively manage SCC resources. This method deals with work force, work load, and flow of work through the organization. It is a systematic method used to identify the work load in advance of the due date and to provide the exact number of work hours required for its completion.

2.04 The concepts of centralized force management provide the foundation on which the Network Maintenance Plan for SCC organization and administration is founded.

2.05 Centralized force management involves five basic principles.

- Matching the work force to the work load
- Loading the work to the work force
- Tracking work completion
- Measuring individual employee and total force efficiency performances
- Refining force and load matching through tracking and forecasting.

2.06 *It is essential that management involved with SCC organizations is indoctrinated to the principles of Centralized Force Management.* They must accept new responsibilities, new methods, and new measurements. The following paragraphs discuss the principles and illustrate their interrelationship.

WORK INPUT

2.07 Force management involves the processing of all work inputs through a control center, whether received by telephone or in the form of mailed documents, from other work groups or inputs generated within the work group. At the control center, requests for work are received, sorted, logged, priced, scheduled, filed, loaded, and tracked. In this manner, the entire work load is visible at the control center. The importance of this principle cannot be overstressed. If any portion of the work load is allowed to be handled outside the control of the SCC, it will erode the overall efficiency of the force management process.

2.08 Work inputs received at the SCC by telephone include customer-trouble reports, other trouble referrals, and requests for information or assistance. Inputs normally received from SCC work stations include trouble tickets and work requests. Documents requiring work usually include trunk orders, translation change notices, service-observing rearrangement orders, etc. Document inputs will also include work requests initiated by SCC and field maintenance supervisors. All system supporting documentation, such as Operating Company Practices and Program Application (PA) documents are also received, filed, or distributed by the SCC.

2.09 Procedures for handling work input generally involve the following:

- Initiating trouble tickets on trouble referrals
- Initiating work requests for other types of work
- Recording log entries for tracking work progress
- Pricing work
- Establishing work priorities

- Referring or assigning of work items to SCC work stations or central office (CO) forces
- Filing of work items for eventual loading to particular work groups
- Handling work inputs also includes the close out or return of work items to their originators.

2.10 The administration of preventive maintenance is viewed as being part of handling work inputs. Procedures for centrally administering preventive maintenance work that are compatible with the functions of a centralized force management operation will be presented in more detail in subsequent paragraphs in this section.

2.11 If the SCC has responsibility for frame operations, the administration of frame orders will also be a part of handling work inputs as described in Section 201-200-010. In addition, operational procedures are described in Section 190-140-110.

WORK LOAD ADMINISTRATION

2.12 The objective of centralized maintenance administration at an SCC is to plan for proper load and force balance. The procedures for handling work inputs through a proper logging system provide the means to estimate future work loads. The logging system described in Part 4, which includes the Document Input Log (Form E-10259) and/or Monthly Work Summary (Form E-6834), is used as a loading vehicle. Since all work items are logged, the log is used to compile all of the loads. The log is not only used as a record of work items received, it also provides tracking control of the status of the work. The work files can then be accessed for the supporting documentation, such as trouble tickets and work requests.

2.13 In general, an efficient load and force balancing operation will be obtained under the following conditions:

- (a) **All** work inputs are processed by the SCC.
- (b) **All** work items are priced and assigned a priority to determine amounts of time and effort involved.

- (c) Earliest and latest start dates are established on due-dated work, or portions of that work, to facilitate loading.
- (d) Standards are established for completion of programmable work.

Example: Any programmable work item that has been logged for 2 weeks and has not been loaded should be referred to the originator. The originator decides if the work item should be canceled or kept active for 2 more weeks.

- (e) **All** work items are logged in such a manner as to make the pending work load readily available to the loader and to supervision.
- (f) Work loads are adjusted, whenever possible, to meet known force capacities.
- (g) Timely force adjustments are made through movement of employees between work locations whenever the pending work load cannot be adjusted.

2.14 The Monthly Work Summary and/or the Document Input Log, in conjunction with the work file system, provide the means of keeping future work loads visible at all times. The preparation and use of these forms are discussed in Part 4.

PRICES AND PRIORITIES

2.15 To ensure maximum productivity and to meet required due dates, the centralized force management function must be able to estimate the required work time (price) and establish priorities for completion of the loaded work items.

2.16 It is the responsibility of management to establish prices and priorities for all work items. **All** work items must be processed by the SCC. Further, it is imperative that the entire management team of the SCC understand and agree to the pricing and priority scheme.

2.17 There are standard pricing guides for switching systems that include work codes, prices, and priorities. These guides can be ordered by following the procedures described in Section 190-130-131. For those systems that do not have a pricing guide, or special one-time jobs that do not have a standard price, blank pricing guide forms (SCC Work Pricing

Chart, Form E-6833) can be used. Equipment Test List (ETL) preventive maintenance work is priced on Monthly Test and Inspection (T&I) Work List (Form E-6835) or comparable Central Office Maintenance Management System—Preventive Maintenance (COMMS-PM) documents.

WORK FILES

2.18 An important function associated with centralized force management is the maintenance of work files. These files organize all work items, including those that were assigned to particular craft persons and are still pending. The files are used in the SCC to organize and store the work documents until they are needed for loading to CO and SCC craft forces. The files and the file maintenance procedures are described in subsequent paragraphs of this section.

PREPARATION OF JOB ASSIGNMENTS

2.19 Job assignments provide an inventory of the work load and organize jobs of nonmanagement employees. Job assignments and associated work allow the defining of balanced assignments so the loading process can be effective.

LOADING

2.20 A load is defined as a series of priced work items or activities that are expected to be accomplished in a full shift. Loads are built from standard pricing data and are issued to each individual daily for completion on that day.

2.21 When additions are made to a load during a shift, they are either “demand load” items or “break load” items. If a work item is received on the day that it must be worked and is processed through the SCC loading function, it is considered a demand load.

2.22 If a Central Office Technician (COT) identifies work in the CO that is not on the Load and Work Time Record (Form E-6843), the COT should call the SCC. The SCC would then add the work item to the Load and Work Time Record and the COT could work on the work item. **Any** other procedure will result in a “break load” and should be avoided. (A break load is any work item that is worked on by a CO technician and is not loaded through the SCC.)

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2.23 This plan provides procedures for planning and scheduling field maintenance and SCC work at least one day in advance. Procedures are also provided for the dispatching of demand items that require immediate action.

2.24 In summary, an efficient loading operation cannot be obtained unless all work items have an established priority and price and are logged and filed correctly.

WORK COMPLETION CONTROL

2.25 Control of work completion is maintained at the control center through communication with the individual employees and by the field supervisor through on-site observation. The control from the center should be accomplished by establishing a procedure for all craft to report their current work status on an established schedule, such as break-lunch-break and/or end of shift.

2.26 A status of the load should always be obtained when contact is made with the field. The dispatcher should enter the appropriate information on the SCC copy of the Load and Work Time Record (Form E-6843). These factors control work load completion and quality. The objective of management is to control loaded work items to their completion and eliminate load interruptions. The principle involved is to maintain control of the work load completion.

TIME REPORTING

2.27 By centralizing the force management responsibilities at the SCC, time report processing and the collection of data for forecasting purposes can also be centralized. The Load and Work Time Record, Form E-6843, provides the basic input information for these functions. Time report processing involves gathering the time data needed from Form E-6843 and entering the data into the local mechanized time reporting system. The mechanized time records should be compatible with requirements for the SCC Work Load and Force Measurement Plan in Section 190-130-160.

OTHER ADMINISTRATIVE FUNCTIONS

2.28 Many other administrative functions are more efficiently performed at the SCC than is possible at individual end offices. Time reporting,

inventory record keeping, forecasting, ordering, and maintaining stationery and equipment supplies are a few examples. Other administrative functions that are not detailed in this plan should be consistent with local administrative practices and procedures outlined throughout sections in the Network Maintenance Management Plan.

STATUS BOARDS

2.29 The SCC manager and supervisors need up-to-date information regarding work load, office performance, and force disposition when they establish or change short-term priorities. This information also allows them to make effective decisions regarding the disposition and use of the available work force to meet changing work loads. In a multiple office operation, the required data that are in files, logs, schedules, and office records can be located at the SCC and/or other work locations. Even if the necessary information is at the SCC, it is difficult to obtain a timely and comprehensive picture necessary to manage the job.

2.30 Status boards are recommended at the SCC. The boards must be large enough to be seen by their users and provide good contrast and visibility (eg, light-colored marker). The boards should be made of a material that can be marked with erasable markers to facilitate daily posting. Boards with magnetic materials are useful for posting items that seldom change, such as names, office identification, and office type.

2.31 The three status boards that are recommended are:

- (a) **Personnel Status Board:** Displays personnel assignment and location.
- (b) **Office Status Board:** Displays the corrective maintenance work load and service performance for the offices controlled by the center. The Office Status Board is not necessary if the SCC is using the mechanized Network System Performance Measurement Plan (NSPMP) feature of the SCCS.
- (c) **Frame Status Board:** Displays the performance and work load for distributing frames controlled by the center.

2.32 Descriptions for these boards and procedures for updating them are provided in Part 8. Parts 3 through 8 provide more detailed procedures recommended for SCC operations.

3. PRICES AND PRIORITIES

3.01 Work time estimates (prices) and priorities for jobs that will be regularly loaded and/or dispatched by the SCC must be established by the SCC management team. Similar work items should have similar prices and identical work items should have identical prices, regardless of location. Special prices should be used only for special situations (one-of-a-kind or one-time only) and have the agreement of the Field Supervisor involved and the Dispatch/Administration Supervisor.

3.02 Pricing guides provided by American Telephone and Telegraph Company (AT&T) are available for several switching systems. (See Section 190-130-131.) The pricing guides include a work code, price, and sometimes a priority for all work items. Pricing charts (Form E-6833) are to be prepared for systems where standard pricing guides are not available. The pricing guides and charts should include all work items other than ETL preventive maintenance work. The pricing guides and charts are for the use of SCC personnel in assigning price and priority for all work items.

3.03 Figure 1 is an example of a pricing chart, Form E-6833. The EQ/SYSTEM identifies the office type (eg, 1/1A ESS* switches, No. 5 crossbar, etc), and TYPE OF ACTIVITY identifies the category of work, such as preventive maintenance, corrective maintenance, trunking, translation. The WORK ITEM column provides a brief description of the type of work being addressed. The WORK CODE identifies the work item. This work code is used in trouble ticket and work request identification. The PRICE 1ST UNIT is the estimated time to complete one work item. The PRICE ADDITIONAL UNIT is the estimated time to complete any additional units of the same work item. The PRIORITY is the relative importance of that particular work item and is used to determine the loading sequence.

3.04 Figures 2 and 3 are examples of pricing guides for 1/1A ESS switching equipment and step-by-step (SXS) equipment corrective maintenance.

* Trademark of Western Electric.

These examples provide additional data concerning first unit pricing and, in some cases, work code.

Note: The prices on these examples are not intended to be all-inclusive or precise estimates of time for any particular operation but are from the recommended standard pricing guides. For those systems and work items that are not included in the standard guides or for special situations, the guidelines in paragraphs 3.06 through 3.15 should be used.

3.05 In determining price values, supervisors should be concerned with setting the prices at objective minimums, not at current averages. Work prices should reflect ideal conditions. It is undesirable to allow roadblocks or other unwanted conditions in the pricing structure as part of normal procedures. Emphasis should be placed on eliminating the roadblocks and the unwanted conditions in the pricing structure.

3.06 A suggested method for use by the supervisors in establishing ideal price values is to first assume:

- (a) All equipment and test facilities are available and working.
- (b) Office records and necessary documentation are available and in their proper location.
- (c) Employees performing the work are fully qualified. In this manner, management will be able to determine the personnel who require additional training.
- (d) Work is performed in an efficient and safe manner.
- (e) The work is completed (trouble found, service provided, etc).

When using the above examples, do not include nontrouble activity, preventive maintenance, or travel time. However, if travel time is significant, it should be priced and tracked separately.

3.07 The next action is to define each job task into a series of work steps and to price each step separately. In this manner, each step will be viewed independently for hidden roadblocks. Since various

steps will be common to several job tasks, the price value may be used for more than one job task.

3.08 For example, assume the job task of equipment trouble that is to be dispatched to the field force for repairs. The following should be considered when establishing a price for a particular job.

- Respond to the dispatch call.
- Assemble proper technical data to handle the dispatch.
- Screen and verify the trouble.
- Provide service protection.
- Locate the trouble.
- Repair the trouble.
- Verify repair.
- Restore service.
- Clean up.
- Close out and post work records.

3.09 When the length of each step is determined, the supervisor can begin eliminating roadblocks and assigning ideal price values. Using the list in paragraph 3.08 as an example, the supervisors should challenge each step as being necessary to the job and then provide ways and means to expedite each required step. For example, verification of the trouble may begin by setting up a test frame. All the supervisors may agree that the step should take no longer than 4 minutes; however, some craft persons are taking much more time. Then, the supervisors should begin a training program or provide operation lists for the test equipment. The objectives of these programs are to provide the actual time for that particular step down to the ideal priced value.

3.10 Once initial prices are established, regular adjustment should be made as new methods are devised or until such time that the SCC manager and supervisors agree that the prices are both ideal and realistic in value. Final estimates should be reviewed and approved by the SCC manager. Once approved, no further adjustments should be made, with the exception of adding new work items or deleting

those that are no longer required. Once the pricing structure of the SCC organization is set, it will provide the means to measure force efficiency.

3.11 On some work items, such as trunk orders, the number of units per job will vary. The cost of the first unit will be higher than the remaining units due to paper processing, set-up time, clean-up time, etc. In these cases, pricing will be more efficient if one price is established for the first unit and a second price for all subsequent units.

3.12 Similarly, repeated or subsequent trouble reports might be considered for additional pricing values. This is based on the assumption that trouble conditions which were not corrected on previous dispatch attempts will have increased urgency to be resolved on subsequent dispatch attempts. For example, a typical trouble report priced at 30 minutes for a one-time report might be increased to 45 minutes on a repeated dispatch attempt. If the trouble is not found within that time limit, the matter should be brought to the attention of the Dispatch/Administration Supervisor who may consult with other supervisors to determine the best approach to finding the trouble.

3.13 Detailed pricing and priority instructions should be prepared for the use of all personnel. The SCC and field supervisors should conduct regularly scheduled meetings to resolve the pricing and priority structure of the organization.

3.14 Work time requirements for preventive maintenance jobs (ETL routines) are established and adjusted in the same manner as other work items. It is essential that estimated work times be regularly reviewed and adjusted to more nearly reflect ideal work times. The COMMS mechanizes these processes.

3.15 When ETL work is loaded, test time should be separated from repair time. If possible, repair should be performed during ETL testing; otherwise, it should be loaded at a later date. (In both cases, test times would be shown separate from repair times.) Whenever the expected trouble level is exceeded, the work should be held for inspection by the field supervisor for correctness of work procedures and determination of new repair pricing.

4. HANDLING OF WORK INPUTS

4.01 The two types of work inputs in an SCC are telephone work inputs and document work inputs. The procedures for handling telephone work inputs are described in paragraphs 4.02 through 4.12. Document work inputs are created outside the SCC and by the SCC work stations. Document work inputs are in the form of work requests, trouble tickets, and work orders. The procedures for handling document work inputs are described in paragraphs 4.13 through 4.44, and procedures for handling preventive maintenance are described in paragraphs 4.45 through 4.52.

HANDLING OF TELEPHONE WORK INPUTS

4.02 Incoming telephone requests fit into several general categories. Examples are:

- (a) Trouble reports from the Maintenance Center that will generally be requests for corrective maintenance

Note: The Maintenance Center was identified previously as the Repair Service Bureau.

- (b) Equipment trouble reports from field maintenance forces
- (c) Trouble reports or requests for corrective action from other sources
- (d) Status or verification requests
- (e) Coordination requests
- (f) Messages to be relayed
- (g) Requests for trunk trouble sectionalization.

4.03 Incoming calls originate from sources such as:

- (a) Other SCCs and other organizations (eg, Network Administration Center)
- (b) Supervisors and field maintenance forces
- (c) Staff and engineering forces
- (d) Outside sources.

4.04 Requests are classified into three categories:

- Requires immediate action (Class I)
- Requires action within that day (Class II)
- Requires action but may be loaded at another date (Class III).

Note: Class I and II work items are demand load items, and Class III work items are programmable work. Each class may have subpriorities.

4.05 Originators of requests should be required to submit written requests rather than telephone requests. This reduces the possibility of misinterpreting the request and enables the loader to program the work requests and provide adequate follow-up. Telephone requests should be accepted only when the submission of written requests is impractical.

A. Telephone Log Description

4.06 The Telephone Log, Form E-6831 (Fig. 4), is a monthly log used to record details and subsequent action of telephone calls received at the SCC. Separate logs should be maintained for each CO or work force.

4.07 Details of all incoming calls requiring action by the SCC are recorded on the telephone log when received. Each item should show sufficient information to process the request and an indication of the action taken. At the end of the report period, incompletd items should be carried over to a new log. The Dispatch and Administration Supervisor should know the reason for each entry carried over. Figure 4 shows typical entries of the telephone log.

B. Trouble Reports/Trouble Tickets

4.08 For trouble reports, the following actions should be taken:

- (a) Record the details of the trouble on a trouble ticket (if ticket does not exist).
- (b) Record appropriate details on a telephone log.

(c) Determine the estimated work time (price) and priority from the appropriate pricing guide.

(d) Screen all trouble reports. If the trouble cannot be cleared in the SCC, the following actions should be taken:

(1) If the trouble is a demand load and must be worked on immediately, it should be dispatched immediately to the field maintenance force. This can be accomplished by telephoning the CO force and reading the trouble ticket information to the field craft. The original ticket should be placed with the remainder of the craft load, which includes the Load and Work Time Record (Form E-6843), in the in-progress file.

Note: If the ticket indicates trouble of a critical nature, supervision should be informed immediately.

(2) If the trouble is a demand load and must be worked on today, it can be logged and filed in the appropriate pending file if there is a later tour for that day. Otherwise, the ticket should be dispatched when the field personnel call to report the status of their load.

(3) If the trouble ticket is not a demand load, it should be sent to the loader for logging on the Document Input Log or the Monthly Work Summary, and for future loading.

Note: The procedures for loading work are discussed in Part 7.

(e) Close out the trouble ticket and the corresponding entry on the telephone log when the required maintenance or other work action has been completed.

(f) Return the trouble ticket to the originator or the originating work station. This is done so that logs can be closed, trouble repair can be verified, further analysis can be performed, and trouble tickets can be reviewed by the supervisor.

4.09 Trouble tickets originating in the SCC (ie, SCC work stations) will be dispatched directly to the field by the dispatcher. If it is a demand load or will be entered on the Document Input Log or Monthly Work Summary, the trouble ticket is filed

for future loading by the loader. The procedure for the handling of these trouble tickets is the same as trouble tickets originating outside of the SCC.

4.10 For requests other than trouble reports or work orders, a work request, Form E-6838, or Work File Face Sheet should be prepared. Work requests should then be processed as document work inputs. Refer to paragraphs 4.36 through 4.39 for details on the Work Request.

C. After-Hours Inputs

4.11 A designated control center/maintenance force will receive after-hours telephone inputs. The force, whether it is the SCC or another designated center or maintenance force, should follow the same procedures as described in paragraphs 4.01 through 4.10. Arrangements must be made to inform the SCC of the results of all after-hours trouble reports by the start of the next business day.

4.12 Figure 5 represents a flowchart of recommended SCC operations in handling telephone inputs.

HANDLING OF DOCUMENT WORK INPUT

4.13 Document work inputs are created outside and within the SCC, and take the form of work requests, trouble tickets, or work orders. Work inputs created outside the SCC are generally requests for work that do not require immediate action. Work inputs created within the SCC are generally requests for corrective maintenance at individual offices (documented with a trouble ticket) or requests for testing assistance that is documented with a work request.

4.14 Trouble tickets originating at the SCC are usually created by the office control and analysis work stations. The procedure for handling trouble tickets created by the SCC work stations is identical to that described in paragraphs 4.09 and 4.10 with the exception that tickets are logged on the Central Office Log, Form E-5457. The procedures for handling work requests are described in paragraphs 4.36 through 4.41. The procedures for handling work orders are described in paragraphs 4.45 through 4.52.

4.15 Pricing guides that include priorities must be prepared for proper handling of document work inputs. The following are examples of document inputs.

- Trunk orders
- Special service orders
- Cable or line transfers
- Translations
- Broadcast warning notices
- Network administration trouble reports or studies
- Carrier orders
- Verification requests
- Coordination requests
- Work requests from field
- Work requests from SCC
- Trouble reports from SCC work stations
- Miscellaneous work from SCC work stations
- Other internally generated work
- Service orders
- Service-observing assignment change orders.

4.16 The flow of document work requests in an SCC organization, from input to final completion and close out, should be organized and controlled to fit the needs of the individual organization. In general, control should be maintained with as few steps as possible. The following paragraphs minimize the number of steps needed to control the flow of document work inputs. Managers should study their needs and make use of appropriate instructions.

4.17 The following forms have been designed to facilitate control of document work inputs.

- Document Input Log (Form E-10259)
- Monthly Work Summary (Form E-6834)
- Central Office Log (Form E-5457)
- Work File Face Sheet (Form E-10210)

- Work Request (Form E-6836).

The use of input logs or summaries can provide adequate tracking controls. The Document Input Log and/or the Monthly Work Summary provide the logging system needed to effectively load all the work inputs in an SCC. The description and use of the logging system and forms are included in paragraphs 4.18 through 4.35.

A. Document Input Log

4.18 The Document Input Log, Form E-10259 (Fig. 6), is specifically designed for use at an SCC. The form is used to record input documents as they are received at the SCC. The form is recommended to be used as a means of recording the details of incoming documents. Figure 7 illustrates the form used as a work summary.

4.19 Although it would prove advantageous to maintain a log (Fig. 6) as a defensive record that shows the documents that were received at the SCC, its use as that type of record is not recommended. Emphasis should be directed toward the elimination of this need. The SCC personnel should be able to satisfy the occasional query for documents by examining the work summary logs that are described in the following paragraphs.

4.20 The Document Input Log (Form E-10259) is used as a work summary, to create work loads, and to record the details of document inputs. (See Fig. 7.) A separate log is kept for each central office or work group and reflects the current location of each work item (eg, in-progress file, etc) in the Load File column.

4.21 The log has the advantage of displaying the priority, current status of each work item (eg, in-progress file, etc), a description of the work, the date the document was received, and the actual hours to complete the work item.

4.22 The Document Input Log may be kept on a daily or monthly basis. Visibility is given to the number of hours available to load if it is kept on a daily basis. Since the Document Input Log and/or the Monthly Work Summary are used by the loader to create work loads, it is essential that all work items except ETLs and TRIK items be included in the logs.

4.23 A chronological Document Input Log is recommended for programmable work. Programmable work is generally logged in the order of occurrence.

4.24 Work documents are received and/or created at the SCC; they are first priced and assigned a priority. Earliest and latest start dates are calculated for due-dated work inputs (if applicable). A search is then made through the individual daily logs for an open loading date. Once the loading date is selected, the work item is listed on the log for that date and the work document is placed in the proper load file. As work items are added to the logs, individual item prices and total cumulative load hours are entered in the EST/CUM HOURS column on the Document Input Log. If a work item is to be deleted from the log, the price of the item is subtracted from the total cumulative load hours and a notation is made as to the new loading date, if appropriate.

B. Monthly Work Summary

4.25 The Monthly Work Summary, Form E-6834 (optional), is provided for recording details of input documents in much the same manner as the Document Input Log. (See Fig. 30.)

4.26 The Monthly Work Summary displays a work load situation for a month at a single glance. This allows a method of determining if the work load and the work force are balanced for any day of a given month. If there are multiple shifts, the Monthly Work Summary should be kept on a per-shift or per-group basis. This gives visibility to the number of available hours per shift.

4.27 The Monthly Work Summary allows one to designate a preferred craft ("assign to"), gives visibility to due-dated versus scheduled work items, and provides a method to determine if a work item has been reloaded in a given month. The "Assign To" column can be used to identify meetings, schools, etc. Scheduled work is identified by using an "S"; due-dated work is identified by using the due date in the "Sch/Due Date" column.

4.28 It is recommended that scheduled and due-dated work be logged on the Monthly Work Summary. This will assure that immediate visibility is given to any work item that cannot be completed by the specified date.

4.29 Document Input Logs or Monthly Work Summaries are to be maintained at the SCC for each CO or work force controlled by that SCC as a means to control work load development. Use of either of these forms, in conjunction with the Work Schedule, Form E-6837 (described in Section 190-130-140), will enable the loader and the Dispatch and Administration Supervisor to make comparisons of developing work loads with daily work force capacities.

C. Central Office Log

4.30 The Central Office Log, Form E-5457 (Fig. 8), is a vital part of trouble ticket administration. In addition to recording trouble tickets, the log records any unusual activity that could result in trouble tickets, ie, installation activity. The log includes information on the status and nature of the trouble report. It is also the source for determining if there is any unusual activity that may be responsible for changes in switching performance. The Central Office Log provides a quick check to see if there are any open items in the CO.

4.31 The Central Office Log is kept on a per-office basis, with one log per central office. It is recommended that the log be closed out monthly; however, some other period of time may be used, depending on the volume of trouble tickets for a given CO. Trouble tickets that are not closed out on one log should be carried over to the log for the next period.

D. Work File Face Sheet

4.32 The Work File Face Sheet (Fig. 9) is provided for use with document work inputs that require work unit credit and/or coordination of multiple loading steps. It provides space for comments to aid in coordination, for tracking multiple loading steps, and for work unit credit. This form is used to track the loading and completion of work steps. It **should not** be used instead of a Work Request.

4.33 Not all input documents will require the use of the Work File Face Sheet. In many cases, its use would provide little or no advantage. The request itself and the log should provide adequate control.

4.34 The Work File Face Sheet will be used to track any work input document that requires multiple loading and/or completion steps. There is one Work File Face Sheet per trunk order.

4.35 As an example, trunk order work may be organized as in the following subparagraphs.

(a) Assume that the input document (in this case, a trunk order) is to be loaded first to the field for vacancy checks and to the translations group for verification. The trunk order is then reloaded for frame wiring and equipment set-up work, initial translations, and/or final translations. Finally, it is set for overall tests and turned up.

(b) The trunk work station prepares a Work File Face Sheet showing the loading steps and loading dates for each step. A work request, which includes due date and earliest and latest start dates, may be prepared for each loading step. Each work request is sent to the loader to be logged so that loading will occur when required.

(c) The Work File Face Sheet is filed by the loader and may also be filed at the trunk work station by earliest start date. The work request is filed by the loader in the loading files according to its loading date. On that date, the work item (along with the supporting documentation) is loaded.

(d) Work status is taken from completed Load and Work Time Records, Form E-6843 (Fig. 10), and posted on the log by the loader. The status is posted on the work request by the field craft (or the loader). The work request is returned to the originator and the Work File Face Sheet is updated by the trunk order coordinator. This process is repeated for each loading step until completion. At that time, the SCC performs all of the required completion functions.

Note: In this example, the process has reduced the number of input document copies and has minimized its movement while establishing control of its status and location at all times. This example is not proposed as a solution for every SCC operation, but it is an illustration of the potential use of the Work File Face Sheet form.

E. Work Request

4.36 The Work Request, Form E-6836 (Fig. 11 and 12), is used as a written document for work to be loaded. Work requests may be prepared as a result of telephone inputs or may originate from supervisors, SCC work stations, or the field. Work requests

should include the price and priority and/or a due date.

4.37 Work requests are prepared for any job where a work document does not exist or for jobs where it is desirable to retain the original work document on file in the SCC. Typical uses for the work request are:

- Equipment cleaning
- Equipment installation
- Inventories
- Studies or reports
- Filing
- Verification
- Meetings
- On-the-job training.

4.38 Figure 11 illustrates a Work Request form prepared as an equipment and facility vacancy check for a pending trunk order. When the Work Request is used in this manner, it allows for the retention of the trunk order at the SCC trunk work station during the preliminary work operation of the job.

4.39 Figure 12 is an illustration of a Work Request from a field supervisor to get a storeroom cleaned. In this example, the priority and the work request type (ie, the box marked programmable) require that the request be filed in the SCC programmable file. Supervisors should be encouraged to submit programmable work requests.

4.40 The following procedures are illustrated in the flowchart of Fig. 13. These procedures outline recommended SCC methods for handling work document inputs.

4.41 The following is a list of items to be performed at the SCC after receiving a work document input.

- (a) If the work item requires multiple loading and/or completion steps, work unit credit, or

other special tracking at the SCC, prepare a Work File Face Sheet. As many entries as possible should be completed at this time.

Note: Work File Face Sheet forms are not needed for single-loaded documents that do not require special tracking or other coordination at the SCC.

- (b) Create a work request for each loading step on the Work File Face Sheet, and file the Work File Face Sheet in the trunk work station.
- (c) Refer the work to the appropriate work force for coordination, if necessary. As an example, trunk orders may be coordinated by the SCC trunk group. (A chart should be prepared stating: the types of work requiring coordination, who is responsible for coordinating, and with whom.)
- (d) Using the pricing guide, determine work codes, prices, priorities for each work request.
- (e) The earliest start date, latest start date, and due date should be provided by the originator of the request for work (if these dates are appropriate).
- (f) Refer work requests to the loader for logging and loading.
- (g) Refer to the Monthly Work Summary, or Document Input Log, to determine if the hours are available for the dates in (e) above. Scheduled work items are logged by their specified date; due-dated work items are logged by their latest start date. For scheduled or due-dated work items, if hours are not available on the specified date, notify the Dispatch and Administration Supervisor.
- (h) Assuming that loading dates are available, enter the items on the Monthly Work Summary, or the Document Input Log, using separate entries for each work request.
- (i) File the work request and any supporting documents in the appropriate loading file. (Some supporting documentation may be filed at the central office.)

Note: At this point, there are many factors that must be considered concerning the flow of work documents at individual SCCs. Factors of

geography, complexity, and timing will determine if field and SCC work can be performed from the original work document and loaded from the SCC, or whether additional copies must be distributed to various locations where they are held in file until notified by the SCC to perform the work. There are many possible solutions for the individual SCC local needs. In general, the better solutions will minimize the number of copies needed and organize the subsequent work document flow.

- (j) Load the job according to procedures described in Part 7.
 - (k) After the job has been loaded and it is incomplete or if there are additional loading steps to be accomplished, place the document in the next appropriate work file or instruct that it be held at another location. Make appropriate notations on the log and Work File Face Sheet.
- Note:** These forms should be retained long enough to provide analysis of estimated and actual work times and other studies, as required.
- (l) Send or telephone completion notices, as required.
 - (m) Transcribe work unit credit to appropriate summaries.

F. Controlling Work Load Development

4.42 Using the Work Schedule, Form E-6837 (Fig. 31), and the Loading Guide, Form E-6836 (Fig. 14), the Dispatch and Administration Supervisor should be aware of the number of available work force hours and job assignment coverage for any given workday. The total force hours available for loading should be entered on either the Document Input Log or on the Monthly Work Summary as shown in Fig. 7 and 30, respectively. These hours represent the daily force capacity for the type of work being loaded.

4.43 For example, the Loading Guide, Form E-6836 (Fig. 14), for the Carlton office indicates demand work to be 1-1/2 hours for D-1 and none for D-2 job assignment. This means that all nondemand work can be loaded to the D-1 and D-2 job assignments at 6-1/2 and 8 hours per shift, respectively. Using the

Work Schedule, the supervisor can readily determine the days in the month when both of these shifts are scheduled and enter a total of 14-1/2 hours available for this type of work. The supervisor will also note those days for which these particular shifts are not covered and adjust the force capacity, as required. Similar work capacity notations should be made for other types of work (preventive maintenance, frame, special services, etc) on appropriate SCC loading logs.

4.44 With the daily force capacities and developing work loads made visible at the SCC, the Dispatch and Administration Supervisor will be able to make timely decisions concerning the scheduling of work and personnel. The scheduling of personnel can be made on an ongoing basis while matching the force to the daily work load. It is vital that all changes to the work schedule be communicated to and processed by the SCC. Proposed schedule changes must be processed through the Dispatch and Administration Supervisor before the changes are actually made.

HANDLING OF PREVENTIVE MAINTENANCE

A. General

4.45 The ETLs (Form E-5450) and schedules for ETL work should be maintained and administered at the SCC in accordance with CMP or by the rules of the COMMS-PM, whichever is applicable.

4.46 Revisions to ETL work orders, schedules, and estimated work time are done at the SCC. These changes are made from:

- (a) Inventory changes caused by CO equipment additions or removals. These data are supplied to the SCC by the field supervisors.
- (b) Trunk or facility type orders that add or delete circuits tested by ETLs. These data are obtained from Work File Face Sheets (Form E-10210) for completed work.
- (c) Ongoing data supplied from completed Test and Inspection (T&I) Work Orders, Form E-5452 (Fig. 15).

B. Manual Preventive Maintenance

4.47 The Monthly Test & Inspection (T&I) Work List, Form E-6835 (Fig. 16), is provided to

show the status of T&I Work Orders as the month progresses and to facilitate the loading of this type work. The form is prepared as follows:

- (a) Prepare the form at least 1 month in advance to allow completion ahead of schedule if the work force is available. This does not mean that the work force is to be loaded for a month in advance; they are to be given their loads on a daily basis.
- (b) Enter the job numbers for the month from the ETL work schedule.
- (c) Using Form E-6835 as a guide, pull the master T&I Work Order forms and reproduce the appropriate copies so that they may be sent to the CO.

Note: For unattended or remote locations, it may be advantageous to reproduce a month's or even a year's T&I Work Order forms to be filed at the field location for assignment.

- (d) Enter the type of work code, class/frequency, and any required priority on Form E-6835.
- (e) If a coordinated work effort is required, enter the information in the Remarks column.
- (f) Enter the estimated work time (price) from past T&I Work Order Summaries.

Note: Consult the pricing procedures described in Part 3.

- (g) Entries in the Loaded Date/To column will be made when the T&I Work Order is loaded.
- (h) The actual time is entered when the T&I Work Order has been completed.

4.48 Form E-6835 is placed in the pending work file and is used during the work loading procedure as described in Part 7. The individual T&I Work Order, Form E-5452, requiring CO work should be forwarded to the CO to be held on file for assignment via the Load and Work Time Record, Form E-6843. For work to be done at the SCC, the T&I Work Order form should be filed at the SCC.

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4.49 Special requirements, such as coordination requirements and test sets, should be shown on the master T&I Work List.

C. Mechanized Preventive Maintenance

4.50 The SCCs that are served by COMMS-PM will be administered by the rules of that system and will not be required to maintain duplicate manual records. (See COMMS-PM User's Manual, PA-1N404-01, which can be ordered through Western Electric [WE].)

4.51 It is recommended that T&I Work Orders never be structured in increments which would exceed a full day's work. Every effort should be made to keep any work item at 2 hours or less. This expedites loading and increases completion control.

4.52 When trouble test (TT) or special T&I Work Orders are required, enter the information on the Monthly T&I Work List, Form E-6835, and handle as described in paragraph 4.47.

5. WORK FILE SYSTEM

5.01 The recommended basic work file system for use at an SCC is illustrated in Fig. 17. The files provide a method for organizing work that allows easy access for gathering supporting documentation. The work files consist of an in-progress file, a pending file, and a future file. The files should be conveniently located for easy access by the loader without interrupting the work of others. Also, the in-progress file must be accessible to the dispatcher.

5.02 Each CO or work group that is being force managed should have the following files:

(a) **In-Progress File:** This file should contain a copy of the work loads (Load and Work Time Record, Form E-6843) for craft currently assigned to the particular work force. The file usually consists of a folder for each craft person but may be filed by CO or work force group.

(b) **Pending Work File:** This is a file of all pending work (trouble tickets, work requests, work orders, and T&I work lists for the month) for

the particular office or work force group. The work items for each day should be filed as follows:

(1) **Scheduled Work:** This work must be completed on a specific date and cannot be worked ahead of the specified date. Coordination is usually involved and clock hour may be specified. Generally, this file will be a rolling file for the next 30 days.

(2) **Due-Dated Work:** This work may be assigned and completed ahead of the specified date of the work request but should be completed by the specified date. Trunk orders are examples of due-dated work. Generally, this file will be a rolling file for the next 30 days.

Note: In SCCs where the amount of scheduled/due-dated work is small, one file for both types of work may be established. Generally, this will be a rolling file of work for the next 30 days, with work items being added or removed. In some cases, it may be advisable to include work items that extend beyond the 30 days for special projects, area cutovers, etc.

(3) **Programmable Work:** This work has no special due date but should be completed in a reasonable time. The work primarily consists of jobs that can be done when time is available. Generally, this work will be filed chronologically and will match the log.

(c) **Future Work File:** The future work file is for due-dated or scheduled work items that cannot be assigned until a specific date in the future, beyond the limits of the pending work file. The future work file does not include programmable work since programmable work does not have a due date. Work items should be filed chronologically and the file should be searched daily for work items that become assignable. The work items should then be moved and placed in the proper scheduled or due-dated file.

5.03 **Field supervisors should submit work requests for all miscellaneous jobs to be accomplished as soon as they are identified.** This allows the SCC to balance the work load.

6. PREPARATION OF JOB ASSIGNMENTS

6.01 The preparation of job assignments provides a means of inventorying the work load and organizing jobs of nonmanagement employees in the force group into defined and balanced assignments. Figure 18 contains a flowchart of the job assignment procedures.

6.02 The main objectives of organizing and assigning work are:

- (a) To provide an orderly approach to the job
- (b) To make sure that all questions are considered
- (c) To provide each person in the work force with a full work load for their shift
- (d) To establish pricing values for all operations
- (e) To ensure that high-priority work is worked before low-priority work.

WORK INVENTORY

6.03 The first step in organizing the work load is to inventory all work items by individual work forces or supervisory groups. The Work Inventory Record, Form E-5847, may be used for this purpose. A typical Work Inventory Record is shown in Fig. 19.

6.04 The Reference column is used as a cross-reference point for the work item listed. For example, if the work item described requires a form to be filled out, the **Reference** column would indicate the form number. The **Number of Units** is the number of work items described per line that need to be performed per shift, job, or group. The **Frequency** denotes the rate at which a work item is performed—daily, weekly, monthly, etc. The **Time Per Unit** is the price per work item. Total Time Per Period is the time it takes to complete the total number of units in a specified period (eg, hours per month, minutes per month, hours per day, minutes per day, etc). The **Total Time Per Period** is calculated by the following:

$$(\text{Number of Units}) \times (\text{Frequency})$$

$$\times (\text{Time Per Unit}) =$$

$$\text{Total Time Per Period}$$

The period must be the same for a given Work Inventory Record. This is so that the total calculated at the lower right-hand corner is in the same units.

6.05 The controlled maintenance ETLs or Central Office Maintenance Management Systems—Preventive Maintenance (COMMS-PM) summaries combined with data taken from pricing guides, pricing charts, and other work time summaries will provide pertinent data for developing the inventory and the related pricing data.

6.06 Initially, the time required for each work item must be determined from the supervisor's existing office records, the supervisor's experience, or other existing sources. As Pricing Guides and Pricing Charts (Form E-6833) are developed, initial items must be adjusted as described in Part 3 of this document. When times have been determined for all work items, the total work load time can then be determined. The total work load times must be allocated and assigned by job assignment codes or shift the work force.

SORTING WORK ITEMS

6.07 Demand work is defined as work which is expected to be performed on a daily basis. The amount of time (price) allotted for demand work is deducted from a full day's shift (eg, an 8-hour day) for loading purposes. Demand work is divided into three categories.

- TRIK
- Corrective Maintenance
- Service Order.

6.08 Demand work items are classified as follows:

- (a) The TRIK work items are usually daily repetitive tasks usually of a relatively short duration which are not supported by trouble tickets, work requests, or T&I work orders. All TRIK items must be priced and should be loaded separately; however, minor work items may be combined to make an item of 15 minutes or more.
- (b) Corrective Maintenance work items are trouble tickets which are expected to occur each day and which are added to the load during the

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shift. The Corrective Maintenance window is based on historical data.

(c) Service Order is a category to set aside time for field work on service orders which do not have visibility at the SCC. The Service Order window is based on historical data.

6.09 The supervisor's Work Inventory Record shows the total demand work load which must be allocated to the work force by sorting, grouping, and assigning the various work items to a specific job assignment or shift.

6.10 For very small groups, the sorting process may be done directly from the Work Inventory Record. However, when a work force of several assignments is involved, the work load should be balanced among the assignments. Care should be taken to sort, group, and assign the work items for efficient operation. In large organizations where demand work items or other recurring work items constitute more work than can be assigned to a single assignment, they must be concentrated in as few assignments (TRIK, corrective maintenance, service orders) as possible.

6.11 The sorted work items are listed on individual Work Inventory Records. Figures 20 through 22 illustrate typical methods of listing the work items.

WORK ASSIGNMENT LISTS

6.12 A Work Assignment List, Form E-5848, is prepared for each job assignment or shift. Sufficient detail must be provided to inform the employees of their duties when they are assigned a particular work assignment. Figures 23 through 25 illustrate typical work assignment entries. Note the relationship to the Work Inventory Record shown in Fig. 19.

6.13 Work Assignment Lists for SCC personnel are shown in Section 190-130-120.

6.14 Specific job functions and responsibilities for each functional craft and clerical job in the SCC organization must be listed on a Work Assignment List.

6.15 Work Assignment Lists are prepared and updated by each supervisor for subordinates. The lists are distributed as follows:

- SCC—one copy
- Field supervisor's file—one copy
- Posted at work location(s)—one copy.

6.16 Work should be listed in a manner which minimizes the number of job assignments or shifts. Short duration demand work should be concentrated in as few job assignment codes as possible, and the supervisor should select demand work items for the most productive assignments. Related tasks should be assigned on the same Form E-5848.

6.17 Each completed Form E-5848 should be designated with a job assignment or shift; eg, D1 (day shift, job number one), E2 (evening shift, job number two), etc. This job assignment is then shown on the Work Schedule, the Loading Guide, and the Load and Work Time Record.

LOADING GUIDE

6.18 The Loading Guide (Form E-6836) is prepared by each supervisor whose subordinates are subject to force management procedures. The information on the form prescribes the job assignment (shift) that will be loaded for any given work item by the SCC. These forms are necessary to show how the supervisor wishes to restrict the types of work assigned to different job assignment. Form E-6836 may be used for the loading guide. The form is distributed as follows:

- SCC—one copy for the loader
- SCC manager—one copy
- Field supervisor's file—one copy.

6.19 The purpose of Form E-6836 is to show work assignment preferences for the types of work to be loaded and to indicate the demand work hour restrictions that are required to concentrate that type of work in as few job assignments or shifts as possible. The upper portion of the form provides space to show work assignment preferences. The lower portion provides space for total demand work hours divided between TRIK, corrective maintenance,

nance, and service orders. Figure 14 is an example of a completed Form E-6836.

6.20 The form is prepared as follows:

- (a) In the Job Assignment column in the lower portion of the form, list the designated job assignments (D1, D2, E1, E2, etc) as determined in paragraph 6.17.
- (b) In the Type Work column, list the appropriate Work Type codes for the work to be performed (usually listed in the order of priority). These codes are the Work Type codes as listed on the Pricing Guides. Section 190-130-110 has a more general list of work codes which can also be used.
- (c) Determine the preferred job assignment for each type work code. Enter the job assignment designation in the Work Assignment Preference column(s). In most cases, the corrective maintenance work is assigned to job assignments with daily repetitive tasks (TRIK) rather than to those assigned longer duration jobs such as trunk orders or preventive maintenance. This method of assignment concentrates the short duration work, which is more likely to be interrupted to the fewest number of job assignments.
- (d) Estimate the TRIK assignment, corrective maintenance, and/or service order hours required for each job assignment for each day of the week. Post these estimates in the lower portion of the form. All estimates should be based on minimum averages.
- (e) Total the TRIK, corrective maintenance, and service order time for each job assignment and day of the week in the Total Demand Estimate columns.

Note: All estimates should be reviewed on at least a monthly basis to ensure that they are reasonable and that they are based on **minimums**.

6.21 It is usually not necessary to enter more than two or three options under Work Assignment Preference for one type of work code. The SCC will enter the applicable work codes on the loading guide so they can be entered on the Load and Work Time Records as work is loaded.

REVIEWING JOB ASSIGNMENTS

6.22 The SCC will load the CO work force with demand hours and specific work items in strict accordance with the work schedule and the loading guide. If this does not allow all work items to be loaded by the required dates, the Dispatch/Administration Supervisor will resolve the problem.

6.23 Preparation of full loads with a minimum amount of demand time for a maximum number of people is a major key to efficiency. This is accomplished by a daily review of the completed Load and Work Time Records and of the logs used for loading. Job assignments should be restructured whenever it becomes apparent that the demand work estimate can be reduced.

6.24 Periodic meetings must be held by the SCC manager with the field and SCC supervisors to review completed Load and Work Time Record for possible road blocks, training needs, and job structure improvements. Once a month is a recommended interval for these meetings.

7. LOADING

GENERAL

7.01 The basic goal of centralized force management is to plan all of the work for SCC field maintenance craft personnel. This includes provision of demand loading as discussed in paragraphs 7.13 through 7.15.

7.02 Demand loads are work items which are received on the day that they must be worked. The responsible SCC force will assemble in advance all work items that each craft is expected to complete during the next full shift. Each item is listed on a Load and Work Time Record, Form E-6843 (Fig. 10), in order of priority. A copy of the Load and Work Time Record and all supporting documents are sent to the field.

7.03 Unless instructed otherwise, the craft should work on the work items in the order listed on the Load and Work Time Record. The SCC loader and/or dispatcher will update the Load and Work Time Record copy at the SCC for load tracking purposes. See Section 190-130-150 for a more detailed description of the Load and Work Time Record.

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7.04 The SCC is responsible for organizing demand load work items (eg, customer trouble reports, operation support system messages and reports, etc) and dispatching these to the on-site field or SCC forces.

7.05 The SCC may also have the responsibility for assuming the role of the end offices which it serves on such matters as control office, trunk control, span control, circuit control, order control, etc, when these are within the span of control of the manager. Within these responsibilities, the SCC has the obligation to meet all normal time and due-date commitments and to perform interface functions with all other work forces and groups.

7.06 Where other existing sections refer to CO responsibilities of establishing or receiving contact from sources outside of the SCC organization (such as T-Carrier Restoration and Control Center [TRCC], Equipment Billing and Accuracy Control [EBAC], Network Service Center [NSC], etc), the SCC will assume full responsibility to interface as coordinator and controller of these contacts. The following are examples of this type work.

- Customer Trouble Reports
- Carrier Restoration (TRCC)
- Network Service Center (NSC) Reports
- Equipment Billing and Accuracy Control Reports
- Interoffice Tests
- Order Activity.

In handling these and other similar work requests and trouble tickets, prices and priorities must be set in accordance with established objectives.

7.07 Due dates are generally established for all work requests that are given to or received from other forces or outside groups. The establishment of these commitments will provide the SCC with the means for establishing proper scheduling. With the proper use of earliest and latest start dates, these items can be completed as early as possible.

7.08 Before the load for tomorrow can be assigned, the SCC must know the status of the loaded

work for today. To accomplish this, the SCC must obtain a report of work that is complete and a status of work that is incomplete. This status tracking is done throughout the shift and should also be updated as late in the shift as possible, but early enough to prepare the work loads for the next shifts. If loads are prepared in the afternoon, this could include evening, night, and the next day shift.

7.09 Work File Face Sheets, Work Requests, Monthly Work Summaries, and Document Input Logs can be updated from the SCC copy of the Load and Work Time Record as follows:

- (a) Forms having completed items are closed out.
- (b) Forms for multiple loaded items that have one or more loading steps remaining are entered on the appropriate Document Input Log or Monthly Work Summary and placed in the pending file for the next loading step.
- (c) Forms for other unaccomplished work items are relogged and held for reloading. However, any scheduled work that was not completed may require rescheduling with other SCCs or other work forces before reloading. For any uncompleted due date and scheduled work, contact the Dispatch/Administration Supervisor for assistance.

LOADING PROCEDURES

7.10 The procedures for creating a load are described in the following subparagraphs. For additional information on loading procedures, see Section 190-130-133.

- (a) Enter heading information on a Load and Work Time Record or an equivalent mechanized time reporting form for each employee scheduled for tomorrow. It is recommended that a Load and Work Time Record be prepared for all employees each work day. This includes those employees who are on vacation, scheduled off, absent, attending training class, or otherwise unavailable for loading. This allows for the supervisor's record of approval as to the disposition of all scheduled employees and their pay treatment.
- (b) For each job having daily demand work estimates, enter the job code assignment as covered in Part 6.

Note: Steps (a) and (b) should be completed early in the day.

(c) Examine the current day's copies of the Load and Work Time Records to determine if there are any incompleting work items. This allows re-loading any incompleting work items from today's Load and Work Time Records to those for tomorrow. Work Requests or copies of the items that are to be reloaded should be removed from the in-progress work file and associated with the Load and Work Time Record of the job assignment to which they will be assigned.

(d) Using the log and the loading guide, load all of tomorrow's scheduled work. If all the scheduled work cannot be loaded, contact the supervisor for assistance.

Note: When using the loading guide, if sufficient time is not available on the preferred job assignment, use the next preference job assignment. If other preference job assignments are not available, contact the supervisor for help.

(e) Using the log and the loading guide, load all of tomorrow's due-dated work. If all the due-dated work cannot be loaded, contact the supervisor for assistance.

(f) Use the current Monthly Test and Inspection (T&I) work list, Form E-6835, or comparable COMMS-PM report to load routines that are due this week.

(g) Using the log and the loading guide, load programmable work in order of priority and within the priority, in chronological order.

(h) Use the current Monthly Test and Inspection (T&I) Work List, Form E-6835, or comparable COMMS report, to determine which T&I Work Orders to load. In situations when some of next month's T&I Work Orders can be done ahead of schedule, the T&I Work Order with the longest interval should be selected for completion first. This permits the more critical short interval T&I Work Orders to remain at their prescribed intervals.

(i) The Dispatch and Administration Supervisor should review the work loads for reasonable-

ness at this stage of the loading process and make any necessary adjustments.

(j) As each item is entered, post the estimated time in the extreme right-hand column on the Load and Work Time Record. Enter the loaded date of T&I Work items on the SCC Monthly T&I Work List. Return the form to the in-progress file.

(k) Separate the Load and Work Time Record copies. Place the top copy in the in-progress file. Send the second copy to the field supervisor and the cardstock copy and supporting documentation to the field craft.

7.11 If the daily mail run or other manual means of delivery from the SCC to field locations are not adequate, the use of telefacsimile or other means may be used to transmit work documents to the field forces. Loading may also be accomplished by telephone. In this case, prepared Load and Work Time Records should be sent to the field locations in advance in order that the field employees will have them available when the load is telephoned to them. It may be desirable at some locations to have short interval transfers mailed directly from the dial assignment office to the CO with a copy sent to the SCC for estimating and loading. Other items will be sent from the SCC to the CO if mail time is consistent with work start times.

7.12 While the SCC should generally assign work according to established priorities, exceptions may arise where variations may increase field craft efficiencies. For example, it may be more productive to assign a lower priority ETL at the same time as a higher priority ETL if they involve the same equipment, the same test gear, or possibly involve similar testing procedures. The same priority assignments should be made for equipment repairs and rearrangement and change work. By distributing T&I Work Orders to remote locations on a monthly basis, field forces who are dispatched on a demand load work item at these locations can be loaded with additional items for the remainder of the shift.

PROCEDURES FOR DEMAND LOADING

7.13 Demand load work items will require immediate or same day action. These work items must be loaded by the dispatcher at the SCC in real time directly to the work force personnel. These items include customer out of service, major equipment

outages, and other nondeferrable requests for assistance.

7.14 The objective of demand loading is to maintain work flow control while minimizing the need to interrupt work in progress.

7.15 The following procedures are recommended for the handling of demand loading at the SCC.

- (a) Record the details of the request on a trouble ticket or work request form.
- (b) Record appropriate details on the log.
- (c) Determine the priority and price from the pricing guide or pricing chart.

Note: A priority of action chart should be prepared for guidance in the handling of all work inputs. There is a need to revise priorities as the work load changes. Immediate action work items would be high priority and dispatched on a real-time basis rather than be preloaded.

(d) For demand load work items that require immediate action, the craft person should be selected for dispatch by using the loading guide. This will usually be the person who is currently working on the lowest priority work in a given work force or the person with dedicated corrective maintenance time for demand work. Occasionally, it may be necessary to move a craft person to an unattended office or new work area to perform demand work.

(e) Demand load work items requiring action "sometime today" should be held in a pending file awaiting contact or a period of light load. Care must be taken to ensure that this work does not accumulate to a point that it cannot be completed during the day. Assuming that a work item is to be demand loaded, the following applies:

- (1) The work item is dispatched to the appropriate field maintenance forces as in subparagraphs (d) and (e) above.
- (2) The on-site craft should be given the details of the job to be done, and considering other

uncompleted loaded work items, be instructed when to next contact the SCC.

Note: If a craft is dispatched more than an estimated 2 hours of work, or a work item is taking much longer than estimated, periodic contact times should be established.

- (3) The on-site craft person should complete work items in the order of dispatch, unless instructed otherwise.
- (4) Trouble found or other disposition of the work, together with the actual work time spent, is communicated to the SCC by the field craft as each demand work item is completed or as prearranged at the time of dispatch.
- (5) Completion information is entered on the logs, work items, and on the copy of the field person's Load and Work Time Record.
- (6) Completion notification to originators of work requests and/or trouble tickets is handled by the SCC either verbally or by returning the documents by mail.
- (7) Trouble tickets and/or work requests are filed for supervisory approval and later analysis.
- (8) During the course of the day, on-site craft may be required to respond to equipment and environmental problems not controllable by the SCC. In these cases, disposition lists should be provided denoting conditions which require immediate reporting to the SCC (conditions for which on-site craft must prepare trouble tickets which will be returned to the SCC at the end of the day, and conditions which need not be recorded).

DEMAND LOAD PRICING

7.16 Pricing of individual work items must be based on objective minimums. Demand work pricing is used at dispatch to establish the time assigned craft will have to complete the assignment. Estimated time should be studied locally and pricing charts and guides be created and updated for use by craft and clerks at the SCC.

7.17 Pricing formulas should be developed for multiple and subsequent assignments. For example, pricing of equipment checks may be set at 15 minutes when loaded individually, but if four checks are dispatched simultaneously, the total job may be 30 minutes. Similarly, the pricing of work items, for which analysis indicates that previous action failed to rectify the trouble condition, should take into account that subsequent dispatches will require more extensive analysis to correct the item.

ADMINISTRATION

7.18 Comparing priced hours with actual hours charged will prove useful in determining the accuracy of pricing estimates. Supervisory checks of the SCC logs and work files will provide indications of developing problems in work load and individual craft performance. On-site supervision is responsible to add to the effectiveness of demand work administration by informing the SCC of priority items, office status, and craft availability.

7.19 Work items, which require corrective action, are identified by on-site force observations and walk-through inspections. These work items are requested through the use of the Work Request, Form E-6838. The Work Request, when forwarded to the SCC for loading, should include estimated price and priority to be used for loading at the SCC.

8. UPDATING SCC STATUS BOARDS

PERSONNEL STATUS BOARD

8.01 The personnel status board is used to display location and job assignments of personnel in the work forces controlled by the SCC. It is also used to display the location and availability of vehicles. A format that can be used for this board is illustrated in Fig. 26.

8.02 In Fig. 26, space has been provided for the name and telephone number of the duty supervisor. The board also displays the work locations with the assigned personnel, the various categories of unavailable time to which they may be assigned (ie, scheduled off, school, vacation, etc), and the identity and location of vehicles. Magnetic numbers, letters, or markers are used to identify the job assignment to which individuals are assigned.

8.03 The personnel status board should be visible to the dispatcher, office control, and analysis positions. If space constraints do not allow this, the personnel status board should be visible to the dispatcher.

OFFICE STATUS BOARD

8.04 The Office Status Board (Fig. 27) is used to display the outstanding corrective maintenance work load, CO results plan components, and unusual conditions that may impact the demand work load. There are many ways in which to arrange a status board. Items should be posted on the status board in a manner that clearly identifies those areas requiring special attention. The SP-SCCs that are using the mechanized NSPMP feature do not need to display the CO results plan components.

8.05 The EM status board is organized as a grid system in which horizontal lines are used to identify office Number Exchange (NNX) codes. Vertical columns are used to identify the type of data being displayed. The board must be updated daily to ensure that the Switch Work Station (SWS) is informed of the developing corrective maintenance situation. Columns have been provided to identify the NNX codes served by each office, the measured components of the NSPMP, and to identify equipment and trunks that are out of service. The Remarks area is used to identify any abnormal conditions or unusual events that would affect maintenance efforts (eg, WE activity).

8.06 The absence of posting an NSPMP component indicates that the component is within objective, the down-pointing arrow indicates a downward trend, the up-pointing arrow indicates an upward trend, and the horizontal arrow indicated a component that is below objective but staying steady. Index components may also be color coded where red indicates a level below objective. Figure 27 is an example of a No. 5 crossbar status board. The NSPMP components vary for each office type (eg, step-by-step [SXS], No. 5 crossbar, No. 1 crossbar). Consult the appropriate NSPMP section to determine the measured components for each office type. The office status board should be visible to the SWS.

8.07 The SPCS office status board (Fig. 28) is organized in a grid system in which columns also identify the present generic, NNX codes, last overwrite applied (broadcast warning messages [BWM]),

any unusual office activity which is identified in the activity column (eg, WE activity, scheduled updates, recent ETLs, etc), and office status affecting conditions (eg, code blocking, telemetry problems, etc). The horizontal lines represent data for individual offices. Figure 28 is an example of a 1/1A ESS switch office status board. The SPCS status board should be visible to the office controller and the analyzer.

8.08 The personnel and office status boards should be colocated. If they cannot be colocated, the office status board may also include craft currently assigned to a central office.

FRAME STATUS BOARD

8.09 The Frame Status Board (Fig. 29) can be used to display performance and load information for locations using the Frame Administration Plan. Space has been provided to show individual frame performance as indicated by:

- The percentage of efficiency for the previous month
- The percentage of efficiency for the previous week
- The current percentage of order discrepancy.

8.10 Today's work load is indicated by columns that show:

- The number of hours required for service order activity
- The loading efficiency rate used to reach the estimate of hours for service order activity
- The total number of available frame force hours
- The time available for loadable work (such as trunk order or cut sheet preparation) or time usable for force loans to other work locations.

8.11 The Remarks column is used to indicate special activities, such as force loans or important events that affect operation.

8.12 The management team should consider the need for additional status board information pertaining to items such as trunk order activity or toll operations in order to display the total work load picture affecting their operation.

Work Pricing Chart

E-6833
(5-83)

						Eq./System		Type Of Activity		Effective Date	
						No 5XB		FRAME		MAY '83	
Line	Work Item	Work Code	Price 1st. Unit	Price Add. Unit	Prior	Line	Work Item	Work Code	Price 1st. Unit	Price Add. Unit	Prior
1	TRUNK ADDITIONS					26					
2	1 way out with E6	TO	1-1/4	1	-	27					
3	without E6	TO	1	3/4	-	28					
4	2 way with E6	TO	1-1/4	1	-	29					
5	without E6	TO	1	3/4	-	30					
6	1 way in	TO	1	3/4	-	31					
7						32					
8	TRUNK REMOVES					33					
9	1 way out	TO	1/2	1/4	-	34					
10	2 way	TO	1/2	1/4	-	35					
11	1 way in	TO	1/2	1/4	-	36					
12						37					
13						38					
14						39					
15						40					
16						41					
17						42					
18						43					
19						44					
20						45					
21						46					
22						47					
23						48					
24						49					
25						50					

FCC Item No. 85

Fig. 1—Example of Work Pricing Chart (Form E-6833) (3.03)

EXHIBIT OF 1/1A ESS SWITCH PRICING GUIDE (3.04)
CORRECTIVE MAINTENANCE ESTIMATED WORK TIME CHART

WORK ITEM	TYPE WORK CODE	PRIORITY	ENT IN HOURS FOR		USUAL WORK CODE	REMARKS
			SCC WORK	FIELD WORK		
COMMON EQUIPMENT TROUBLE	CET					PRIORITIES 1A, 1B SHOULD BE DISPATCHED AS AN EMERGENCY. PRIORITIES 1C, 1D, 1E SHOULD BE DISPATCHED ASAP. PRIORITIES 1F AND 1G SHOULD BE DISPATCHED/LOADED NO LATER THAN THE NEXT SHIFT. PRIORITIES 2A, 3C SHOULD BE LOADED ASAP IN PRIORITY ORDER. NOTES: 1. PRIORITY WILL VARY DEPENDING UPON NEED TO USE CARD WRITER—DURING UPDATE PR1 1C OTHER 2C. 2. PRIORITY WILL VARY DEPENDING UPON NUMBER OF CENTREX SYSTEMS AND CONSOLES PER CENTREX AFFECTED. 1C IF SEVERE, OTHERWISE 1F. 3. IF THE TROUBLE CAN BE STOPPED BY MAKING EQUIPMENT BUSY PRIORITY 3B. IF THE TROUBLE CANNOT BE STOPPED BY MAKING EQUIPMENT BUSY BUT DAILY OBJECTIVE WILL NOT BE MISSED, PRIORITY 3A. IF THE TROUBLE CANNOT BE STOPPED BY MAKING EQUIPMENT BUSY AND DAILY OBJECTIVE WILL OR HAS BEEN MISSED PRIORITY 1D. 4. IF RSS CUSTOMER PRICES MAY BE DIFFERENT, PRIORITY WILL REMAIN UNCHANGED. 5. FIELD TIME ONLY AT SCCS RESPONSIBLE FOR MAINTENANCE OF CUSTOMER PREMISES EQUIPMENT.
SP, CC, PS, CS, CPD(0/1), BUS(PS, CS, SPCS, R, T, MS(0,1))					77R	
DUPLEX OUTAGE		1A	AS REQD	AS REQD		
SIMPLEX OUTAGE		1C	1.	2.		
MCC, TTY, ROTL/PCI		2A	.5	1.		
MCW		NOTE 1		4.		
RA		1C				
NETWORK EQUIPMENT TROUBLE	NET				77R	
LSW, TSW, LSC, PUB, SCAB, AMA, RSS/RT, PDSP						
DUPLEX OUTAGE		1B	AS REQD	AS REQD		
SIMPLEX OUTAGE		1D	.5	1.		
LISW, TJSW						
DUPLEX OUTAGE		1E	AS REQD	AS REQD		
SIMPLEX OUTAGE		1G	.5	1.		
JSD, UTSD, SSD, MUT, CMT, AIOD, CPD(2,3,4...), PUC						
DUPLEX OUTAGE		1B	AS REQD	AS REQD		
SIMPLEX OUTAGE		1F	.5	1.		
CTX DL		NOTE 2	.5	1.		
RSS DL		1C				
DUPLEX		1D				
SIMPLEX						
NETWORK FAILURE	NF				77R	
ANALYSIS (PER TICKET)		NOTE 3				
TROUBLE LOCALIZATION						
ERR/FSCN		NOTE 3	.25	.75		
SUPF/FCG		NOTE 3	.25	.75		
RVFY		1C	.1	.15		
JUNCTOR GROUPING FRAME		NOTE 3	.5	.5		
KILLER GRID		1B	.3	.5		
LINE TROUBLE			NOTE 4	NOTE 4		
CUSTOMER TROUBLE REPORT (RESIDENCE)	CTRR	1C	.25	.5	77R	
COIN LINE REPORT	CLR	1C	.1	.5	77R	
CENTREX CONSOLE TROUBLE REPORT	CCTR	1D	.5 NOTE 5		77R	
WATS TROUBLE REPORT	CWTR	1C	.15	.5	77R	
INWATS TROUBLE REPORT	CITR	1C	.15	.5	77R	
EMERGENCY TRACE	ET	1B	.15		77R	
CUSTOMER TROUBLE REPORT (BUSINESS PBX OR CTX)	CTRB	1C	.3	.5	77R	

Fig. 2—Example of 1/1A ESS Switch Pricing Guide (3.04)

WORKTIMES FOR PRICING REPAIRS AND CLEANUP					
RELAYS					
REPAIR	RELAY TYPE	REPAIR TIMES (NOTE)	REPAIR	RELAY TYPE	REPAIR TIMES (NOTE)
Mechanically and Electrically Adjust a Relay	AC J, 186	30	Replace a Relay	AC J, 186	30
	Barrel 122, 125, 149, 162, 178	30		Barrel 122, 125, 149, 162, 178	30
	Flat Spring A, E, F, H, R, T, U, Y	30 55		Flat Spring A, E, F, H, R, T, U, Y	30 55
	Polar 206, 239, 280	55		Polar 206, 239, 280	35
	Pulsing L, N, S	50		Pulsing L, N, S	35
	Step-by-Step 221, 222, 223, 224, 225, 247, 248, 252	30		Step-by-Step 221, 222, 247, 248, 252, 223, 224, 225	30 45
	Supervisory B, G	50		Supervisory B, G	35
	Thermal 236, 271	35		Thermal 236, 271	30
	Trip 114, 198	30		Trip 114, 198	30
	Wire Spring AF, AG, AJ, AK	50		Wire Spring AF, AG, AJ, AK 12 or less contacts 24 contacts	55 90
Replace a Contact on a Relay (includes time to gauge contacts.)	Flat Spring (Weld)	35	Replace a Coil in a Relay	Wire Spring	50
	Polar (Screw)	45			
	Wire Spring (Weld)	40			
Note: 1. Times given in minutes unless otherwise noted.					

Fig. 3—Example of SXS Pricing Chart (3.04)

SCC Telephone Log

E-6831
(4-81)

Report		Affected Equip.	Details	Referred			Dispatched		Cleared		Cause Code	Disp Code
Number	Class	Line/Trunk		From	By	Time	Location	Time	Time	Date		
Tel. No./Trk/Item		Assoc. CA&PR		Call Back			Action	To	By			
10-001	A	09501000	CCD	MC	PAH	1135	SPV	1135	1250	0823	REF	-
966-1181		7-1674		955-5374	open. tip on MDF reterminated		DB	WD				
10-002	A	10017603	NDT	MC	DL	1322	SPV	1322	1630	0823	523	600
956-2206		10-1153		955-7535	Put in XLAT		AJS	CAP				
10-003	A	01201503	WILL NOT rotate	MC	EJH	1420	SPV	1530	1535	0823	174	523
939-6413		21-1501		956-8446	Put in XLAT correctly		DB	CAP				
10-004	A	05512302	talk in background	MC	DLW	0917	JRA	1213	1225	0824	611	800
966-4687		7-368		955-7535	NTF		AJS	CAP				
10-005	A	012114003	NDT	MC	DL	1437	JRA	1730	CH	0824	310	513
956-3313		51-2662		955-7535	chg LEN to 12114200		DR	CAP				
10-006												
10-007												
10-008												

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Fig. 4—Example of Telephone Input Log (Form E-6831) (4.06)

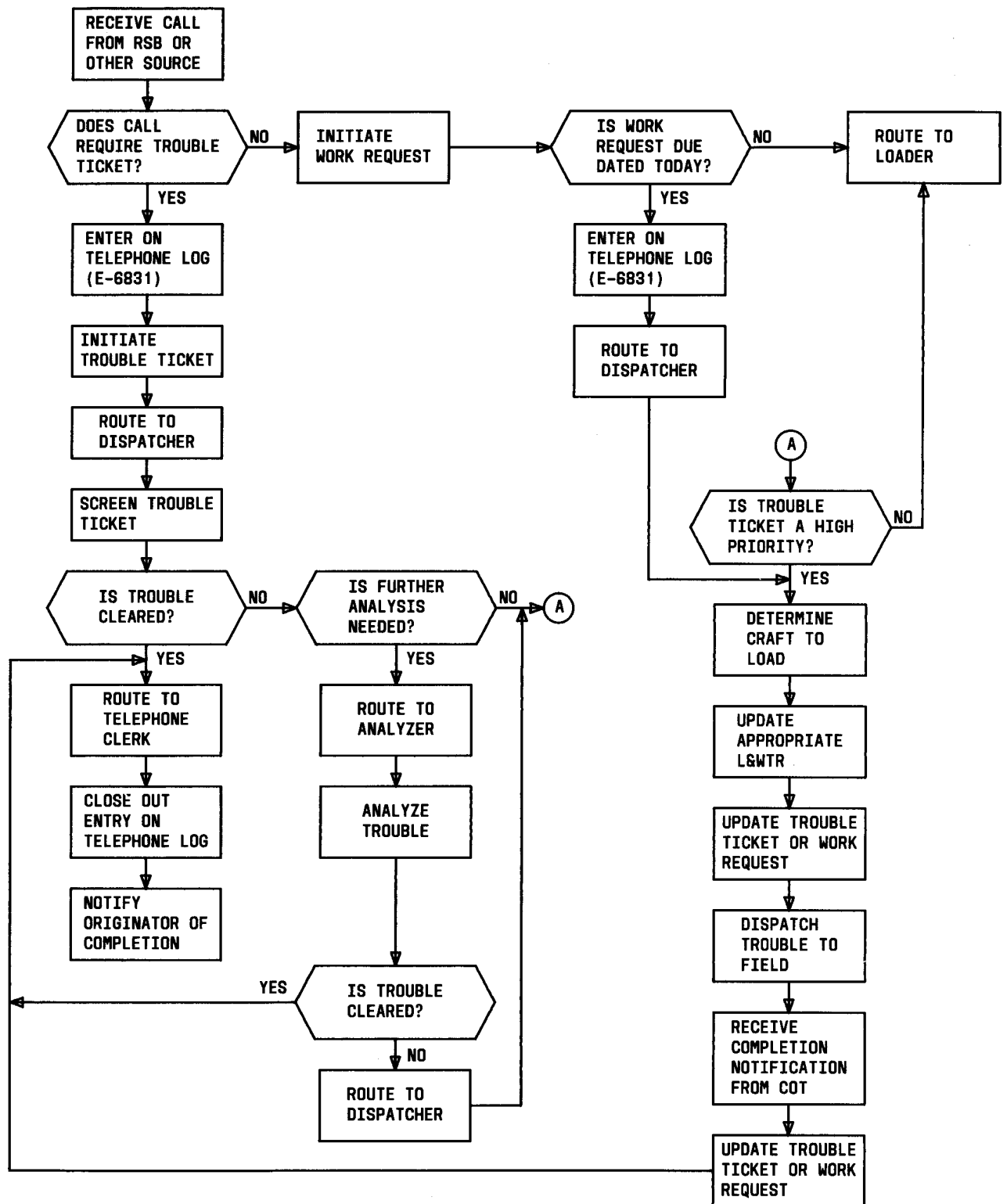


Fig. 5—Telephone Input Work Flow (4.12)

DOCUMENT INPUT LOG

E-10259
(9/78)

Office/Work Force: LEMMON
Period: 6/23 - 7/22

- Log Used For:
- Trunk Order
 - Special Service Order
 - Cable Transfer
 - Line Transfer
 - Miscellaneous (PROGRAMMABLE)
 - Work Summary

	Type Work	Item Ident Number	Related Ident No.	Control Office Or Input Source	Description Of Work	Date Rec'd	Test Or Due Date	No. Of Price Units	Est Cum Hours	Loading Date Time/ Priority	Load File	Act Load Date	Act Compl Date	Act Hours
1	MISC	WR #13-4		SUPVR	File drawings	6/23								
2	"	WR #13-5		SUPVR	Supply inventory	6/24								
3	"	WR #13-6		SUPVR	work unit inventory	6/24	6/30							
4	TRNG	SOUNDY		DIST	first aid school	6/25	7/10							
5	MEET	WR #15-10		SUPVR	safety meeting all people	6/26	6/30							
6	TmBE	#126		ANAL	replace relay	6/26								
7	TmBT	#93		TM	" "	6/27								
8	TmBE	#129		ANAL	trunk failure	6/29								
9														
10														
11														
12														
13														
14														
15														
16														
17														
18														
19														
20														

Fig. 6—Example 1 of Document Input Log (4.18)

DOCUMENT INPUT LOG

Office/Work Force: CAMELBACK
 Period: 6/23 - 7/22

Log Used For:

- Trunk Order
- Special Service Order
- Cable Transfer
- Line Transfer
- Miscellaneous
- Work Summary (Programmable)

	Type Work	Item Ident Number	Related Ident No.	Control Office Or Input Source	Description Of Work	Date Rec'd	Test Or Due Date	No. Of Price Units	Est / Cum Hours	Loading Date Time/ Priority	Load File	Act Load Date	Act Compl Date	Act Hours
1	TMBT	T#5-73		TM	101 to WB	6-23		1	1/4 / 1/4		P	7-2,3	7-3	2
2	TMBE	C#5-42		ANAL	7004 to FHL D	6-26		1	2 / 2 1/4		P	7-3	7-3	2 1/2
3	TMBE	C#5-43		ANAL	SW Repl	7-1		1	1 / 3 1/4		P	7-4,5	7-5	1 1/2
4	MISC	WR#16-3		Johns	File BSPs	7-2		1	2 1/4 / 3 3/4		P	7-5	7-5	1 1/4
5	TMBE	C#5-44		ANAL	Replace 10A GRD	7-3			1 / 4 3/4		P	7-7,8	7-8	1 1/2
6	TMBT	T#5-115		TM	7144 to Phx	7-4			1/4 / 5		P	7-8	7-8	1/4
7	MISC	WR#17-3		Johns	PACK and return P/E EQUIPMENT	7-7			1 1/2 / 6 1/2		P			
8	TRR	WR#17-5		Johns	Repair TPs	7-7		4	4 / 10 1/2		P	7-12	7-12	3 1/2
9	ERTN	E-120		Pm	mw supply	7-7		1	1 1/2 / 12		P			
10	ERTN	E-121		Pm	mw supply	7-7		1	1 1/2 / 13 1/2		P	7-12	7-12	2
11	ERTN	E-122		Pm	mw supply	7-7		1	1 1/2 / 15		P			
12														
13														
14														
15														
16														
17														
18														
19														
20														

Fig. 7—Example 2 of Document Input Log (4.20)

Central Office Log

E.5457
(8-80)

Office **OMEGA** Period **6-23 to 9-22**

Date	Tkt. No.	Time Rcvd.	From Or Report Class	Nature Of Report Or Activity	Disp. To	Closed Out	Eqpt. Group	Cause Code	Disposition Code
6-24	C5-41		E	LJ 070 CO LJJ 07002505 RST SES			NET		
-24	C5-42		E	LJJ 0300306L Rep Grid 0618789			NET		
-24	C5-43		E	TS-031 Rep Grid			NET		
-25	C5-45		E	003134 TG 71 SUPFS			TRUNK		
-25	C5-46		E	LJF030 Replace Grid			NET		
-26	C5-47		E	022073 TG35 MT 31-15-00 fails 75-0050-2451 came clear			TRUNK		
-26	C5-48		E	MJ SPL 36 Loose strap on frame			NET		

Fig. 8—Example of Central Office Log (4.30)

Work File Face Sheet

E-10210
(7-81)

Ref. BSP 190-130-130		Due Date 8/8/83		No. 7-265	
Office Work Force ALPHA		Originator Aiona		Recvd Date 7/21/83	
<input checked="" type="checkbox"/> In Progress File		<input type="checkbox"/> Demand		DVA Date 7/23/83	
<input type="checkbox"/> Pending Work File		<input type="checkbox"/> Due Date File		Sched Date/Time	
<input type="checkbox"/> Future Work File		<input type="checkbox"/> Scheduled File		Earliest Start Date 7/21/83	
		<input type="checkbox"/> Programable File		PT Date 8/4/83	
Item Identification TO 8366.12		TGN No.		Latest Start Date 8/4/83	
Description Of Work Add two 2-way trunks to Phoenix 4E		Related Items		Control <input type="checkbox"/> Yes <input type="checkbox"/> No	
No. Of Priced Units FRM + EQ chk		6 jumpers		2 ERMO	
				overall tests	

Coordination	Frame	Toll	Intermediate Offices	End Office 4E
Contact/Date	Pat 7/21			HH 7/21
Tel. No.	888-6222			345-6863
Promised Date	7/26			8/3
Work Compl. Date	7/26			8/4

Load Step	Work Type Code	Start Date	Load Date	Assigned	Status	Jeopardy	Time	
							Estimated	Actual
1	FRCHX	7/22	7/22	HAA	COMPL		-	-
2	EQCHX	7/22	7/23	PAT	COMPL		3/4	3/4
3	Jumpers	7/26	7/26	DAS	COMPL		3/4	1/2
4	ERMO	7/23	7/23	MA	COMPL		1 1/2	2
5	TST	8/3	8/4	HAA	COMPL		1/2	1 1/4
6								
7								
8								
9								

Date	Time	Remarks

Update ETL 8/4 W. J. D	Post WU 8/4 W. J. D	Date Compl Notice Sent 8/4 W. J. D
----------------------------------	-------------------------------	--

Please Tabulate & Post On Reverse Side ORIGINATOR COPY FCC Item No. 48n

Fig. 9—Example of Work File Face Sheet (4.32)

EMPLOYEE MARY WRIGHT			PR#	TRICK	DATE 5-9-83	E-6843-A PG 1 OF 1	
SOC. SEC. OR ID # 527-23-0926			CLOCK HOURS WORKED A.M. 0800 P.M. 1700		SUPERVISOR IRWIN		APVL.
REG.	EXT. (O.T.)	PRE.				EXCEPTIONS	
						CODE	HOURS
CODE	HOURS	GEO. CODE	EST-KC-RO	REMARKS			
19	1						
11	1/2						
13	13/4						
12	13/4						
42	1 1/2						
17	1 1/2						

LOADING RECORD

	WORK TYPE	ITEM IDENT	START TIME	END TIME	WORK CODE	DISP CODE	OFFICE	EST-KC-RO REMARKS	ACT TIME	EST TIME
1	TRVL	SCC-CAMELBACK								
2	TRIK									
3	CM									
4	ERTN	E-114								
5	TMBT	T# 5-59								
6	TMBT	T# 5-61								
7	TDEG	WR# 116-13								
8	TMBE	C# 5-53								
9	TRVL	CAMELBACK-SCC								
10										
11		1	0800	0830	19	C			.50	
12		2	0830	0900	11	C			.50	
13		3	0900	1015	13	F		TA # 60	1.25	
14		4	1015	1100	12	F			.75	

15		4	1100	1230	13	C			.50	
16		MEAL	1130	1230						
17		5	1230	1300	42	C			.50	
18		3	1300	1345	12	NTF		TA # 63	.75	
19		6	1345	1430	42	F			.75	
20		6	1430	1445	42	F			.25	
21		7	1445	1530	17	NC			.75	
22		3	1530	1545	12	F		TA # 64	.25	
23		7	1545	1630	17	50%			.75	
24		9	1630	1700	19	C			.50	
25										
26										
27										
28										
29										
30										

Fig. 10—Example of Load and Work Time Record (7.02)

SCC Work Request

E-6838
(7-81)

Ref. BSP - 190-130-130		No. 7-25	
Work Force/Office CENTRAL		Shift Preference D2	Priority
Earliest Start Date	Latest Start Date 7/22	Due Date 7/22	Estimated Time 10 min
Acct. Code/Geo. Code/Area 89000	Est./Order No. 8396.12	<input type="checkbox"/> Demand	<input checked="" type="checkbox"/> Due Date 7/22
Work Type Code MISC	Completion Report Req. <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Programmable	<input type="checkbox"/> Scheduled
Orig By John	Tel. No. 835-0001	Date issued	

Work Required:

check cable and equipment Locations for
vacancy

18 x 1263

18 x 1264

ERM0 2263
2265

RR1250 CKT 4
1250 CKT 5

Action Taken

ALL terminals vacant
Removed dead jumper on 18x1263

Date	Item	Employee	Hours Charged	% Work Compl.	Compl. Date
7/22		EAR	5 min	100%	7/22

Return To: Originator File

ORIGINATOR COPY

FCC Item No. 48n

Fig. 11—Example of SCC Work Request (Vacancy Check) (4.36)

SCC Work Request

E-6838
(7-81)

Ref. BSP - 190-130-130		No. <u>8-4</u>	
Work Force/Office <u>Sunrise</u>		Shift Preference <u>D2</u>	Priority
Earliest Start Date <u>8/15</u>	Latest Start Date <u>9/20</u>	Due Date <u>9/20</u>	Estimated Time <u>2</u>
Acct. Code/Geo. Code/Area	Est./Order No.	<input type="checkbox"/> Demand	<input type="checkbox"/> Due Date _____
Work Type Code <u>misc</u>	Completion Report Req. <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Programmable	<input type="checkbox"/> Scheduled _____
Orig By <u>Roger Kuhn</u>	Tel. No. <u>286-5811</u>	Date Issued <u>8/15</u>	

Work Required:

Clean up storeroom at Sunrise office.
Sort out spare equipment and return excess.

Action Taken

Cleaned storeroom, cataloged relay stock and returned all excess.

Note: Several stacks of prints are in need of filing. Please generate new work request. Will take about 1-1/2 hours.

SLD

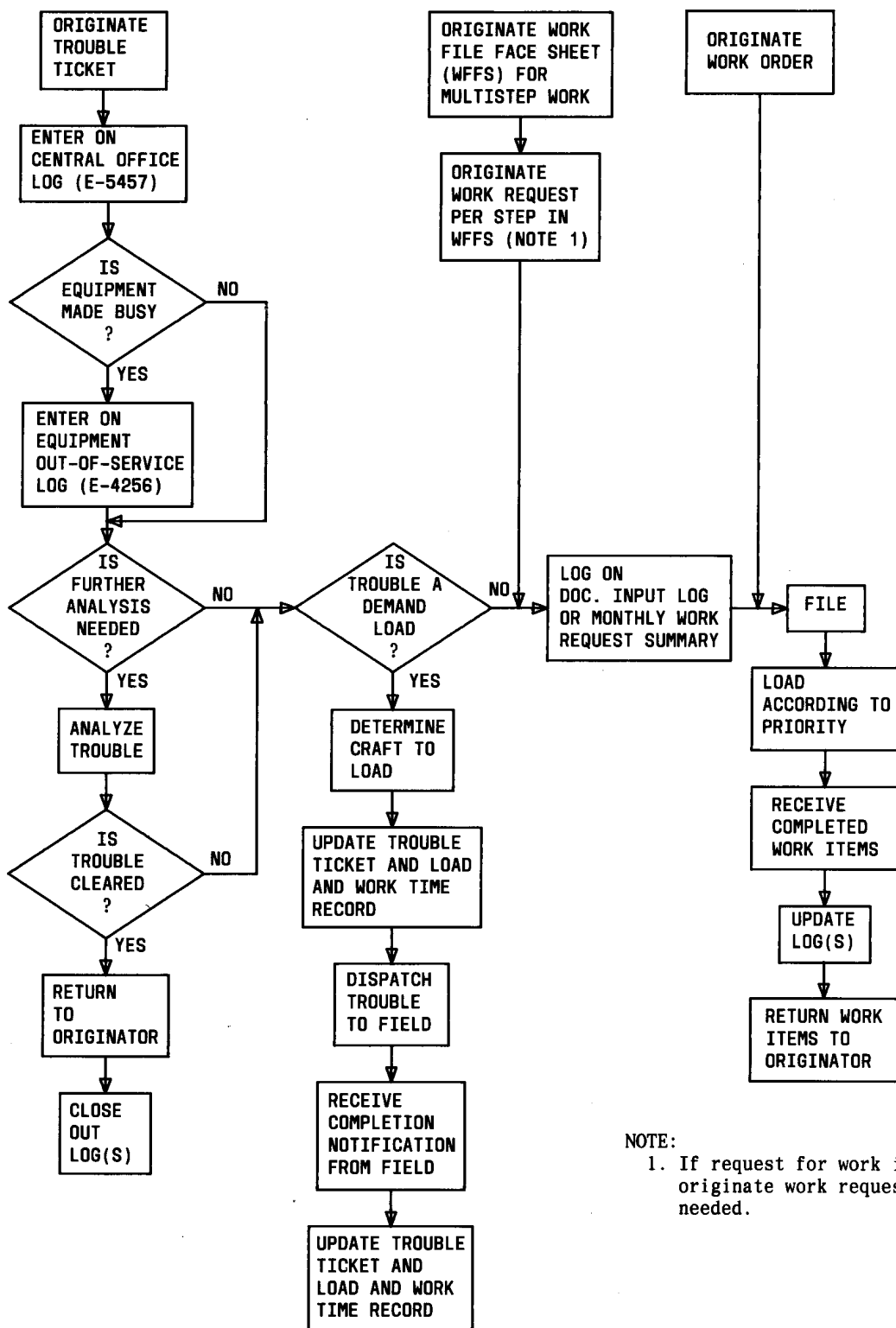
Date	Item	Employee	Hours Charged	% Work Compl.	Compl. Date
<u>8/29</u>		<u>SLD</u>	<u>2 1/2</u>	<u>100%</u>	<u>8/29</u>

Return To: Originator File

ORIGINATOR COPY

FCC Item No. 48n

Fig. 12—Example of SCC Work Request (Work to be Loaded) (4.36, 4.39)



NOTE:
 1. If request for work is a single step, originate work request - no WFFS is needed.

Fig. 13—Document Input Work Flow (4.40)

Loading Guide

E.6836
(5-83)

Type Work	Work Assignment Preference																Work Or Distribution Code (s)
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
TA	D1	D2	E1	F1													
CET	D1	D2	E1														
NET	D1	D2	E1														
TJ	D1	E1															
NF	D1	E1															
TMBE	D2																
TMBT	D2																
TB	D2	D1															
TOEQ	D2																
ERTN	D2	NI															
PRTN	D2	NI															
SST	D1	D2	E1														
UPD	D2	E1	NI														
FRTN	F1																

Demand Work Estimate

Job Assignment	Total Demand Estimate							TRIK Assignment Hours							Corrective Mtc. Hours							Service Order Hours						
	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
D1		1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2		1/2	1/2	1/2	1/2	1/2	1/2		1	1	1	1	1	1							
D2																												
E1																												
NI																												
F1		6	5	4	5	5 1/2			1/2	1/2	1/2	1/2	1/2		1/2	1/2	1/2	1/2	1/2		5	4	3	4	4 1/2			

FCC Item No. 85

Fig. 14—Example of Loading Guide (6.19)

TEST AND INSPECTION WORK ORDER AND RECORD

E-5452 16-68

OFFICE Longbranch

ASSIGNMENT OR JOB NO. 388

ASSIGNMENT DATA					PROGRESS REPORT							
B.S.P. NO. TEST LETTER OR PAR. <u>IM-1A001</u>					DATE	FROM EQPT. UNIT		TO EQPT. UNIT		TIME SPENT (MINUTES)		BY
EQUIPMENT <u>Central controls</u>						TEST		REPAIR				
					WORK DESCRIPTION <u>Standby cc DGN and EA Tests</u>					<u>8/1</u>	<u>CC0</u>	<u>+</u>
					<u>8/4</u>	<u>CC0</u>	<u>+</u>	<u>CC1</u>		<u>30</u>		<u>PAH</u>
					<u>8/5</u>	<u>CC0</u>	<u>+</u>	<u>CC1</u>		<u>30</u>	<u>30</u>	<u>PAH</u>
					<u>8/10</u>	<u>CC0</u>	<u>+</u>	<u>CC1</u>		<u>30</u>		<u>PAH</u>
FROM EQPT. UNIT		TO EQPT. UNIT		TOTAL UNITS	CL SHIFT		FR					
<u>CC</u>	<u>0</u>	<u>CC</u>	<u>1</u>	<u>2</u>	<u>MW</u>		<u>W</u>					
ASSIGNED TO		TO BE STARTED		TO BE COMPLETED								
<u>PAH</u>		<u>8/11/83</u>										

WORK RECORD					
EQPT. UNIT		TROUBLE APPEARANCE	ACTION TAKEN	REPAIR TIME	BY
<u>cc</u>	<u>1</u>	<u>Failed DGN</u>	<u>Repaired AH5 CP at Loc 62-12</u>	<u>30</u>	<u>PAH</u>

TOTAL TROUBLE APPEARANCES _____

NO. SHEETS _____ SHEET NO. _____

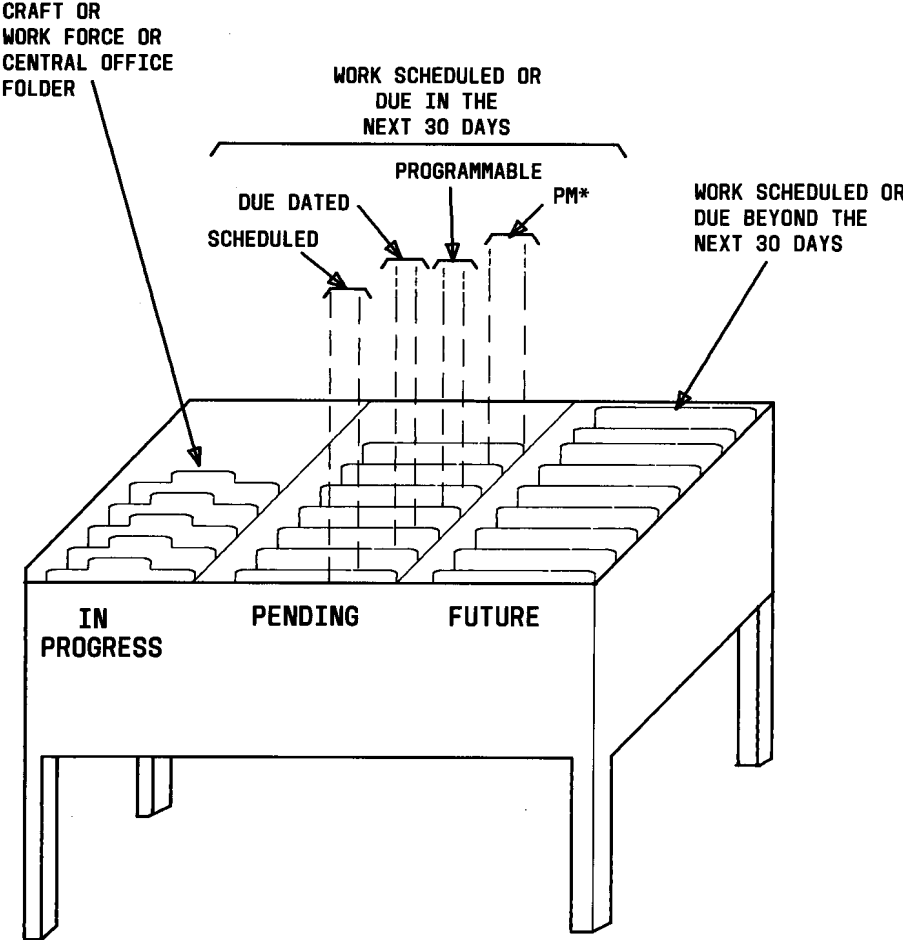
Fig. 15—Example of T&I Work Order and Record (4.46)

SCC MONTHLY T&I WORK LIST

WORK FORCE LongbranchMONTH & YEAR Aug 1983Page 1 of 1

JOB NO.	TYPE WORK CODE	CLASS FREQ.	PRIOR	LOADED DATE/TO	EST TIME	ACTUAL TIME	COMPLETED DATE/BY	REMARKS
3	ERTN	mw3	2	8/3 MA	1 1/2	1	8/3 MA	
4		mw24	4		2			
9		mw6	3		4			
15		mw6	3		2			
16		mw12	3		3			
17	↓	mw12	3	8/3 MA	2 1/2	2	8/3 MA	
32	TRTN	mw3	2	8/2 HA	3	3 1/2	8/2 HA	
33		mw3	2	8/15 DS	1			
34		mw3	2		1 1/2			
51	↓	mw3	2		1 1/2			
70	PRTN	mw1	1	8/10 WD	1/4 wk 1 hr	1/4 - 1/2	8/10 WD	
71		mw1	1	8/10 WD	1/2	3/4	8/10 WD	
72		mw3	2	8/10 WD	2	2	8/10 WD	
73		mw3	2		1			
74		mw12	2		1 1/2			
75	↓	mw12	3		3			
95	CRTN	mw12	3		2			Requires Coord.
96	↓	mw12	3		1 1/2			Requires Coord.
110	TRTN	mw12	3		1			
111		mw12	3		1 1/2			
112	↓	mw12	3		3			
137	FRTN	mw12	3		1			
138	↓	mw3	2	8/10 JB	2 1/2	3	8/10 JB	
TOTAL PER PERIOD								

Fig. 16—Example of SCC Monthly T&I Work List—Form E-6835 (4.47)



* PM = PREVENTIVE MAINTENANCE

Fig. 17—Work File System (5.01)

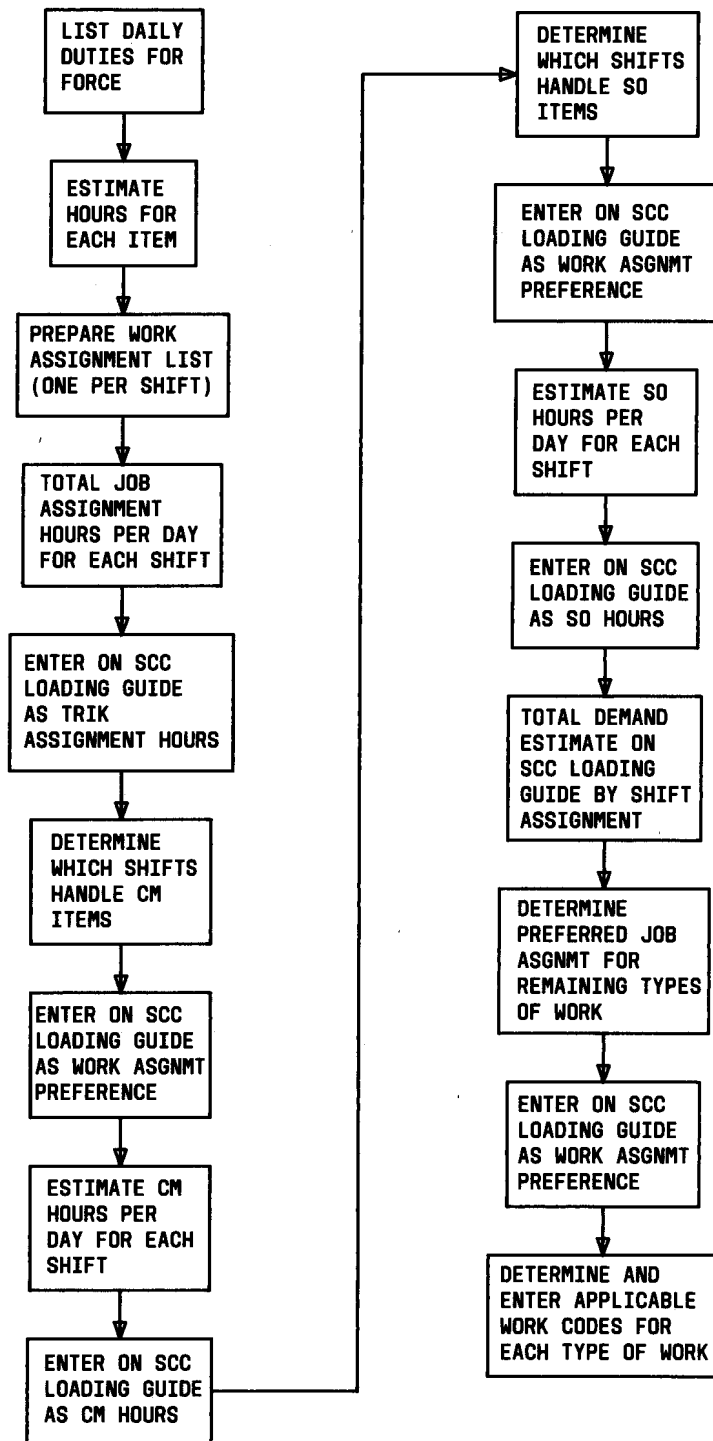


Fig. 18—Job Assignment Procedures (6.01)

Work Inventory Record

E-5847
(5-83)

		Shift Or Job Or Group	SASSA		Date
				MAY '83	
Reference	Work Item Description	No. Of Units	Freq.	Time Per Unit	Time Per Period
	TRIK				
	Activate office alarms "in"				3
	Turn on soldering irons				3
	Respond to all alarms, write tickets				15
	Keep maintenance center clean				15
	Call completed and made busy tickets to SCC				20
	Tour switchroom, check made busies				30
	Check status of loaded items, call SCC		1530		20
	Read, record cable air volume	0815			
	Call 955-5374				10
	Read, record, plant register				15
	Clean, maintain soldering iron tips				15
	Tour frame, clean shoes, replace heat coils				10
	Read, record power plant float voltages				10
	SUBTOTAL				166
	CORRECTIVE				
	Fix troubles: Called reports				160
	All alarms				60
	SUBTOTAL				220
	SERVICE ORDERS				
	Sort				15
	Prerun				150
	Complete				60
	Test				20
	Correct with Repair Bureau				20
	Keep frame area neat, clean				15
	Empty frame scrap wire bags				10
					290
	Total				676

FCC Item No.85

Fig. 19—Example of Work Inventory Record (6.03)

Work Inventory Record

E-5847
(5-83)

		Shift Or Job Or Group D-1			Date MAY '83
Reference	Work Item Description	No. Of Units	Freq.	Time Per Unit	Time Per Period
	SHIFT HOURS 0730 to 1600				
	MEAL 1130 to 1200				
	TRIK				
	Activate office alarms "in"				3
	Turn on soldering irons				3
	Respond to all alarms, write tickets				15
	Keep maintenance center neat				15
	Call completed and made busy tickets to SCC				20
	Tour switchroom, check made busies				30
	Check status of loaded items, call SCC				20
	SUBTOTAL				106
	CORRECTIVE				
	Fix troubles: Called reports				160
	All alarms				60
	SUBTOTAL				220
	SERVICE ORDERS				
	None				
Total					326

FCC Item No.85

Fig. 20—Example of Work Inventory Record (D-1) (6.11)

Work Inventory Record

E-5847
(5-83)

Shift Or Job Or Group					Date
D-2					MAY '83
Reference	Work Item Description	No. Of Units	Freq.	Time Per Unit	Time Per Period
	SHIFT HOURS 0800 to 1630				
	MEAL 1200 to 1230				
	TRIK				
	Read, record cable air volume	0815			
	Call 955-5374				10
	Read, record plant register				15
	Clean, maintain soldering iron tips				15
	Tour frame, clear shoes, replace heat coils				10
	Read, record power plant float voltages				10
	SUBTOTAL				60
	CORRECTIVE				
	NONE				
	SERVICE ORDER				
	Sort				15
	Prerun				150
	Complete				60
	Test				20
	Correct with Repair Bureau				20
	Keep frame area neat, clean				15
	Empty frame scrap wire bags				10
	SUBTOTAL				290
				Total	350

FCC Item No. 85

Fig. 21—Example of Work Inventory Record (D-2) (6.11)

Work Inventory Record

E-5847
(5-83)

		Shift Or Job Or Group D-3			Date MAY '83	
Reference	Work Item Description	No. Of Units	Freq.	Time Per Unit	Time Per Period	
	SHIFT HOURS 0830 to 1700					
	MEAL 1230 to 1300					
	TRIK					
	NONE					0
	CORRECTIVE					
	Fill in, assist D-1 called trouble alarms					20
						20
	SUBTOTAL					40
	SERVICE ORDER					
	Fill in; assist D-2 complete SO					10
	Assist D-2 Prerun MDF jumper					30
						40
					Total	80

FCC Item No.85

Fig. 22—Example of Work Inventory Record (D-3) (6.11)

Work Assignment List

E-5848
(5-83)

Shift Or Job Assignment

D-1

Work Items

1. Activate office alarms "in."
2. Turn on soldering irons.
3. Respond to all alarms, write tickets.
4. Keep maintenance center neat.
5. Call completed and made busy tickets to SCC.
6. Tour switchroom and check made busies.
7. Check status of loaded items.
8. Fix troubles: Called reports and all alarms.

Fig. 23—Example of Work Assignment List (6.12)

Work Assignment List

E-5848
(5-83)

Shift Or Job Assignment

D-2

Work Items

1. Read, record cable air volume (955-5374).
2. Read, record plant register and power plant float voltages.
3. Clean, maintain soldering iron tips.
4. Tour frame, clean shoes, and replace heat coils.
5. Sort, prerun, complete, and test service orders.
Connect with Repair Bureau.
6. Maintain frame area neat and clean, empty frame
scrap and wire bags.

FCC Item No. 85

Fig. 24—Example of Work Assignment List (D-2) (6.12)

Work Assignment List

E-5848
(5-83)

Shift Or Job Assignment

D-3

Work Items

1. Assist in called trouble alarms.
2. Assist in completing service orders.
3. Assist in prerun MDF jumpers.

Fig. 25—Example of Work Assignment List (D-3) (6.12)


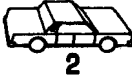
SUNRISE NORTH	SUNRISE SOUTH	MOUNTAIN	COOLIDGE	WATERVILLE	SCC
D. WILSON 870-7839	D. WILSON 870-7535	D. WILSON 871-7194	W. DUNBAR 544-8841	W. DUNBAR 544-8194	OFFICE CONTROL
D1	D1 BUSHEY	D1	D1	E1	MOHSEN
D2 HART	D2	D2	D2	E2 CHAPMAN	ANALYSIS
N1		E1 LEE	D3 CONRAD	E3	LIVINGSTON
 1		E2 WASHBURN	 2		DISPATCH
VAC REED	SCHOOL HALL GLENN			VAC VYECHI	SALYER
					TRUNK
					SOUNDY
					LASSUY
					SIMON

Fig. 26—Example of EM-SPC SCC Personnel Status Board (8.02)

MARKER GROUP	NNX	OUT-OF-SERVICE		DTS	STUCK SDR	MKR 2TF	TRAN 2TF	OFF OVFL	LINK RLS	IML	EQUIP IRREG	EQUIP CODE 5	REMARKS
		EQUIP	TRUNK										
Downtown MG1	442-444	CM 0 or 00-0	DTX 1 MRN 52				↓						WE Job 3782 Mop 8869 Step 2
Downtown MGO	289		TRA 2,4 DTX 50, 75										
Uptown MGO	964-965	Drm 1			↑				→ 90				02 Cable Cut

Fig. 27—Example of EM-SCC Office Status Board (8.04)

OFFICE	GENERIC	NNX	LATEST BWM	ACTIVITY	STATUS
GREER N.	1ESPB7	638	83-0067	CN in progress CS-4	
GREER S.	1ESPB6	642			

Fig. 28—Example of SP-SCC Office Status Board (8.07)

LOCATION	EFFICIENCY PERFORMANCE			TODAY'S LOAD				CODE 5s	REMARKS
	LAST MONTH	LAST WEEK	PERCENT DISCREPANCY	LOADING EFFICIENCY RATE	SERVICE ORDER HOURS	TOTAL AVAILABLE HOURS	LOADABLE HOURS		
SOUTH	52%	55%	21%	64%	47	64	9	6	B. HART LOANED TO LVNGTN
MAIN	54%	62%	18%	66%	22	24	2	3	
LVNGTN	55%	49%	24%	64%	38	32	0	3	50 LINE PBX CUT 530 P 7-1-77

Fig. 29—Example of Frame Status Board (8.09)

WORK SCHEDULE
(Sunday To Saturday Work Week)

Period _____ Posted _____ Time _____
Date _____

Location _____
Force _____

Name	Date							Date							Date							Date														
	Req. Shift	Sun.	Mon.	Tue.	Wed.	Thu.	Fri.	Sat.	Req. Shift	Sun.	Mon.	Tue.	Wed.	Thu.	Fri.	Sat.	Req. Shift	Sun.	Mon.	Tue.	Wed.	Thu.	Fri.	Sat.	Req. Shift	Sun.	Mon.	Tue.	Wed.	Thu.	Fri.	Sat.	Req. Shift	Sun.	Mon.	
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D = Day Shift
 E = Evening Shift
 N = Night Shift
 O = No Work Scheduled
 X = Changed Entry

○ = Premium Payment
 — = Work Scheduled 8 Hrs.

Notes: _____

Fig. 31—Example of Form E-6837—Work Schedule (4.42)