UNITED STATES POSTAL SERVICE

Maintenance Operations Support

Handbook MS-63

August 1996
Transmittal Letter 7

A. Explanation. This handbook is intended for employees who support maintenance operations.

B. Distribution

1. Initial. This handbook is distributed to selected Headquarters and Headquarters field units, Area offices, and processing and distribution centers.

2. Additional Copies. Order additional copies from Material Distribution Centers (MDCs), using Form 7380, *MDC Supply Requisition*.

C. Comments and Suggestions. Address all comments and suggestions about the content of this handbook in writing to:

ENGINEERING
MAINTENANCE POLICIES AND PROGRAMS
US POSTAL SERVICE
8403 LEE HIGHWAY
MERRIFIELD VA 22082-8101

D. Effective Date. This edition replaces transmittal letter 6. This handbook is effective August 31, 1996.

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Vice President
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1 Introduction

11 MAINTENANCE POLICIES

111 Organizational Support

POLICY—Consistent with the goals and objectives of the Postal Service, the policy of the maintenance organization is to provide the support that ensures proper operation and availability of Postal Service buildings and equipment, and a safe, environmentally compliant, and energy efficient working environment. To achieve world class status, the maintenance organization coordinates its activities to meet and surpass the overall objectives of the parent organization.

112 Coordination

POLICY—The policy of the maintenance organization is to update cost control programs, provide specialized support to field activities, and establish and coordinate closer cooperation with organizations involved in planning, procuring, and deploying building and plant systems.

The long lead time required for maintenance to select and train personnel makes it imperative that coordination start in the early stages of equipment installation planning.

12 MAINTENANCE OBJECTIVES

121 Reliability

POLICY—The policy of the maintenance organization is to ensure that Postal Service equipment is reliable, maintainable, safe, and properly configured to meet operational requirements.

Maintenance functions that support equipment operational requirements include predictive, preventive, corrective, and operational maintenance; performance analysis; and overhaul, modification, and testing. Proper planning and scheduling ensures efficient use of maintenance resources and reduces unscheduled maintenance activities.

122 Controlling Costs

POLICY—Managers are required to effectively control maintenance costs and improve equipment performance.

The Maintenance Activity Reporting and Scheduling (MARS) system provides uniform reporting of cost and performance information for maintenance management at the local level. Maintenance program data includes labor information, material expenditures, equipment performance data, preventive maintenance schedules, inventory control, and spare parts replenishment. Equipment performance information includes parts failure data that is provided to organizations responsible for the design, procurement, and modification of equipment.

13 MAINTENANCE METHODOLOGIES

131 World Class Maintenance (WCM)

World Class Maintenance is not a singular prescriptive philosophy. Rather, it is a maintenance philosophy that incorporates one or more different methodologies, including preventive maintenance, predictive maintenance, total quality maintenance, total productive maintenance, reliability-centered maintenance, and life cycle support planning. It is a comprehensive process that integrates production, operations, and maintenance. WCM calls for regular benchmarking, comparing a facility against its past performance or against other successful facilities for continuous improvement. Benchmarking can be broad based, comparing one department to another, or focused, looking at a specific function, such as inspection, troubleshooting, material management, or professionalism. The inherent qualities of WCM include a focus on the quality process, an awareness of

and attitude toward competition, and the level of automation technology necessary to remain competitive in the domestic and world markets.[1]

132 ## Reliability Centered Maintenance (RCM)

Reliability Centered Maintenance, a process developed through reliability engineering, consists of reliability theory concepts and failure mode and effects analysis. Ideally, RCM drastically cuts routine inspection and maintenance time and improves system reliability and availability. One of the main objectives of RCM is to work closely with vendors to match a facility's equipment needs with the equipment design specifications. This includes equipment improvements through re-engineering, either in-house or with vendor cooperation, and by analyzing equipment failure modes. RCM involves identifying the maintenance required to support a system or piece of equipment throughout its life cycle, analyzing equipment failure modes and the effectiveness of maintenance actions, and then eliminating any unnecessary maintenance.

The four features that characterize RCM are the preservation of *system* function, the identification of failure modes that can defeat system functions, the assignment of priority to failure modes, and the selection of only applicable and effective PM tasks.[2]

133 ## Total Productive Maintenance (TPM)

Total Productive Maintenance is a process based on a team approach that combines the talents of machine operators, management, and the maintenance trades to eliminate breakdowns and maximize overall building systems and equipment effectiveness. The TPM philosophy involves every employee in an organization and is a long-range approach to achieving zero defects by focusing on actual equipment performance. TPM utilizes small autonomous groups to determine how efficiently maintenance teams and systems operate. Comparing these figures with accepted standards of optimum operations presents an opportunity for a department to implement a thorough system of preventive maintenance for the entire life cycle of equipment, eliminate breakdowns, and realize higher efficiency goals.

[1]Terry Wireman. *World Class Maintenance Management*. (Industrial Press, 1990).
[2]Anthony M. Smith. *Reliability Centered Maintenance*. (McGraw-Hill Inc., 1993).

By changing maintenance procedures and improving the performance of inefficient equipment, departments can eliminate losses in equipment performance, including downtime losses resulting from unscheduled breakdowns and scheduled down time for setup and adjustment; speed losses attributed to idling, minor stoppages, and reduced processing speed; and defects caused by excessive rejects and yield reduction during startup. Elimination of these losses provides an opportunity to maximize output, minimize cost, and achieve increases in productivity.[3]

134 **Total Quality Maintenance (TQM)**

Total Quality Maintenance, based on the total quality management philosophy, emphasizes customer service, with the facility occupant as the primary customer, and regularly scheduled assessments of service quality. In manufacturing, quality refers to zero defects in the final product; in facility maintenance, it centers on reduced equipment problems, reduced response time, and user satisfaction. The Total Quality Maintenance philosophy is virtually synonymous with Total Productive Maintenance.

135 **Predictive Maintenance (PdM)**

Predictive Maintenance is a type of preventive maintenance that uses non-intrusive, condition-directed monitoring techniques to forecast equipment failures. Forecasts are based on the actual condition of equipment and historical statistical data such as the mean-time-to repair (MTTR) and mean-time-between-failure (MTBF). The analysis generally is conducted through trending of a parameter to monitor the condition of equipment components utilizing technologies such as vibration analysis, acoustic leak detection, thermographic scanning, spectrographic oil analysis, and flow measurement. PdM focuses on the planning and scheduling of equipment repairs prior to the predicted component failure, so that equipment can be disassembled, repaired, and returned to service without interrupting operations. Benefits of PdM include increases in equipment availability, significant reductions in operating and downtime costs, improved equipment performance, the potential for improved system design standards, and the opportunity to develop safer maintenance work practices.

[3]Seichi Nakajina. *Total Productive Maintenance.* (Productivity Press, 1988).

136 ## Preventive Maintenance (PM)

Preventive maintenance is the planned, systematic inspection, cleaning, lubrication, servicing, and custodial care required to retain the functional capabilities of buildings and equipment. The objective is to improve and prolong building and equipment life, avoid unplanned maintenance activity, and lower overall maintenance costs by eliminating all breakdown maintenance and significantly reducing the number and frequency of corrective maintenance actions.

PM can be broken down into four task categories.[4]

1. Time-directed (TD) tasks: Performing PM tasks at predetermined intervals with the objective of directly preventing or retarding a failure. TD tasks are basically overhaul actions. Any planned intrusion into equipment, even an inspection, is an overhaul-type action and may be considered a TD task.

2. Condition-directed (CD) tasks: Identifying a measurable parameter, such as belt wear, that correlates with failure onset, and specifying a value of that parameter when action may be taken before full failure occurs. CD tasks are non-intrusive and are an integral part of predictive maintenance. A condition-based maintenance process involves the continual monitoring of all major components or systems, with any deviation from a normal range of tolerances causing an alarm to be generated automatically.

3. Failure finding (FF) tasks: Inspecting a system, subsystem, or piece of equipment to determine if it is in working order and to identify potential hidden failures. Only discovered deficiencies are repaired to avoid failures when performing FF tasks.

4. Run-to-failure (RTF) tasks: Allowing equipment to run until it fails, with no preventive maintenance performed. RTF tasks normally are used under the following circumstances: when proper safeguards are in place to avoid accidents; when no PM task will do any good regardless of how much money is spent; if a potential PM task is too expensive and it is less

[4]Anthony M. Smith. *Reliability Centered Maintenance*. (McGraw-Hill Inc., 1993).

costly to replace a component or subsystem when it fails; and when equipment is of such low priority that when a failure occurs, there is little, if any, impact on operations.

A comprehensive preventive maintenance program usually is the first step toward a structured maintenance management program. It utilizes regular, scheduled evaluation of critical plant equipment and systems to identify potential problems and immediately schedule maintenance tasks to eliminate breakdowns, prevent further degradation in operating condition, and lower overall life cycle costs. Preventive maintenance incorporates predictive maintenance, time-directed maintenance tasks, and corrective maintenance to provide comprehensive support for all plant and manufacturing systems.

Note: Headquarters-published information provides guidelines for standard postal and plant equipment. Local operating conditions may require adjustments, but all deviations must be documented to show the resulting cost and be approved by the installation head. When Headquarters guidelines are not available, preventive maintenance should be developed locally.

137 ## Corrective Maintenance (CM)

Corrective maintenance is a proactive approach that focuses on planned tasks to maintain all critical plant equipment and systems in optimum operating condition. Successful implementation of corrective maintenance includes the following fundamental support efforts.

1. *Accurate identification of the root cause of equipment problems.* Without this ability, corrective action cannot be planned or scheduled.

2. *Planning and scheduling repair activities to minimize both cost and interruption of the production schedule.* Proper planning and scheduling allows complete repair of the root cause and resultant damage caused by identified problems.

3. *Proper safe repair procedures.* Repairs must be properly completed and implemented. In many cases, poor maintenance or repair practices result in more damage to critical equipment and systems than the observed failure mode. It is crucial that all repairs are made by personnel who have the necessary knowledge, skills, abilities, repair parts, and tools required to return the equipment or system to as-new condition.

4. *Adequate time to repair.* Plant management must provide adequate maintenance windows for all critical plant systems before either preventive or corrective maintenance can be effective. Equipment maintained in as-new condition experiences significantly lower life cycle costs compared to equipment maintained in the breakdown mode.

5. *Verification of repair*. The verification process ensures that the repair was properly made and that all incipient problems, deviations from optimum operating conditions, or other potential limitation to maximum production capacity and reduced product quality have been corrected.[5]

   Although corrective maintenance is a component of a comprehensive preventive maintenance program, the objective of any maintenance program should be the elimination of machine equipment and system problems that require corrective actions.

[5]R. Keith Mobely. *Maintenance Engineering Handbook.* (McGraw-Hill, 1995).

2 Responsibilities

21 HEADQUARTERS

211 Maintenance Policies and Programs (MPP)

POLICY—Maintenance Policies and Programs (MPP) develops and provides maintenance policies and guidelines.

212 Maintenance Technical Support Center (MTSC)

POLICY—The Maintenance Technical Support Center (MTSC) provides information, methods, technology, and technical support.

22 AREA

POLICY—Maintenance Support complies with and implements Headquarters maintenance policies and programs within the Area.

Area managers may delegate to their staffs the authority to oversee the performance of the maintenance activities, but retain the final accountability for the success or failure of the program. The main goal is to provide quality and cost-effective maintenance to meet operational requirements.

23 LOCAL

POLICY—Local maintenance complies with and implements Headquarters maintenance policies and programs through the Area office.

The structure of each maintenance organization is affected by such factors as major and minor equipment, area and configuration of the buildings, and scope of service rendered to other offices (see Exhibit 23).

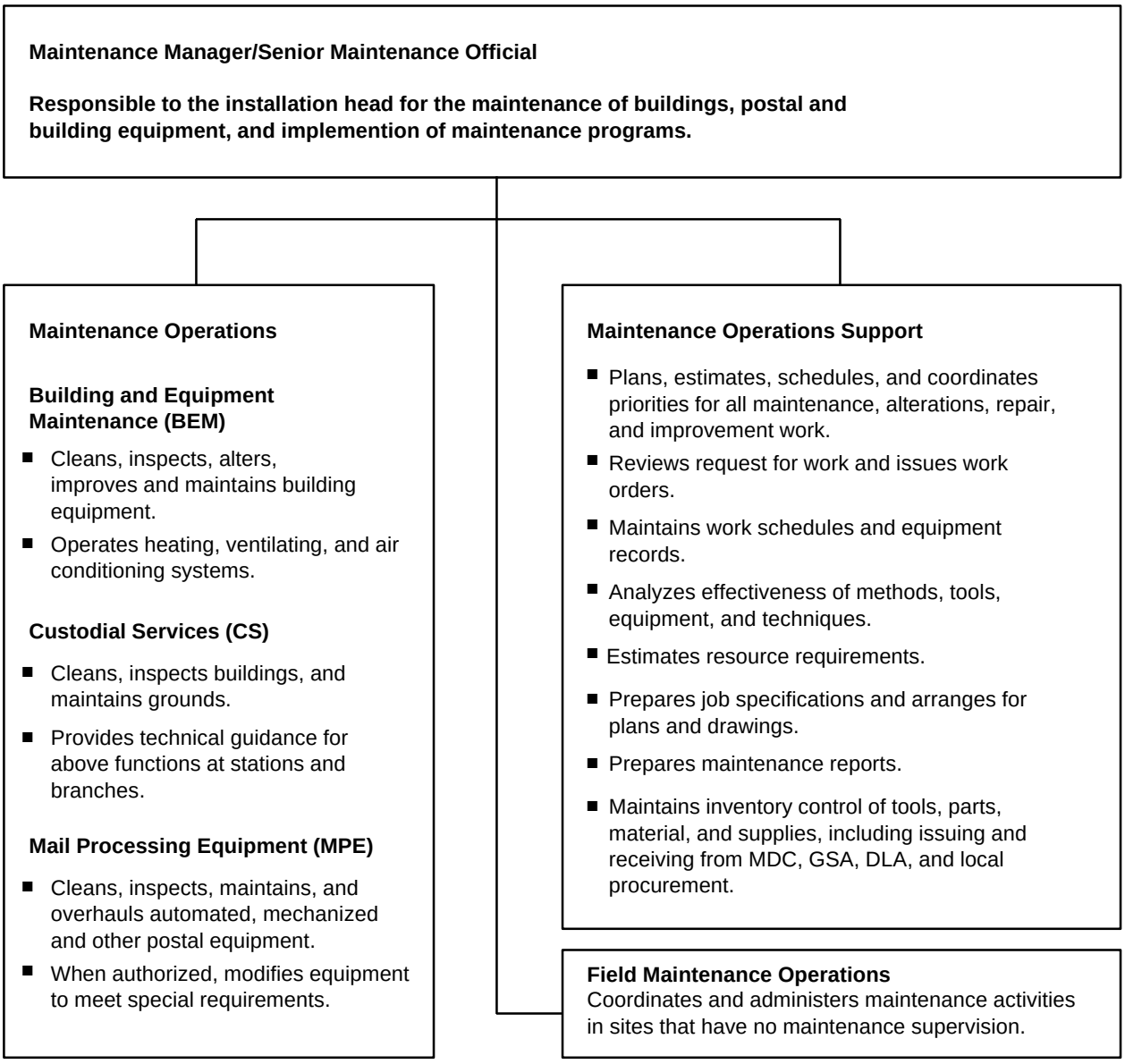

Exhibit 23

Maintenance Organization Structure

231 Maintenance Manager

231.1 Senior Maintenance Official

The maintenance manager is responsible for the overall maintenance program within his or her organization, including the safety and health of maintenance employees. Since the specific title can vary, depending on the size and function of the organization, the generic title *senior maintenance official* is used to describe the employee responsible for the functions listed below.

231.2 Knowledge of Maintenance Publications

To provide the direction and guidance required for management of the various maintenance functions, the senior maintenance official must be familiar with the contents of this handbook and applicable maintenance publications. Functions covered in these publications include but are not limited to national maintenance policies, technical instructions, labor agreements, safety programs, organizational requirements, and performance standards.

231.3 Training of Maintenance Personnel

Senior maintenance officials are responsible for ensuring that maintenance personnel are properly trained and adequately equipped, understand their responsibilities, and effectively complete their assigned tasks. By reviewing and analyzing management data, managers can identify effective performance as well as potential deficiencies and take appropriate corrective actions.

231.4 Coordination of Efforts

Senior maintenance officials are responsible for coordinating the combined efforts of maintenance. Maintenance Operations Support (MOS) activities should be integrated effectively with the efforts of Maintenance Operations and Field Maintenance Operations (FMO) to give the managers the comprehensive data required to determine overall maintenance effectiveness.

232 Maintenance Operations Support (MOS)

MOS responsibilities include planning, scheduling, documenting, and analyzing maintenance requirements for mail processing equipment, building equipment, and custodial services including Maintenance Activity Reporting and Scheduling (MARS) system files management, Corrective Maintenance (CM) and Preventive Maintenance (PM), and maintenance equipment and

stockroom inventories. This organization daily supports assigning work, recording maintenance activities, and analyzing performance, such as:

a. Tracking contract maintenance.
b. Developing, recording, and analyzing data on utilization and performance of maintenance resources.
c. Compiling data to help determine workhour requirements.
d. Establishing and maintaining PM checklists and route sheets.
e. Maintaining a work order system.
f. Coordinating with other maintenance areas the assignment and scheduling of all preplanned maintenance.
g. Rescheduling of workload to compensate for unplanned maintenance.
h. Communicating to management elements on effectiveness and productivity.
i. Planning for new equipment installations, overhauls, alterations, and authorized modifications.
j. Maintaining a library of maintenance documents.
k. Maintaining accountability and cataloging, ordering, issuing, and receiving equipment, repair parts, tools, and supplies.

233 Maintenance Operations

233.1 Mail Processing Equipment (MPE)

This area is responsible for the effective use of resources in support of the MPE. It participates in developing staffing and training requirements, planning, scheduling, and conducting performance evaluations for the following MPE maintenance activities (See Handbook MS-1, *Operation and Maintenance of Real Property*):

a. Preventive Maintenance (PM).
b. Corrective Maintenance (CM).
c. Overhaul.
d. Modification and alteration.
e. Operations (MPE).

233.2 Building and Equipment Maintenance (BEM)

This area is responsible for the effective use of its resources in support of the buildings and building equipment. It participates in developing staffing and training requirements, planning, scheduling, and conducting performance evaluations for the following building maintenance activities (See Handbook MS-1, *Operation and Maintenance of Real Property*):

a. Preventive Maintenance (PM).
b. Corrective Maintenance (CM).
c. Overhaul.
d. Alteration.
e. Operations (BEM).

233.3 Custodial Services (CS)

This area is responsible for the effective use of its resources in support of the custodial workload. This includes scheduling, facility cleaning, maintaining exterior areas and supporting minor maintenance activities. When directed by higher authority, CS may be responsible for operating elevators and telephone switchboards (See Handbook MS-47, *Housekeeping–Postal Facilities*).

234 Field Maintenance Operations (FMO)

This area is responsible for the effective use of its resources to provide maintenance support to sites that have no maintenance supervision

3 Maintenance Management Information System

31 PURPOSE

The Maintenance Activity Reporting and Scheduling (MARS) system is a real-time local data collection system that uploads to the national maintenance data base. Local maintenance data is entered into the MARS system by the local maintenance staff to develop the maintenance data noted below.

311 Data Collection

311.1 Local Maintenance Data

POLICY—The local office utilizes the Maintenance Activity Reporting and Scheduling (MARS) system to manage its own maintenance data.

The MARS system provides maintenance data relative to equipment, supplies, repair parts, inventories, cost of parts, productivity, labor, contracts information, and maintenance scheduling.

311.2 National Maintenance Data

The national maintenance data is composed of locally generated MARS data. This data provides information relative to equipment, supplies, repair parts, inventories, cost of parts, productivity, labor, contracts information, and maintenance scheduling.

32 DATA COLLECTION AND PROCESSING

POLICY—Maintenance data (labor, material cost, Preventive Maintenance (PM) schedule requirements, equipment inventory data, operating maintenance parameters, etc.) is collected and transmitted daily by the local office to the national maintenance data base.

321 Data Management

Maintenance offices collect and report maintenance data daily. This is especially important for data entered on the last day of the Accounting Period (AP) and at the end of the Fiscal Year (FY). Corrections to data for prior APs can cause an increase or possible negative expenditures to be reflected on current AP reports. All files are closed by the end of AP 13, and no corrections are processed for the prior FY.

322 Validation

POLICY—A senior maintenance official or designee certifies the validity of a sampling of data inputs on an annual basis.

33 DATA TYPES

331 Equipment Inventory History

POLICY—An equipment inventory-history record is established by the local office and used with other data for tracking maintenance costs and performance.

This record provides management with information such as the status, location, model, capacity, size, and manufacturer of a piece of equipment.

332 Preventive Maintenance (PM)

332.1 Scheduling

POLICY—The local office schedules all Preventive Maintenance (PM) and operating route requirements and establishes a master file for the schedule.

The master file is used to distribute scheduled PM requirements.

332.2 Route Activity

All route activity information is available in the MARS system (e.g., backlog, bypass). Refer to the MARS software user manual for accessing route activity information.

333 Corrective Maintenance (CM)/Operational Maintenance

POLICY—Productive maintenance workhours not scheduled for Preventive Maintenance (PM) or training are reported through the MARS Work Order Management module.

Corrective and operational maintenance workhours include preventive, corrective, reactive, breakdown, and operational maintenance, and modifications. These workhours are reported through the MARS Work Order Management module and are available on demand in the MARS system. Refer to the MARS software user manual for detailed information.

334 Equipment Operating Parameters

POLICY—Equipment operating hours and pieces processed are entered into the Maintenance Activity Reporting and Scheduling (MARS) system.

Form 4804, *Equipment Workload/Hours Operated Record*, is optional for collecting the required data (Exhibit 534.1). This information is used to evaluate equipment utilization and maintenance cost per units processed.

335 Contract Costs

POLICY—Contract costs are reported through the Maintenance Activity Reporting and Scheduling (MARS) system.

Form 4803, *Contract Maintenance Cost*, may be used to collect this data (Exhibit 533). Contract costs include the amounts paid to a contractor for a negotiated contract or procurement request for activities associated with the maintenance function (e.g., dust mop cleaning, trash removal, snow removal, tool and equipment leasing).

336 Parts and Supplies

336.1 Inventory File

POLICY—The local office establishes and maintains an inventory file of parts and supplies in the stockroom utilizing the Maintenance Activity Reporting and Scheduling (MARS) system.

This file contains all information on parts and supply activities within each office.

336.2 Inventory Levels

The MARS system assists in managing and controlling local inventory stock. Inventory levels for each line item are based on local maintenance demand. Inventory item reorder points (ROPs) and demand are recalculated every AP. Stock replenishment is controlled by material average demand, pipeline/delivery time, and existing due-in items.

34 MANAGEMENT REPORTS

POLICY—Maintenance personnel are responsible for monitoring, controlling, and improving the maintenance effort using Maintenance Activity Reporting and Scheduling (MARS) reports.

341 Purpose

The purpose is to provide maintenance with Maintenance Activity Reporting and Scheduling (MARS) data and reports to verify and analyze the cost effectiveness, performance, trends, and efficiencies of postal, building and mail processing equipment and systems.

342 Description

Reports are detailed in the appropriate sections of the MARS software user manuals.

4 Management Procedures

41 PURPOSE

Maintenance management procedures in this chapter assist management in controlling the maintenance organization and maintaining high service standards as follows:

a. Maintenance is performed in accordance with established national guidelines. Equipment not covered by national guidelines must be maintained by locally developed procedures.
b. A work order system is used to account for corrective, reactive, breakdown, and operational maintenance as well as alterations, modifications, overhauls, training, and construction activities.
c. Maintenance tool and part activities are controlled by receipt, issue, replenishment, transfer, and change transactions.
d. Reports are produced to provide visibility and data for managing a maintenance unit.

42 PREVENTIVE MAINTENANCE (PM)

421 Purpose

The objective of a Preventive Maintenance (PM) program, which is one of the most important maintenance activities, is to improve and prolong building and equipment life, avoid unplanned maintenance activity, and lower overall maintenance costs. This is achieved by the utilization of checklists and route sheets.

422 Enforcement of Preventive Maintenance (PM) Requirements

The senior maintenance official must determine and enforce local equipment PM requirements. The senior maintenance official should require unbiased investigations of equipment breakdowns, malfunctions, and inaccurate reporting.

423 Staffing

423.1 Required Skill Levels

Separate checklists for different maintenance activities permit maximum utilization of different skill levels of employees assigned to perform PM. Inspection checklist activities must be performed by employees with the capability to identify potential malfunctions at the earliest stages. Cleaning and lubrication are routine activities requiring specific instructions with minimal training. This work may be done by qualified employees at the minimum skill levels, if the supervisor believes their technical knowledge and safety awareness is sufficient to permit them to work without direct supervision.

423.2 Employee Evaluation

Appropriate supervisors must review annually the performance of each maintenance employee assigned to perform routes. Different routes must be scheduled each time the employee performance evaluation is conducted. When performing the evaluation, the supervisor must accompany the employee during the entire route. The supervisor performing the evaluation must complete the Maintenance Employee Evaluation Record, shown as Exhibit 423.2. The senior maintenance official or designee must keep the record of the review on file for two years . The supervisor is responsible for establishing and maintaining a schedule to show when the last evaluation was performed, when the next is due, and any training that the employee might need.

MAINTENANCE EMPLOYEE EVALUATION

Date of Evaluation	Employee Evaluated (Full Name)	Checklist/Route Sheet Number Evaluated	Evaluation Supervisor (Full Name)	Next Evaluation Due (Date)

Comments/Remarks:

Exhibit 423.2

Maintenance Employee Evaluation Record

424 Maintenance Checklist Description (Form 4777)

424.1 Developing Checklists

PM actions required for specific equipment or major components are shown on checklists. The recommended frequency for performing each action is also listed. Sample master checklists are available in Maintenance Series (MS) handbooks. Checklists can be developed locally from manufacturers' manuals or other available information. Master checklists and instructions furnished by Headquarters Maintenance Policies and Programs (MPP) and the Maintenance Technical Support Center (MTSC) for building and standard operating equipment are the bases for preparing detailed checklists and establishing frequencies of maintenance actions in field facilities. Master checklists for mail processing equipment are published in Maintenance Management Orders (MMOs). PM for building equipment must follow the guidelines in Handbook MS-1, *Operation and Maintenance of Real Property*.

424.2 Preventive Maintenance (PM) Work Codes

The work codes shown in Exhibit 424.2 are used for PM.

Work Codes	Description
01	Operating Routes (see Handbook MS-1, *Operation and Maintenance of Real Property*)
02	Inspection
03	Routine PM
04	Cleaning and Lubrication
06	Custodial (see Handbook MS-47, *Housekeeping–Postal Facilities*)
09	Operational Maintenance

Exhibit 424.2
PM Work Codes

424.3 Operational Maintenance Checklist

The operational maintenance checklist differs from other checklists because it covers the amount of time a person is involved in operational maintenance tasks. This checklist is maintained by a maintenance employee in the vicinity who may be working on other assigned PM routes or repair work orders. Detailed checklists should address equipment performance and sortation quality, etc. with minor corrective actions taken as required.

425 Route Sheets (Form 4776) Preventive-Custodial Maintenance Route

425.1 Work Specifications

Route sheets specify the equipment or areas to be maintained and applicable checklists. Routes should not contain different types of machines or systems.

425.2 Route Sheet Development

Route sheets are assignments of work for maintenance employees. The development of a route sheet requires the consideration of time involved, skills, tools, and checklists. The estimated time to complete a route is determined by totaling the times needed to perform each of the checklist items that apply.

425.3 Scheduling and Performance

Route sheets should include similar equipment or areas to facilitate efficient scheduling and performance of PM. These sheets provide the means for reporting and identifying minor repairs, adjustments, and work time.

426 Operating Routes

Operating routes are performed by personnel maintaining building equipment in a Postal Service facility. Primary responsibilities of personnel on these routes include operating, monitoring, recording, and making minor adjustments.

427 Checklist and Route Sheet Review

427.1 Frequency

Each checklist and route sheet must be reviewed at least once a year to ensure that they are accurate, appropriate, and in compliance with latest guidelines. Route sheets are reviewed to verify existence and status of equipment, usage of appropriate checklists, and accuracy of estimated performance time.

427.2 **Cover Pages**

A cover page is prepared in the format shown in Exhibit 427.2 for each checklist and route sheet reviewed. The cover page, indicating review, must be attached to the copies of checklists and route sheets being reviewed. The maintenance supervisor or designee conducting the review must sign, date, and list any comments, revisions, etc., in the appropriate space on the cover page. Copies of reviewed checklists and route sheets, including the review cover sheet, must be kept on file until the next review is completed.

CHECKLIST/ROUTE REVIEW RECORD

04	BBC FG2	001 L	0012
Work Code	Equipment Acronym & Number	Checklist Number & Type	Route Sheet

Number

Date: _____

Reviewed by: _____

Title: _____

Comments: _____

Date: _____

Reviewed by: _____

Title: _____

Comments: _____

Date: _____

Reviewed by: _____

Title: _____

Comments: _____

Date: _____

Reviewed by: _____

Title: _____

Comments: _____

Sample, Not for Operating Use

Facsimile, April 1996

Exhibit 427.2

Checklist/Route Review Record

427.3 Delegating Responsibility

Maintenance supervisors must review, approve, and initial all checklists and route sheets in Maintenance Capable Offices (MCOs). The senior maintenance official must designate the person responsible for reviewing checklists used in non-MCOs. Recommended changes must be forwarded to Maintenance Operations Support (MOS) or designee.

427.4 Guideline Changes

Recommendations for changes to national guidelines must be forwarded to the MTSC for review and approval.

43 CORRECTIVE MAINTENANCE (CM) WORK ORDER (FORM 4805)

431 Purpose

Work orders are initiated as a result of maintenance personnel requesting work based on their findings and observations. Other personnel may request the initiation of a work order.

Upon approval, the work order must be assigned a unique number in the appropriate Maintenance Activity Reporting and Scheduling (MARS) register prior to scheduling. The work order should provide:

a. Documentation, scheduling, and reporting of planned and unplanned corrective, reactive, and breakdown maintenance.
b. Documentation of CM root causes and costs.
c. Documentation and reporting of indirect maintenance, training, operational maintenance, alterations, modifications, construction, overhaul maintenance, travel hours, safety, environmental, and energy maintenance costs.
d. Documentation of workhours and cost for nonroutine Custodial Services (CS).

432 Maintenance Activity Control

The work order system is used to control all maintenance activity as shown in Exhibit 432. All work is controlled by a specific work order or by a standing work order, with the exception of scheduled PM routes. Specific work orders apply to planned corrective, reactive, breakdown, operational, alteration, modification, construction, and overhaul maintenance, travel hours, training, environmental, safety, and energy. Standing work orders apply to routine or repetitive maintenance and shop work. To avoid misuse, standing work orders must be monitored and reviewed periodically.

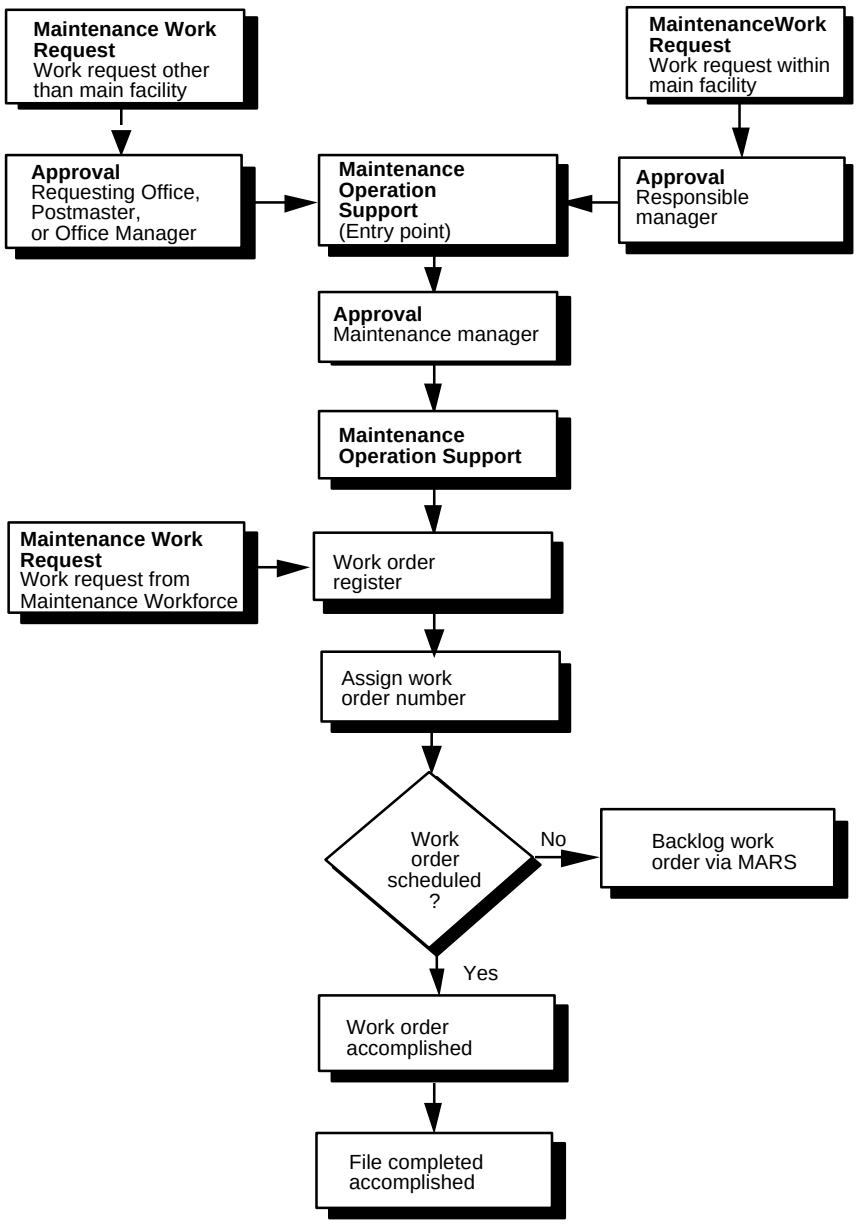

Exhibit 432

Management Control of Work Order Activity (Flow Chart)

432.1 Daily Assignment Sheet (Form 4778)

A daily assignment sheet is used by the maintenance supervisor to assign PM routes and work orders to maintenance employees for each day and tour.

433 Approvals

Specific controls are necessary to ensure that nonroutine work requests have proper approvals. Nonroutine work requests must be approved by the designated responsible official before being submitted to the maintenance office. Senior maintenance officials should discuss with the approving official requests that do not seem feasible or are contrary to USPS policies.

433.1 Modifications

433.11 Buildings

Requests for modifications and alterations to buildings must be by memorandum to the appropriate manager for discussion and concurrence before forwarding to a higher level for approval. Approval of routine work may be delegated to the MOS manager or designee.

433.12 Postal Equipment

Modifications to postal equipment must be done according to the Postal Service Configuration Management Program through the Engineering Change Board (ECB) as described in Publication 101, *Engineering Change Board Organization and Operation.*

433.13 Modification Work Order (MWO)/Software Modification Order (SMO)

Separate registers have been established and will be utilized for Software Modification Orders (SMOs) and Modification Work Orders (MWOs) for each subsite. SMOs and MWOs will have a work order number assigned by the MTSC.

After completing an MWO or an SMO, the workhours expended must be reported on Form 4805, Maintenance *Work Order Request*. All material used must be reported in the MARS Tool & Parts Inventory module. Reports of field modifications must be completed and forwarded to MTSC and Area office, or as indicated in the particular MWO/SMO.

44 INVENTORY

441 Equipment Inventory

441.1 Records

Data of historical value must be maintained in the MARS Equipment Inventory module that provides a record of parts, components, accessories, and sources that are used to locate drawings and identify a manufacturer or representative. This module is also used to record MWOs, MMOs, SMOs, and local modifications to equipment.

442 Parts and Supplies Inventory

442.1 Maintenance Stockroom Control

An effective maintenance management program requires control of all material required to support mail processing equipment, building equipment, and the physical structure. Control minimizes equipment downtime, expedites repairs and services, and prevents stockpiling, misuse, and pilferage.

442.11 Repair Parts and Supplies

Each MCO must establish and maintain an inventory of all material in the maintenance stockroom. Site spares provided by an equipment manufacturer must be added to the inventory files when they are received. The MARS Tool & Parts Inventory module provides automatic adjustment of balances on hand as each issue and receipt activity is reported.

442.2 Tools and Test Equipment

Control is required to ensure that proper types and quantities of tools and test equipment are available and that calibration requirements are followed.

442.3 Cannibalization

To take a spare part from one piece of equipment to be used on another is recognized. The cannibalization must be approved by and controlled by the senior maintenance official at the installation to ensure that unsafe equipment is not utilized in postal operations.

45 DIRECTIVES

451 General

A central library that includes MS handbooks, maintenance bulletins, environmental handbooks, procurement bulletins, supply bulletins, contractor Operating and Maintenance (O&M) manuals, equipment, and building prints, etc. must be established for maintenance personnel. A system for recording receipts, withdrawals, and returns should be established and a permanent record of distribution maintained in the library. The senior maintenance official or designee at the organization is responsible for the operation of the library.

452 Distribution

When MOS issues maintenance handbooks to individual technicians or mechanics, distribution must be through the library. Records must be maintained for the distribution of all documentation to provide for accounting and revision replacement control. Employees must return all handbooks no longer needed to perform their duties.

453 Requisitioning Documents

Maintenance handbooks can be requisitioned from the appropriate Material Distribution Center (MDC) using Form 7380, *MDC Supply Requisition* (Exhibit 453).

UNITED STATES POSTAL SERVICE®

MDC Supply Requisition

Print or type complete mailing address of office preparing requisition	For MDC use only

Finance Number	FEDSTRIP Address Code	Julian Date	Requisition No.	Page No.

Postal Stock Number (PSN) or Postal Service Item Number (PSIN)	Quantity	Unit Issue	Description	Unit Price	Estimated Cost
5					
10					
15					
				Grand Total Amount of Order $	

Fold First

Send originals only

Mail to supporting materiel distribution center (MDC)	Authorizations
	Name of Materiel Accountability Officer or Designate
	Signature and Date
	Name of Authority Certifying Funds
	Signature and Date
	PEN or Commercial Telephone Number w/ Area Code

PS Form **7380**, August 1990

1 – MDC

Exhibit 453

Form 7380, *MDC Supply Requisition*

454 Minimum Quantities

The senior maintenance official must establish minimum quantities for maintenance publications.

455 Needed Documents

An office should order only the publications it needs to operate. All organizations should order maintenance handbooks from the appropriate MDC.

46 MAINTENANCE TRAINING

Workhours expended in training status must be reported. All workhours expended performing required duties or on-the-job training must be reported as productive workhours using a work code *other* than 22. All other training (USPS employees development center and resident) should be recorded using work code 22 and acronym ZTRNG.

5 Workload Scheduling and Reporting

51 MAINTENANCE OPERATIONS

511 General

POLICY—Maintenance Operations provides comprehensive planning that best utilizes available labor resources, repair parts, supplies, and time allocated for maintenance activities.

Effective planning and control require an information reporting system that enables maintenance personnel to monitor, adjust, and reschedule workloads in accordance with operational requirements.

512 Organizing Proper Control

512.1 Equipment Conditions

Preventive Maintenance (PM) is based on inspections and written condition reports that provide data for analysis and evaluation of causes and corrective action. PM requires estimating, planning, scheduling, and controlling maintenance and repair. An efficient PM program must have controls that indicate the need to revise routines and procedures.

512.2 Analysis

Maintenance personnel identify discrepancies in a PM program by analyzing equipment performance and workhour utilization. Discrepancies should be brought to the attention of the senior maintenance official and/or line supervisor for corrective action.

512.3 Equipment Examination

Senior maintenance officials will define, apply, and enforce the standards of maintenance for local equipment. Equipment examination is a means of determining adherence to these standards. Senior maintenance officials should require supervisors to conduct unbiased investigations of equipment breakdowns or malfunctions.

513 Preventive Maintenance (PM) Program Elements

PM program elements include development of checklists, route sheets, work orders, equipment data records, assignment sheets, failure reporting, root cause analysis, and corrective action feedback, as well as various forms for accumulating and reporting data on costs and performance. Effective analysis of reports and revision of checklists and route sheets will improve the efficiency of the maintenance operations in the support of operational requirements.

Note: PM does not include travel time to or from operations outside the plant. Travel time for completion of work code 01 is included in PM time.

514 Maintenance by Operator Personnel (Mail Processing Machines)

514.1 Examples

Mail processing personnel who use and operate the equipment are responsible for certain servicing actions. They should not attempt to make unauthorized adjustments, repairs, or parts replacements. They may perform any servicing specified as part of equipment operating procedures and employee position descriptions. Examples of such operator servicing include:

a. Checking equipment to be sure that it is in top operating condition before starting.
b. Making adjustments that do not require specific skills or knowledge. Changing the speed of a machine is a typical operating adjustment.
c. Cleaning dust, lint, paper scraps, and loose mail from a machine during its use and after turning it off.
d. Designating personnel to clear jams when no safety hazard exists or when it would not be detrimental to the operation of the equipment.

514.2 Posted Information

Information about equipment operation should be posted in the immediate area. Written instructions on the use of equipment must clearly state that breakdown or irregular performance of equipment must be reported immediately to maintenance. The method and point of reporting must be specifically stated.

514.3 Periodic Servicing

The senior maintenance official or designee recommends to the site manager any periodic servicing instruction for the mail processing supervisor. Training equipment operators and followup on the use of procedures are the responsibilities of the senior supervisor of mail processing and the line supervisors.

515 Maintenance Checklist (Form 4777)

515.1 Description

PM checklists define maintenance actions required for specific types of equipment (see Exhibit 515.1). Checklists provide instructions for completing PM routes and list the frequency for performing each action.

Maintenance Checklist
(Continue on reverse)

Identification				
Work Code	Equipment Acronym	Class	Number	Type

Equipment Type	Sub-Equipment	Model/Series	Original Issuance Date
System/Location	MMO No. / Last Revised Date	Revision No.	Approved By (Initials)

Part or Component	Item No.	Instructions (Comply With All Current Safety Precautions)	Est. Time Req'd	Frequency

PS Form **4777**, September 1991 ***(Previous edition usable)*** Page _____ of _____ Pages

Exhibit 515.1 (p. 1)

Form 4777, *Maintenance Checklist*

Description	Instructions
Identification	Enter appropriate work code for type of maintenance to be performed. Authorized codes are:
(a) Work Code	01 Traveling and Stationary Operating Routes 02 Inspection 03 Routine Preventive Maintenance 04 Cleaning and Lubrication 06 Custodial Services 09 Operational
(b) Equipment Acronym	Enter acronym of equipment to identify type of equipment on which maintenance is to be performed such as MPLSM, HVACA, FC, etc.
(c) Class	See Appendix 1.
(d) Number	Enter sequence number that identifies checklist, a number between 001 and 999.
(e) Type	Enter an L for locally developed checklist or M for master checklist.
Equipment Type	Enter equipment type on which maintenance is to be done.
Sub-Equipment	Enter brief description of any sub-equipment associated with main equipment.
Model/Series	Enter model/series of equipment.
Original Issuance Date	Enter date checklist was developed and originally issued.
System/Location	Enter a brief description of system/location where maintenance is to be done.
MMO No.	Enter Maintenance Management Order number.
Last Revised Date	Enter date checklist was revised.
Revision No.	Enter number of times this checklist has been revised.
Approved By (Initials)	After checklist has been developed and reviewed by equipment supervisor, make sure it is accurate, appropriate, and in compliance with latest guidelines, enter initials of responsible supervisor.
Part or Component	Enter name of component or assembly to be serviced.
Item No.	Enter number of specific checklist instructions.
Instructions	Enter step-by-step instructions required to check or service component or assembly. Comply with all current safety precautions.
Estimated Time Required	Estimated time required to complete instructions.
Frequency	Enter frequency code(s) in each block to identify all frequencies for this checklist. Also, enter an X in column under appropriate frequency code to identify frequency of each checklist instructions.

Exhibit 515.1 (p. 2)

Form 4777, *Maintenance Checklist*—Completion Instructions

515.2 Master Checklists

Master checklists and instructions include:

a. Instructions furnished by Maintenance Policies and Programs (MPP) are the basis for preparing local checklists.

b. Information published as maintenance performance criteria and Maintenance Management Orders (MMOs) for mail processing and handling equipment.

c. Criteria such as the maintenance guides in Handbook MS-1, *Operation and Maintenance of Real Property*, which provide checklists for building equipment. Handbook MS-47, *Housekeeping Postal Facilities*, which contains requirements for building/custodial checklists.

d. Instructions provided by manufacturers that can be used to establish checklists for small, nonstandard mail handling, processing, and building equipment.

515.3 Nonstandard Checklists

Due to variations in equipment systems, checklists covering equipment in one USPS facility might not apply to equipment in another facility. Frequency of maintenance also could be changed if there are major differences in hours of equipment usage, environmental conditions, or operational requirements.

515.4 Preventive Maintenance (PM) Checklist Categories

The categories for PM checklists are shown in Exhibit 515.4.

Work Code	Categories
01	Operating Routes (see Handbook MS-1)
02	Inspection
03	Routine Preventive Maintenance
04	Cleaning and Lubrication
06	Custodial (see Handbook MS-47)
09	Operational Maintenance

Exhibit 515.4
PM Checklist Categories

515.5 Contents and Frequencies of Checklists

515.51 Operating Route Checklists (Work Code 01)

Duties described in Handbook MS-1, *Operation and Maintenance of Real Property*, Appendix 13-B, are the basis for establishing operating routes. Included with equipment operation are those PM tasks that are accomplished during equipment operation.

515.52 Inspection Checklists (Work Code 02)

Inspection checklists have only PM actions that can be performed in 18 minutes or less and are required to ensure optimum operation. Inspection standards and requirements are based on guidelines provided in maintenance directives. Maintenance actions include visual inspection (including use of test instruments and gauges), adjusting, and tightening.

515.53 Routine Preventive Maintenance (RPM) Checklists (Work Code 03)

Routine Preventive Maintenance (RPM) checklists specify most maintenance activities shown on the inspection, cleaning, and lubrication lists. The checklists describe in detail the work to be done.

515.54 Cleaning and Lubrication Checklists (Work Code 04)

Cleaning and lubrication checklist activities are performed at an interval appropriate to the requirement of the equipment. Cleaning and lubrication checklist activities can be separated from other checklists based on local experience, but these activities usually are combined into one checklist.

515.55 Custodial Checklists (Work Code 06)

Cleaning and policing checklist activities are developed using criteria specified in Handbook MS-47, *Housekeeping Postal Facilities*. The checklists describe in detail the work to be done.

515.56 Operational Maintenance Checklists (Work Code 09)

An operational maintenance checklist differs from a PM checklist in that it covers the equipment performance, sortation quality, etc. of a system if a problem or breakdown occurs. That employee could be working simultaneously on other assigned PM routes or other repair work orders. Time used in such unrelated work must be reported on Form 4805 (Exhibit 541.1). Operational maintenance, when required, should be kept to a minimum.

515.57 **Required Skill Levels**

The purpose of separate checklists for different maintenance activities promotes the maximum use of different employee skill levels for PM work. Work specified on the inspection checklist should be done by mechanics or technicians who have an understanding of the equipment and the ability to diagnose malfunctions. Cleaning and lubrication are routine work with specific instructions that can be performed by persons with lesser training. Routine operation PM duties can be done without direct supervision if the employee has knowledge of the technical and safety requirements. RPM does not require the diagnostic ability required for work specified on inspection checklists.

516 Basis of Preventive Maintenance (PM) Program

516.1 Functions

Organizing and maintaining a PM program involves four distinct functions:

a. Preparing and maintaining PM checklists on equipment.
b. Establishing routes to schedule and control PM activities.
c. Preparing documents for work performed.
d. Updating periodically checklists, route sheets, and schedules based on equipment condition and performance.

516.2 Maintenance Actions

Identify each equipment component requiring maintenance and determine the required PM. Maintenance activities are described in the Maintenance Series (MS) handbooks and documents covering the various items of equipment. Some checkpoints for maintenance activities can be similar for different pieces of machinery; therefore, available lists can serve as guides for much of the material needed for any newly acquired equipment.

516.3 Establishing Preventive Maintenance (PM) Frequencies

516.31 **Usage**

When establishing a PM program for a facility or new equipment, use the frequencies furnished by the Maintenance Technical Support Center (MTSC). An exception is made if the manufacturer's warranty stipulates more frequent attention during the warranty period. If the MTSC has not provided performance guidelines, or if local conditions dictate, frequencies are developed locally.

516.32 **Considerations**

Consider the following when establishing practical frequencies:

a. Will equipment failure interfere with the flow of mail or cause severe interruption to normal building operation?
b. Are there severe or unusual operating or environmental conditions?
c. Is the equipment or part subject to wear or abuse that could result in early failure or reduced effectiveness?
d. Will failure endanger life, property, or both?
e. Does the equipment have a high cost or long lead time for replacement parts?

If the answer to all five of these questions is yes, the equipment must have thorough, routine PM and frequent examination of all critical components and controls. If the answers are a combination of yes and no, some attention is required but not to the same degree as in the preceding instance. When the answers to the five questions are no, the equipment probably requires infrequent PM. If failure endangers life or property, thorough PM and frequent examinations are called for regardless of any other factor.

516.33 **Symbols**

When assigning frequencies on Form 4777, *Maintenance Checklist* (Exhibit 515.1), use the symbols shown in the frequency code table in Appendix 8.

516.4 Assigning a Maintenance Checklist Number

Prepare Form 4777, *Maintenance Checklist*, for all equipment requiring maintenance. The same checklist may be used for identical pieces of equipment or for equipment that has very slight variations (see Exhibit 516.4).

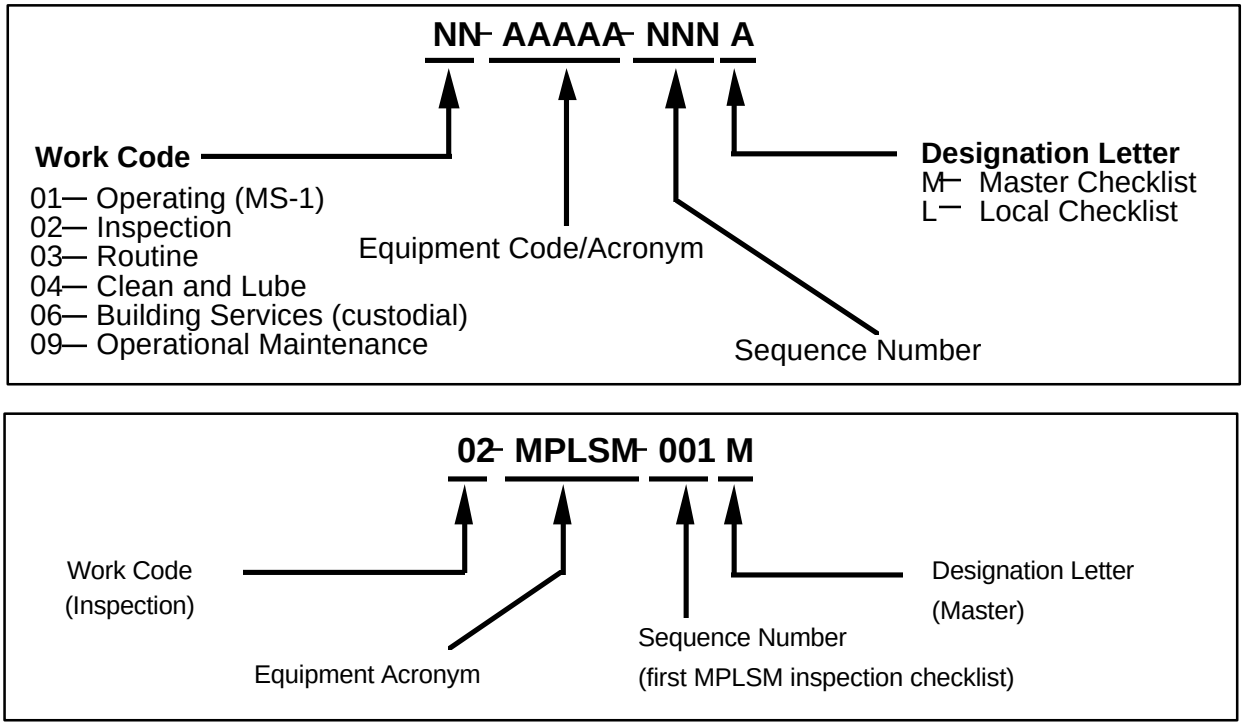

Exhibit 516.4

Maintenance Checklist Number Instructions for Form 4777

a. A checklist number is assigned. The first two digits designate the type of checklist: 01 for Traveling and Stationary (Operating), 02 for Inspection, 03 for RPM, 04 for Clean and Lube, 06 for Custodial, and 09 for Operational Maintenance.
This is followed by the acronym of the equipment as listed in Appendix 1 of this handbook, such as CVY for bulk belt conveyor or MPLSM for multiple position letter sorting machine.
The next three digits are the number of the checklist in this particular series, beginning with 001 and continuing sequentially.
The last character represents the designation letter (M = Master, L = Local). The rest of the form is self-explanatory.

b. Additional information can be found in the master checklists provided by the MTSC.

516.5 Checklist and Route Sheet Validation

POLICY—The local maintenance organization retains a master copy of all checklists and route sheets with a cover page; reviews all checklists, routes, and route sheets annually; and retains the review data with the master copy.

516.6 Review of Preventive Maintenance (PM) Checklists

516.61 Adjustments

After a complete program is established, PM checklists should be reviewed periodically. Maintenance should be scheduled less frequently for check points that historically have never produced deficiencies. When deficiencies occur often, PM should be performed more frequently. Review of equipment records and experience can indicate the need to increase or decrease the frequencies and checkpoints based on historical data.

516.62 Evaluations

The frequency of PM operations should be such that emergencies and breakdown repairs are minimized. Maintenance is responsible for analyzing building equipment failures and service repairs information to determine the need for adjusting checklists. Maintenance personnel assigned to perform PM routes can be of assistance in making these evaluations. Exhibit 581 is Form 4774 (see 582 for explanation of Form 4774).

516.63 Variation of Time from Master Checklist

Local checklists that are developed from master checklists and vary by more than 15 percent from the time allowed on the master checklist must be reviewed by the senior maintenance official and approved by the site manager.

POLICY—When the time allocated on a local checklist exceeds the time allocated on the master checklist by more than 15 percent, the policy of the maintenance organization is to forward a written request for variance to United States Postal Service (USPS) Engineering for consideration and coordination with the Maintenance Technical Support Center (MTSC).

Maintenance must maintain files of the approval and supporting justification.

517 Preventive Maintenance (PM) Routes (Form 4776)

517.1 Route Sheets

517.11 Purpose

PM route sheets list specific groups of machines or systems and designate which should be serviced and which checklist items should be performed. PM routes must not contain different types of machines or systems and should be limited to one type of maintenance with a corresponding checklist.

517.12 Information

Route sheets may contain instructions from the appropriate checklist. A typical route sheet provides the following information:

a. Work code.
b. Equipment acronym and equipment class.
c. Route sheet number.
d. Workhours required, frequency, and tour.
e. Location of equipment.

517.13 Same Maintenance Work

Route sheets describe the same classes of maintenance work as the checklists. For example, one equipment inspection route might describe all gear motors of a small bulk conveyor system. Separate routine PM routes might be made up for each of the incoming conveyor lines, the storage areas of parcel sorter machines, or all the portable sorting conveyors on a floor. A cleaning and lubrication route could cover conveyors under the loading platforms. Routes should be combined with other routes to provide from 4 to 7.5 hours of work per employee. Keeping routes within these limits expedites scheduling and allows maintenance employees sufficient time to write work orders and reports. Each employee should be able to perform assigned routes within a workday and still have time for associated duties.

517.2 Preparation of Route Sheets

517.21 Guidelines

PM routes are assignments of work to be performed by maintenance employees (see Exhibit 517.21). These routes identify the equipment to be worked on by one or more employees and checklists to be used. Each route should be limited to:

a. PM work of the same category and frequency.
b. Equipment of the same type requiring similar maintenance.
c. Equipment in the same area.

UNITED STATES POSTAL SERVICE

Preventive-Custodial Maintenance Route

Identification			
Work Code	Equipment Acronym	Class	Number

Mail Processing-Building Equipment/Component or System	Original Issuance Date	Date Last Revised	MMO No.	Estimated Time *(Hours & Tenths)*

Building	Frequency										Tour	Basic Work Week
	T	D	W	BW	M	BM	Q	SA	A	BA		

Item No.	MPE-Building Equipment Identification		Time		Priority	Check List(s) Nos. Amount to be Serviced Including Work Units or Square Feet	Instructions
	Numbers	Class	From	To			

PS Form **4776**, November 1991 ***(See Reverse)***

Exhibit 517.21 (p. 1)

Form 4776, *Preventive-Custodial Maintenance Route*

Work Due		Assigned		Started		Completed		Total Time Used	Minor Maintenance Performed *(Time)*	Certification of Work Completed *(Signature)*	Supervisors Certification		Maintenance Control Verification	
AP	WK	Employee	Date	Date	Time	Date	Time				Int.	Date	Int.	Date

Date	Tour	Minor Maintenance Performed	Issue Slip Serial Nos.

PS Form **4776**, November 1991 *(Reverse)*

Exhibit 517.21 (p. 2)

Form 4776, *Preventive-Custodial Maintenance Route*

Description	Instructions
Identification (a) Work Code	Enter appropriate work code for type of maintenance to be performed. Appropriate work codes are: 01 Traveling and Stationary Operating Routes 02 Inspection 03 Routine Preventive Maintenance 04 Cleaning and Lubrication 06 Custodial Services
(b) Equipment Acronym	Enter acronym of equipment to identify type of equipment on which maintenance is to be performed such as MPLSM, HVAC, FC, etc.
(c) Class	See Appendix 1.
(d) Number	Enter sequence number that identifies route, a number between 0001 and 9999.
MPE-Building Equipment Component or System	Enter brief description of name of equipment/component or system and equipment class on which maintenance is to be performed.
Original Issuance Date	Enter date route is initiated.
Date Last Revised	Enter date route is initiated or revised.
MMO No.	Enter Maintenance Management Order number.
Estimated Time (Hours & Tenths)	Enter total time estimated for all equipment or areas listed on route.
Building	Enter name or identification of building where equipment or area to be cleaned is located.
Frequency	Enter frequency of route to be done.
Tour	Enter tour during which route is scheduled.
Basic Work Week	Enter inclusive days that route is to be performed. Example: Routes to be performed Monday through Friday may be entered “Mon thru Fri”; or “M–F”; for biweekly routes, enter “week 1 and 3” or “week 2 and 4.” For less frequent routes, enter a 1, 2, 3, or 4 for work week route is scheduled to be performed.
Item No.	Enter a number for each item shown on route used to identify quantity of equipment listed.
MPE-Building Equipment Identification: (a) Numbers	Enter equipment number as reported on equipment master file.
(b) Class	Enter class of equipment, if applicable, as identified on equipment master file.

Exhibit 517.21 (p. 3)

Form 4776, *Preventive-Custodial Maintenance Route*—Completion Instructions

Description	Instructions
Time	Enter beginning and ending time that a room or area is to be cleaned. (Precise time scheduled to be used at management's option.)
Priority	Enter priority code in chronological and alphabetical sequence to identify order of importance for scheduling when labor supply shortage exists.
Checklist(s) Nos.	Enter quantity of area or units to be cleaned or policed. For equipment, enter associated check list number(s) required to perform route.
Instructions	Enter areas or units to be cleaned or policed and any instructions needed to perform route.

Reverse Side

Description	Instructions
Work Due	Enter accounting period and week when route is due to be scheduled.
Assigned	Enter name of employee assigned to perform route, and date route assigned to be performed.
Started	Enter date and time route started.
Completed	Enter date and time route completed.
Total Time Used	Enter total elapsed time (including minor maintenance) used for equipment listed on front of route sheet. For pseudo-equipment, enter total time.
Minor Maintenance Performed (Time)	Enter minor maintenance time used.
Certification of Work Completed (Signature)	Signature of employee certifying route completed as assigned.
Supervisor's Certification	Enter initials and date certifying route performed as assigned.
Maintenance Operations Support Verification	Verify, post, and date as complete.
Minor Maintenance Performed	Enter date, tour, and brief description of minor maintenance performed. Also, enter serial number of parts issue slip, if applicable.

Exhibit 517.21 (p. 4)

Form 4776, *Preventive-Custodial Maintenance Route*—Completion Instructions

517.22 **Steps**

Scheduling of routes provides better work assignments and time for completing the required summary sheets and records. Suggested steps for preparing a route sheet include:

a. Select several equipment items, such as units of a conveyor or fan units or an air conditioning plant.
b. Use a floor plan as a guide, and list each piece of equipment in the order it is to be reached. A floor plan also can identify the applicable total time required for performance of each activity indicated on the checklist.
c. Add or subtract pieces of equipment until the total route time is within the 4 to 7.5 hour range per employee.
d. Verify the route by having a qualified maintenance employee perform it.
e. Assign the route identification (see Exhibit 517.22) using the first two digits to designate the type of activity.
f. Assign the appropriate acronym as prescribed in Appendix 1 of this handbook, such as CVY for bulk belt conveyor or MPLSM for multiple position letter sorting machine. The four digits are the number of the route sheet in this particular series.

Example: A cleaning and lubricating belt conveyor route sheet would be recorded as 04 CVY 0012.

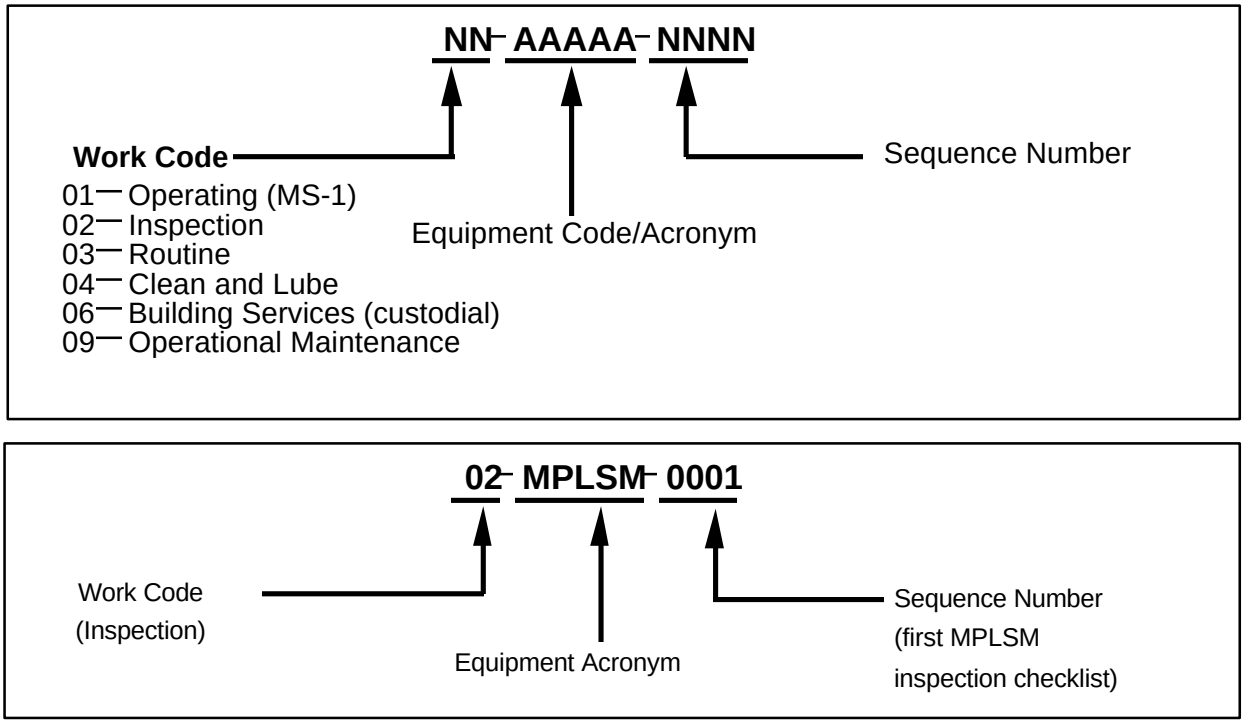

Exhibit 517.22

Route Sheet Identification Instructions for Form 4776

517.3 Uses of Route Sheets

Route sheets have multiple uses. Understanding these uses helps maintenance personnel to accurately prepare the content, wording, and sequence of checklists and route sheets. Route sheets can:

a. Group equipment in a reasonable and logical manner to facilitate the scheduling and performance of PM operations.
b. List the equipment to be serviced and the checklist number to be used.
c. Allow reporting of minor repairs and adjustments, material used, and time required for the work (18 minutes or less).
d. Verify the completion of assigned work and account for the time required for the employees to perform the PM duties. This information is valuable in future scheduling of similar work.

517.4 Performing Routes

517.41 Traveling and Stationary Routes (Operating) (Work Code 01)

Traveling and stationary routes are performed by personnel maintaining a heating, ventilating, and air conditioning system and other building equipment in a USPS facility. Their primary responsibilities are to turn equipment on and off, log operation of equipment, observe overall performance of equipment, and make minor adjustments. See Handbook MS-1, *Operation and Maintenance of Real Property* for further information.

517.42 Inspection Routes (Work Code 02)

Maintenance employees are furnished the appropriate equipment inspection checklist, PM Work Order Card, and/or route. They must examine or test each point listed on the checklist.

517.43 Routine Preventive Maintenance (RPM) Routes (Work Code 03)

These routes are performed most frequently and require the most time. Routes should be scheduled and assigned to utilize best available staffing. Employees performing RPM must use appropriate checklists. Employees are responsible for all assigned checklists, PM Work Order Cards, and/or routes.

517.44 Cleaning and Lubrication Routes (Work Code 04)

The maintenance employee's primary responsibility is to clean and lubricate the equipment using the appropriate checklists, PM Work Order Cards, and/or routes.

517.45 Custodial Services, Building Cleaning (Work Code 06)

The maintenance employee's primary responsibility is to clean the building as defined in Handbook MS-47, *HousekeepingPostal Facilities* using

appropriate checklists, PM Maintenance Work Order Requests, and/or routes.

517.46 **Operational Maintenance (Work Code 09)**
Employees performing operational maintenance monitor operational performance, make adjustments, and take corrective action to improve equipment performance and sortation quality. Operational maintenance may be reported on Form 4805-B, *Standing Work Order* (see Exhibit 541.2), or entered in the Maintenance Activity Reporting and Scheduling (MARS) system Work Order Management module.

518 Adjustments and Minor Repairs

Adjustments and minor repairs or replacements are made by the employee performing the route if the tools and material are on hand and if the work can be completed within 18 minutes for each piece of equipment on the route. When more time, tools, parts, or staffing appear to be required, the discrepancy must be reported to the senior maintenance official or designee with a notation on the route or PM Work Order Card. A Maintenance Work Order Request must be prepared describing the nature of the defect, the required work, the material needed, and an estimate of the workhours. Personnel initiating the work order should make their descriptions as complete as possible.

519 Completing Route Sheet/PM Work Record Card

On completion of a scheduled route, the employee must complete the PM Work Order Card. If all items of a scheduled inspection route are not completed, the employee should enter status code W or P, as appropriate, on the PM Work Order Card and use either the Minor Maintenance Performed column or the PM Work Record Card to note the items completed. Information regarding every work assignment must be submitted to the senior maintenance official or designee. PM Work Order Cards are collected and reviewed for completeness. Supervisors must be informed of deficiencies. If required, a work request must be initiated.

52 PREVENTIVE MAINTENANCE (PM) INVENTORY

The *PM inventory* is found in the MARS Preventive Maintenance Management module for all major equipment by route type, class, and equipment number. Routes are also assigned for Custodial Services (CS)

(see Exhibit 522). This enables crediting and scheduling PM work by equipment in the MARS.

521 Preventive Maintenance (PM) Control Fields

521.1 Element Reference

Elements identifying a route are work code, acronym, equipment number, route number, equipment class, and frequency code. Any reference to a route must include these elements.

521.2 Group Acceptance

MARS accepts the elements indicated on a route sheet as a group. If any element is changed, a different route is identified. This allows variations of the frequency code to identify superseding routes, and only the least frequent route will be scheduled.

522 PM Master File

Form 4788, Preventive Maintenance Inventory Record, is used to establish the PM Master File in new maintenance operations (see exhibit 522). Some equipment identified by pseudo-acronyms requires PM routes but does not require a Form 4772 to be completed.

PSDS				U.S. Postal Service	Date
SOM (1)	LOM (2)	Trans ID (3-4)	Subsite (5-6)	**Preventive Maintenance Inventory Record**	Month-Day-Year
&	6	L Ø			

Action (7)	Route Sheet Information: Work Code (8-9)	Equipment Acronym (10-14)	Equipment Number (15-18)	Route Number (19-22)	Eqpt. Class (23-24)	Freq. (25)	Checklist ID: Number (26-28)	Type (29)	Effective Date: AP (30-31)	Day (32-33)	Schedule: A/P (34-35)	WK (36)	Day (37)	TR (38)	Estimated Hours and Tenths of Hours (39-42)	RSR ID (43)	Labor Code (44-45)	Level (46-47)	EOM (48)
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Completed Form Reviewed By:	Data Entered By:	Date	LNC004P2 Report Date	Verified By:	Date

PS Form **4788,** September 1991

Exhibit 522

Form 4788, *Preventive Maintenance Inventory Record*

523 Preventive Maintenance (PM) Catalog

A PM catalog is resident in MARS at each site and may be produced on demand.

524 Estimated Hours and Tenths of Hours on Form 4788

Estimated hours and tenths of hours reported on Form 4788 (Exhibit 522) must not include locally authorized break periods. All workhours estimated must be reported in hours and tenths of hours (see Exhibit 524 for a time conversion chart).

Mins	100ths*	10ths	Mins	100ths	10ths	Mins	100ths	10ths
1	.02	0.0	21	.35	0.4	41	.68	0.7
2	.03	0.0	22	.37	0.4	42	.70	0.7
3	.05	0.1	23	.38	0.4	43	.72	0.7
4	.07	0.1	24	.40	0.4	44	.73	0.7
5	.08	0.1	25	.42	0.4	45	.75	0.8
6	.10	0.1	26	.43	0.4	46	.77	0.8
7	.12	0.1	27	.45	0.5	47	.78	0.8
8	.13	0.1	28	.47	0.5	48	.80	0.8
9	.15	0.2	29	.48	0.5	49	.82	0.8
10	.17	0.2	30	.50	0.5	50	.83	0.8
11	.18	0.2	31	.52	0.5	51	.85	0.9
12	.20	0.2	32	.53	0.5	52	.87	0.9
13	.22	0.2	33	.55	0.6	53	.88	0.9
14	.23	0.2	34	.57	0.6	54	.90	0.9
15	.25	0.3	35	.58	0.6	55	.92	0.9
16	.27	0.3	36	.60	0.6	56	.93	0.9
17	.28	0.3	37	.62	0.6	57	.95	1.0
18	.30	0.3	38	.63	0.6	58	.97	1.0
19	.32	0.3	39	.65	0.7	59	.98	1.0
20	.33	0.3	40	.67	0.7	60	.99	1.0

* Hundredths-of-hour figures are included for help with checklist calculations.

Exhibit 524

Time Conversion Chart—Minutes to Tenths of Hour

525 Changes to Schedule in PM Master File

Changes to the schedule in the PM Master File must be coordinated with operations and approved by the senior maintenance official or designee. Change actions should not be considered unless the change is indefinite (4 months or longer).

526 Superseding Routes

Some PM routes supersede others; the less frequent route takes precedence. A monthly route is scheduled only when a bimonthly, quarterly, semiannual, or annual route is not scheduled. Quarterly routes supersede corresponding monthly and bimonthly routes. Semiannual routes supersede monthly, bimonthly, and quarterly routes. Routes will supersede when they have the same schedule and when the work code, acronym, equipment number, route number, and equipment class are the same. For these routes, the estimated time is entered in MARS. The estimated time is accumulated for more frequently scheduled routes. Exhibit 526 shows an example of the estimated time to be entered on Form 4788 (Exhibit 522) for each superseding route if the work code, acronym, equipment number, route number, and equipment class are the same. The total time entered on Form 4788 should equal the less frequent route time. This does not apply to routes scheduled more frequently than monthly (that is, hourly, daily, weekly, and biweekly).

Frequency	Est. Time on Form 4776	Est. Time to Be Entered on Form 4788
Annual (A)	1.2	0.2
Semiannual (S)	1.0	0.4
Quarterly (Q)	0.6	0.2
Monthly (M)	0.4	+0.4
		———
Total		1.2

Exhibit 526
Example of Estimated Time

53 PREVENTIVE MAINTENANCE (PM) EXCEPTIONS

531 Bypass of Routes Not Performed as Scheduled

531.1 Rescheduling

Routes not performed on the first scheduled completion date are automatically backlogged in MARS for rescheduling. Routes must be accomplished within the retention period as defined in Exhibit 531.2. After the retention period, no attempt should be made to perform the route since it will be automatically bypassed.

531.2 Routes

Routes with frequencies other than those indicated in Exhibit 531.2 should be bypassed if they were not completed as scheduled.

Frequency	Retention (in days)
B	5
M	14
C	21
Q	42
S	42
A	90

Exhibit 531.2
Retention Periods by Route Frequency

531.3 Exception

The local office has an exception report available through MARS. This report shows each route bypassed and the number of times each was bypassed during the preceding year-to-date.

531.4 Backlog of Preventive Maintenance (PM) Routes and Corrective Maintenance (CM) Work Orders

If the PM/CM cannot be completed as scheduled and is to be done at a later date, the PM/CM is reported as backlogged. The PM/CM backlog report is available in MARS at the local office. This report is used by maintenance to reschedule the PM/CM.

532 Preventive Maintenance (PM) Bypass Codes

The following table illustrates applicable PM Bypass Codes:

PM Bypass Codes	Description
1	Non-Availability of Resources
7	Operational Requirements
8	Equipment Down Due to Maintenance
9	Equipment Not Operational Since Last Scheduled Maintenance

Note: Route suspension and activation are accomplished in MARS using MARS Preventive Maintenance Management module.

Exhibit 532
PM Bypass Codes

533 Contract Maintenance Cost

To complete the maintenance cost, local arrangements must be made within USPS field locations to have contract payment documents or copies flow through maintenance.

Contract costs must be limited to the charges paid to a contractor as a result of a negotiated contract for services. All material costs must be received and issued through MARS, *except* when the material costs are included in a negotiated contract. Costs associated with leasing tools or equipment for a specific maintenance function should be included. Utility charges must be reported as a contract cost. Telephone costs are not a utility charge. Data entry procedures for contract costs are contained in the MARS software user manual or Form 4803 (reference Exhibit 533).

Imprest Fund, Purchase Order, or Contract No.	U.S. Postal Service **Contract Maintenance Cost**	Date *(Month-day-year)*
	Read instructions on reverse before completion.	

PSDS										
SOM (1)	LOM (2)	Trans ID (3-4)	Sub-site (5-6)	Work Code (7-8)	Equipment Acronym (9-13)	Equipment Number (14-17)	Eqpt. Class (18-19)	Dollar Cost (20-26)	EOM (27)	Parts/Supplies Issue Slip Numbers (For Local Use)
&	1	L 3		1 0					@	
&	1	L 3		1 0					@	
&	1	L 3		1 0					@	
&	1	L 3		1 0					@	
&	1	L 3		1 0					@	
&	1	L 3		1 0					@	
&	1	L 3		1 0					@	
&	1	L 3		1 0					@	
&	1	L 3		1 0					@	
&	1	L 3		1 0					@	
&	1	L 3		1 0					@	
&	1	L 3		1 0					@	
&	1	L 3		1 0					@	
&	1	L 3		1 0					@	
&	1	L 3		1 0					@	
&	1	L 3		1 0					@	
&	1	L 3		1 0					@	
&	1	L 3		1 0					@	
&	1	L 3		1 0					@	
&	1	L 3		1 0					@	
&	1	L 3		1 0					@	
&	1	L 3		1 0					@	
&	1	L 3		1 0					@	
&	1	L 3		1 0					@	
&	1	L 3		1 0					@	

PS Form **4803,** May 1994

Exhibit 533 (p. 1)

Form 4803, *Contract Maintenance Cost*

Instructions for Completing Form 4803

Handbook references are to MS-63, *Maintenance Operations Support.*

Item	Positions	Description
Start of Message	1	No entry necessary.
Length of Message	2	No entry necessary.
Transaction ID	3-4	No entry necessary.
PSDS Subsite	5-6	Enter assigned two-position numeric subsite code if your postal facility uses PSDS equipment of another facility. Otherwise, fill in with zeros.
Work Code	7-8	No entry necessary.
Equipment Acronym	9-13	Enter acronym for equipment or pseudo-equipment as shown in Appendix 1, leaving any blank positions to the right.
Equipment Number	14-17	Enter a four-position number, locally assigned, to the right. Leave the unneeded positions to the left blank.
Equipment Class	18-19	Enter one- or two-position code as shown in Appendix 1. Use only column 19 where code is one-position, leaving position 18 blank, except BBC class "L."
Dollar Cost	20-26	Enter actual or estimated whole dollars, rounding cents to next higher figure. Report only at completion. Divide total between applicable equipment and pseudo-equipments. Fill unneeded positions to the left with zeros.
End of Message	27	No entry necessary.

Note: All the above are required.

PS Form **4803,** May 1994 *(Reverse)*

Exhibit 533 (p. 2)

Form 4803, *Contract Maintenance Cost*

534 Equipment Workload/Hours Operated Record

534.1 Description

Units produced and hours operated by the equipment types listed in Exhibit 534.1 (p. 3) are to be reported through MARS or Form 4804 (reference Exhibit 534.1 (p. 1)).

PSDS				U.S. Postal Service	Date
SOM (1)	LOM (2)	Trans ID (3-4)	Subsite (5-6)	**Equipment Workload/Hours Operated Record**	*(Month-day-year)*
&	3	L	2	Read instructions on reverse before completing.	

Equipment Acronym (7-11)	Equipment Number (12-15)	Equipment Class (16-17)	Hours Operated (18-21)	Production Data: Quantity *(Thousand)* (22-28)	EOM (29)
					@
					@
					@
					@
					@
					@
					@
					@
					@
					@
					@
					@
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					@
					@
					@
					@
					@
					@

Completed Form Reviewed By	Date	Data Entered By	Date	Report LNC004P4 Verified By	Date

PS Form **4804,** May 1994

Exhibit 534.1 (p. 1)

Form 4804, *Equipment Workload/Hours Operated Record*

Instructions for Completing Form 4804

Handbook references are to MS-63, *Maintenance Operations Support*.

Item	Positions	Entry
Start of Message	1	No entry necessary. An ampersand *(&)* is preprinted and, when transmitted, indicates to the computer the beginning of a transaction or message.
Length of Message	2	No entry necessary. Number 3 is preprinted and, when transmitted, indicates to the computer the length of message to be transmitted.
Transaction ID	3-4	No entry necessary. L2 is preprinted and, when transmitted, indicates to the computer the type of message being transmitted.
PSDS Subsite	5-6	Enter assigned two-position numeric subsite code from Appendix 3.
Equipment Acronym	7-11	Enter acronym for equipment listed in Appendix 1, leaving any blank positions to the right.
Equipment Number	12-15	Enter a four-position number, locally assigned, to the right. Leave unneeded positions to the left blank.
Equipment Class	16-17	Enter one- or two-position code as shown in Appendix 1. Use only column 17 where code is one-position, leaving position 16 blank, except BBC class "L."
Hours Operated	18-21	Show equipment hours operated for the reporting cycle which is applicable. Fill unneeded positions to the left, with zeros *(excluding maintenance hours).*
Production Quantity *(000's)*	22-28	Quantities will be entered for the reporting cycle that is applicable, in thousands. This means that 9,384,521 would be entered 9385. Fill unneeded positions to the left with zeros. Note that figures of 500 or greater are to be rounded to the next higher thousand.
End of Message	29	No entry necessary.

Note: All of the above are required.

PS Form **4804,** May 1994 *(Reverse)*

Exhibit 534.1 (p. 2)

Form 4804, *Equipment Workload/Hours Operated Record*

Equipment Acronym	Hours Operated	Units Produced	Production Unit
AFCS	X	X	Piece
DBCS	X	X	Piece
FC	X	X	Piece
FCS	X	X	Piece
LMLM	X	X	Piece
MPFSM	X	X	Piece
MPLSM	X	X	Piece
OCRCS	X	X	Piece
PSM	X	X	Piece
RCOCR	X	X	Piece
SBCS	X	X	Piece
SPFSM	X	X	Piece
SPLSM	X	X	Piece
SSM	X	X	Sack

NOTE: Data for equipment not specified above are not to be reported.

Exhibit 534.1 (p. 3)
Equipment to Report on Form 4804

54 WORK ORDERS (FORM 4805)

POLICY—The local maintenance organization will use Form 4805, Maintenance Work Order Requests, for all work requests that are not accomplished through a Preventive Maintenance (PM) program.

541 Description

541.1 Non-Repetitive Work Request

Form 4805, *Maintenance Work Order Request* (Exhibit 541.1), is a request to perform specific work and provides a description of required services. The specific work request provides information for planning repairs and estimating workhours and material. It also provides authorization and instructions for when and how the job is to be done and space for reporting work performed. Work order information becomes a part of the equipment history file.

UNITED STATES POSTAL SERVICE

Maintenance Work Order Request

Sub-site	Register Number	Work Order Number	Priority	Work Code	Equipment Acronym	Equipment Number	Eqpt. Class	Issued: Date (MM-DD-YY)	Issued: Crew No.	Issued: Est. Time

Work Request *(To be completed by the requesting office or organization)*

Office Name			City	State	ZIP + 4
Floor	Area	Room	Person to Contact		Phone *(Include area code)*
Requested By *(Name and title)*			Originating Department	Phone *(Include area code)*	Date Required

Description of Work Requested *(Equipment name and number if known)*

	Approved By *(Name, title, and signature)*	Date

Work Order *(To be completed by Maintenance)*

Description of Work Performed

Work Completed By	Date	Work Accepted By *(Close Work Order)*	Date

Parts Issue *(Use this section to record parts issues when MARS is unavailable for use.)*

Part Number	Nomenclature	Quantity	Issued By	Issued To

Official Disposition *(Use this section to verify work completion and closing of the Maintenance Work Order.)*

Maintenance Official Approval *(Signature and title)*	Date	Close Work Order *(Maint. Ops. Support initials)*

PS Form **4805**, August 1995

Exhibit 541.1 (p. 1) (maintenance work order request)

Form 4805, *Maintenance Work Order Request*

Equipment Breakdown Work Order

Sub-site	Register Number	Work Order Number	Priority	Work Code	Equipment Acronym	Equipment Number	Eqpt. Class	Issued Date (MM-DD-YY)	Issued Crew No.	Issued Est. Time

Instructions

1. Use this report to record information about *all* automation or mechanization equipment breakdowns that last 18 minutes or more.
2. Provide the work order number generated by MARS associated with the breakdown.
3. Provide detailed information about the problem and the diagnostic action taken. Attach additional pages if necessary to give a complete picture of the downtime events.
4. This report should be passed on to each tour until the equipment has been repaired.
5. This report should be reviewed and signed by both Maintenance and Operations personnel.
6. After the repairs are completed and signed off on this report, forward the report to the Maintenance Operation Support unit.

Work Request *(To be completed by the requesting office or organization)*

Office Name	City	State	ZIP + 4

Floor	Area	Room	Person to Contact	Phone *(Include area code)*

Requested By *(Name and title)*	Originating Department	Phone *(Include area code)*	Date Required

Event	Time	Date	Equipment Downtime		Breakdown Codes	
Breakdown Occurred	: AM PM		Due to Maintenance	.	Downtime Cause Code	
Maintenance Notified	: AM PM		Parts Unavailable	.		
Returned to Operation Status	: AM PM		Other	.		
Mail Processing Time Lost		Time *(Amount)* .	Maintenance *(Signature)*		Operations *(Signature)*	

Work Order *(To be completed by Maintenance)*

Description of Work Performed

Work Completed By	Date

Parts Issue *(Use this section to record parts issues when MARS is unavailable for use.)*

Part Number	Nomenclature	Quantity	Issued By	Issued To

Official Disposition *(Use this section to verify work completion and closing of the Equipment Breakdown Work Order.)*

Maintenance Official Approval *(Signature and title)*	Date	Close Work Order *(Maint. Ops. Support initials)*

PS Form **4805**, August 1995 *(Reverse)*

Exhibit 541.1 (p. 2) (equipment breakdown work order)

Form 4805, Maintenance *Work Order Request*

541.2 Repetitive Work Request

Form 4805-B, Standing Work Order (Exhibit 541.2) is a request for repetitive work on items such as hampers, strapping machines, loading (portable) conveyers, etc. Cleaning and custodial services not covered by area or component cleaning route sheets may be covered under the standing work order procedure.

UNITED STATES POSTAL SERVICE™

Standing Work Order

Sub Site	W/O Reg No.	Work Code	Equipment Acronym	Equipment Number	Work Order Number

Date	Employee ID Number *	Level & Labor Code/Hours				Work Completed By	Action Taken Code	Remarks
TOTAL						**OBSERVE SAFETY**	Work Accepted By	Date Accepted

PSDS				Work Order Identification					
SOM	LOM	Trans ID	Sub Site	Work Code	Equipment Acronym	Equipment Number	Work Order Number	Equip. Class	
1	2	3-4	5-6	7-8	9-13	14-17	18-21	22-23	
&	7	L	4						

Action Taken	Employee			Employee			Employee			Employee			EOM
	Pos. Level	Labor Code	Manhours Expended	Pos. Level	Labor Code	Manhours Expended	Pos. Level	Labor Code	Manhours Expended	Pos. Level	Labor Code	Manhours Expended	
26-28	41-42	43-44	45-48	49-50	51-52	53-56	57-58	59-60	61-64	65-66	67-68	69-72	
													@
													@

PS Form **4805-B,** January 1994 * Currently Not Applicable

Exhibit 541.2 (p. 1)

Form 4805-B, *Standing Work Order*

Item	Col.	Description
Subsite		Enter appropriate two-digit subsite code.
W/O Reg No.		Enter two-digit work order register number.
Work Code		Enter two-digit work code number.
Equipment Acronym		Enter acronym as shown in Appendix 1.
Equipment Number		Enter locally assigned equipment number.
Work Order Number		Enter four-digit work order number.
Date		Enter date work completed.
Employee ID Number		Enter employee's name or employee's ID number.
Level & Labor Code/Hours		Enter level and labor code and hours.
Work Completed By		Initialed by employee completing work.
Action Taken Code		Enter action taken code.
Remarks		Enter a brief description of completed work.
Work Accepted By		Initialed by supervisor accepting completed work.
Date Accepted		Enter date supervisor accepted completed work.
PSDS		
SOM	1	Start of message. No entry necessary.
LOM	2	Length of message. No entry necessary.
Trans ID	3–4	No entry necessary.
Subsite	5–6	Enter two-digit subsite code.
Work Code	7–8	Enter two-digit work code number.
Equipment Acronym	9-13	Enter acronym as shown in Appendix 1.
Equipment Number	14–17	Enter locally assigned number.
Work Order Number	18–21	Enter standing work order number (0001 through 0100).
Equip. Class	22–23	Enter one- or two-position code as shown in Appendix 1.

Exhibit 541.2 (p. 2)

Form 4805-B, *Standing Work Order*—Completion Instructions

Item	Col.	Description
Action Taken	26–28	Maintenance supervisor, mechanic, or maintenance support clerk enters three-position code: ALU for work code 07 and SLU for work code 09.
Employee Pos. Level	41–42 49–50 57–58 65–66	Position level of employee. Enter level 6 as 06. Enter level 10 as 10.
Labor Code	43–44 51–52 59–60 67–68	Enter labor group in positions 43, 51, 59, and 67, and classification in positions 44, 52, 60, and 68.
Workhours Expended	45–48 53–56 61–64 69–72	Enter total workhours and tenths of hours.
EOM		End of message. "@" is preprinted and indicates end of message.

Exhibit 541.2 (p. 3)

Form 4805-B, *Standing Work Order*—Completion Instructions

541.3 Repetitive Work Request Numbers

The first 100 numbers in each work order register are reserved for standing work orders. Standing work order numbers are posted, and employees are advised of the work order numbers so that they can charge time and material to the right work order. The same standing work order number must be used throughout the year to make sure that the data input identifies the same equipment. This applies to mail processing equipment, building equipment, and building services and other repetitious hours such as travel and training. Standing work orders must be closely monitored to prevent misuse.

UNITED STATES POSTAL SERVICE™

Standing Work Order

(Continuation)

Sub Site	W/O Reg No.	Work Code	Equipment Acronym	Equipment Number	Work Order Number

Date	Employee ID Number *	Level & Labor Code/Hours				Work Completed By	Action Taken Code	Remarks
TOTAL						**OBSERVE SAFETY**		Work Accepted By / Date Accepted

PS Form **4805-C,** January 1994 * Currently Not Applicable

Exhibit 541.3 (p. 1)

Form 4805-C, *Standing Work Order (Continuation)*

Item	Description
Work Code	Enter two-digit work code number.
Equipment Acronym	Enter acronym as shown in Appendix 1.
Equipment Number	Enter locally assigned equipment number.
Work Order Number	Enter four-digit work order number.
Date	Enter date work accomplished.
Employee ID Number	Enter employee's name or employee's ID number.
Level & Labor Code/Hours	Enter levels, labor codes, and hours and tenths of hours.
Work Completed By	Initialed by employee completing work.
Action Taken Code	Enter action taken code: ALU for work code 07 and SLU for work code 09.
Remarks	Enter brief description of completed work.
Work Accepted By	Initialed by supervisor accepting completed work.
Date Accepted	Enter date supervisor accepted completed work.

Exhibit 541.3 (p. 2)

Form 4805-C, *Standing Work Order (Continuation)*—Completion Instructions

542 Non-Maintenance Work Request

542.1 Approvals

The site manager must establish procedures for requesting maintenance work from activities outside the maintenance organization. The senior maintenance official should discuss with the requestor any request that does not seem to be feasible, is contrary to policy, or when workhours or other costs may adversely affect the established budget. All outstanding work requests should be reviewed continually.

542.2 Change Requests

Requests for changes to buildings or for modifications, additions, and removals involving mail handling mechanization are also received from Area and Headquarters sources. Arrangements must be made locally to provide replacements for the personnel taken from scheduled PM duties on critical machinery to avoid adverse effects on mail processing.

542.3 Completion and Processing

Pertinent information in the spaces of the upper left portion (Part I) of Form 4805 (Exhibit 541.1) must be entered by the requesting office. The nature of the work, equipment, or location to which the request applies must be specifically stated. The name and telephone number of the employee familiar with the request must be listed. Items of equipment, such as platform stools, hampers, etc., on which repairs are required must be identified by operations with Form 4707, *Out of Order* (tag).

Form 4805 (Exhibit 541.1) must be dated and registered upon receipt by maintenance. If performance of the work is authorized, the work request must be entered in the appropriate MARS register.

542.4 Cancellations

Cancellation of work orders requested by personnel outside the maintenance organization must be approved by the site manager or a designee.

543 Reporting Needed Repairs and Adjustments

All maintenance personnel are responsible for identifying and reporting all needed repairs and adjustments or conditions indicating the possibility of such need.

This notification must be delivered to the supervisor as soon as possible. The supervisor decides whether the needed attention can be given by the work force without serious interruption of scheduled maintenance. When the

work cannot be completed during the current tour, the work record card is returned and the work is rescheduled.

544 Preparation and Processing Work Orders

Work orders are generated as follows:

a. Mechanics and supervisors prepare or request work orders based on findings and observations made during daily work assignments.
b. Operations management, administrative officials, customer service units, customer service facilities, and agencies request maintenance work.
c. Maintenance personnel prepare the work orders for seasonal or major overhaul work and for such work as modifications requested by higher management after approval.

545 Work Order Register and Priorities

545.1 Approval

As soon as a work order is approved, the next number is assigned sequentially in the appropriate work order register. Work order procedures are noted in the MARS software user manual. A first-line maintenance supervisor or a qualified designee must assign a priority code from Exhibit 545.1b.

UNITED STATES POSTAL SERVICE

Work Order Register

(Continue on reverse)

Priority	Work Code	Equipment Identification			Work Order No.	Date Issued	Description of Work to Be Performed	Deadline Date	Schedule and Rescheduled Data			Date Completed
		Acronym	Number	Class					1	2	3	

PS Form **4775**, February 1989 *(Previous edition usable)* Page _____ of _____ Pages

Exhibit 545.1a

Form 4775, *Work Order Register*

Note: Work to be done on work requests assigned priority code A or B should be initiated as scheduled if it involves safety or revenue loss. Work requests with these priorities can be assigned verbally and should be started immediately.

Priority Code	Desired Completion
A	24 hours (includes emergency)
B	1 week
C	1 month
D	3 months

Exhibit 545.1b
Priority Codes

545.2 Number Sequence

Numbers used on work order registers start with 0101 and run in sequence through 9999 without interruption. Number blocks 0001 through 0100 are used for standing work orders, allowing commonly used numbers to remain the same from year to year. Uncompleted work orders carried over from the previous year are cross-referenced by the MARS system.

545.3 Nonemergency Work Orders

Priorities for nonemergency work orders must be determined by the availability of funds, workhours, time, and material. Priorities are assigned by the senior maintenance official or designee, not the requestor. The person requesting the work may also ask that the work be done by a certain date. The priority assigned to a work order must be realistic. All required parts/supplies must be in the stockroom before a work order is scheduled.

545.4 Work Priority Changes

545.41 Changes

The priority code assigned to work orders cannot be changed without the approval of the senior maintenance official or designee. If the priority code assigned to a work order received from sources other than maintenance requires a change, the senior maintenance official or designee must coordinate the change with the requester in writing. A copy of all correspondence between the maintenance activity and the requestor must be attached to the revised work order. A copy of the correspondence must also be attached to the work order filed in the suspense file.

545.42 **Approvals**

Priority code changes on work requests generated within maintenance must be approved by the senior maintenance official or designee. Such approvals are indicated by the senior maintenance official's initials or designee's initials in the priority block on the original copy.

545.43 **New Codes and Dates**

When the priority code changes, the work order and other supporting documents must be changed to show the new code and the new scheduled completion date.

545.5 Planning Work

545.51 **Considerations**

When planning approved and assigned work orders, several factors must be taken into consideration: the least interference to operations or building areas; the availability of parts and material; and workhours available to do the work within established schedules.

545.52 **Responsibilities**

Maintenance personnel are responsible for planning work orders after consultation with the appropriate maintenance supervisor.

546 Corrective Maintenance (CM)/Operational Maintenance

546.1 **Unscheduled Workhours**

Any productive maintenance workhours not scheduled in the PM Master File are reported through the MARS Work Order Management module. These workhours include but are not limited to nonrecurring PM, CM, and modifications.

546.2 **Operational Maintenance**

Operational maintenance is the amount of time required to maintain operating equipment in optimum condition. Such operational maintenance requirements are identified and submitted for approval during annual staffing review. Operational maintenance includes the monitoring of the operational performance and the adjustments and corrective actions that are required to improve equipment performance and sortation quality.

547 Training Workhours

Workhours spent in training must be reported. All workhours expended on required duties or hands-on On the Job Training (OJT) are to be reported as

productive workhours. Work code 22 and acronym ZTRNG must be used for all other training (e.g., resident training).

548 Definition of Equipment Downtime

548.1 Breakdown

A breakdown occurs when a piece of equipment in an operational status (scheduled for operation or operating) cannot perform its function at an acceptable performance level. A breakdown should be reported whenever downtime is 0.3 hour (18 minutes) or more.

548.2 Equipment Downtime

Equipment downtime is the amount of clocktime that elapses from the time a breakdown occurs until the time maintenance employees designate the equipment to be operational. Downtime is actual clocktime, not an accumulation of labor hours expended and should be reported as work code 08 (Breakdown) maintenance. Equipment downtime is the total clocktime of downtime due to maintenance, parts unavailability, or other as described below:

a. Downtime due to maintenance is clocktime used to analyze, identify, and resolve an equipment problem, such as troubleshooting, running diagnostics, adjusting, aligning, removing, and replacing defective items.
b. Downtime due to parts unavailability is downtime in excess of 0.3 hour used to secure spare parts, tools, or support equipment. When a stock outage causes equipment downtime, the clocktime from when the outage was discovered until the part was received at the site must be recorded as parts unavailability.
c. Downtime due to other factors is downtime in excess of 0.3 hour measured as clocktime, associated with cleanup, administrative delay, or reassignment of personnel to higher priority work.

548.3 Operational Status

Even though mail processing time is not lost because of availability of similar equipment, a breakdown must be reported on all equipment that failed. A piece of equipment is returned to an operational status when it can perform its function at an acceptable performance level.

Example: A bar code sorter (SBCS) ID tag reader fails; the technician determines that the ID tag reader is defective. The supervisor notifies mail processing that the repair and checkout are to take approximately 1.0 labor hour. Mail processing explains that the equipment needs to be repaired while the crew is at lunch. The repair took 0.5 hour with two employees

assigned downtime due to maintenance reported as 0.5 hour and the labor hours expended as 1.0 hour.

Example: A boiler (HVACB) starts losing pressure; the maintenance employee looks the situation over, shuts the boiler down, and determines that a valve is malfunctioning. The mechanic goes to the stockroom, discovers the valve is not a stock item, and it is to be procured locally. It takes 3.0 hours for the part to be delivered. Because of a shift change, installation is delayed another 1.5 hours. The work is assigned, the valve is replaced, the boiler restarted, and the pressure starts to rise. It took 0.5 hour for examination and repair, 3.0 hours until the parts were received, 1.5 hours for the work to be assigned, and 2.0 hours for the pressure to build to an operational level. Based on this scenario, equipment downtime due to maintenance is reported as 2.5 hours, equipment downtime due to parts unavailability as 3.0 hours, equipment downtime due to other as 1.5 hours, and labor hours expended as 0.5 hour.

55 CLOSING OUT WORK ORDERS

Maintenance personnel must close out completed work orders each day using MARS Completed Actions module.

56 CORRECTING REPORTED DATA

POLICY—The local maintenance organization ensures accurate data input to the national maintenance data base.

57 DETAIL SCHEDULING PROCEDURES

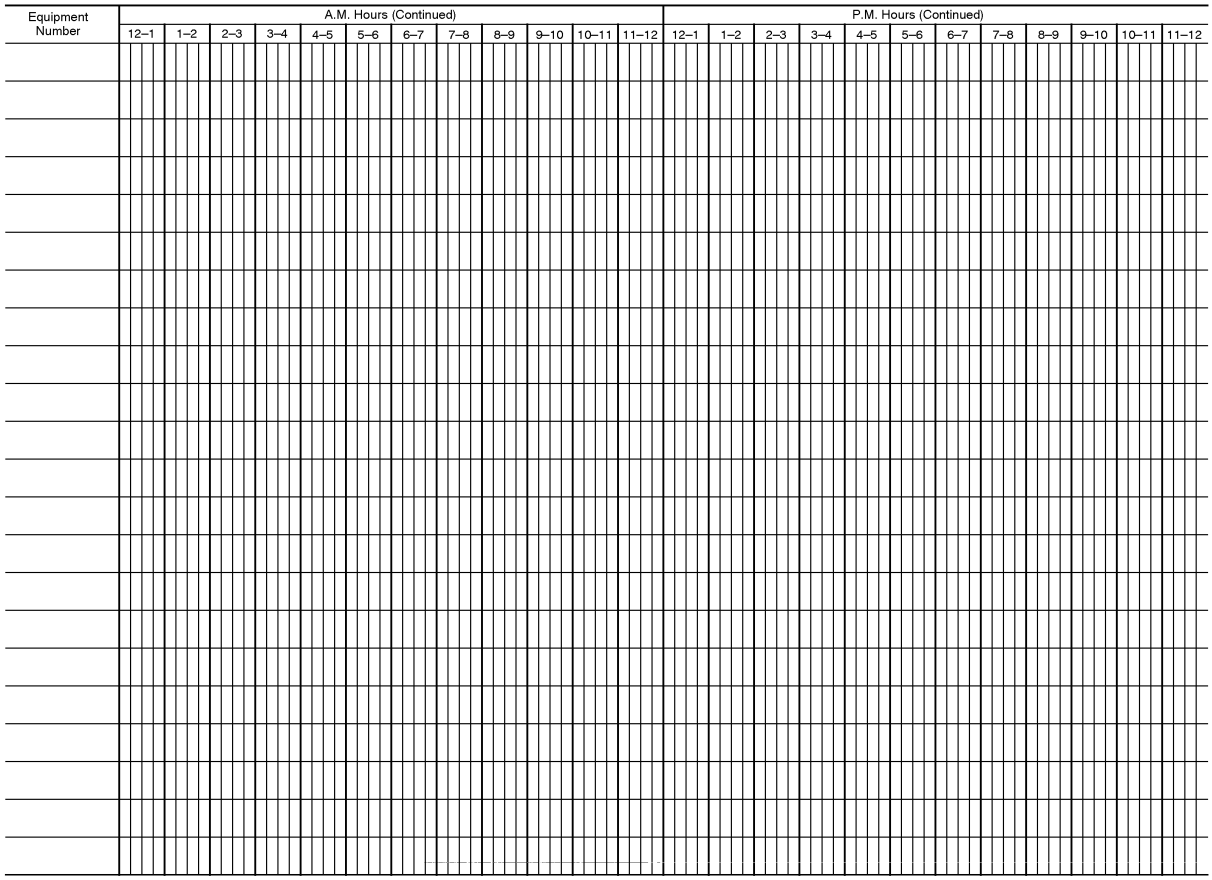
571 Process

The maintenance workload scheduling cycle is mandatory to ensure proper and effective use of maintenance resources. Certain factors must be considered in supporting maintenance requirements: availability of material, tools, test equipment, workhours, and the daily equipment Operation Maintenance Schedule.

a. The crew work schedules are available in the MARS Personnel Management module.

b. Daily equipment Operation Maintenance Schedule (Exhibit 571) must be completed by Operations and Maintenance and posted in the equipment area.

c. Changes to the Operation Maintenance Schedule must be submitted to the senior maintenance official by operations as they occur on Form 4840 (Exhibit 571). These changes enable maintenance to support operations and perform maintenance as required. Maintenance must establish a system to ensure that changes to operational schedules are received.



PS Form **4840**, September 1985 *(Reverse)*

Exhibit 571

Form 4840, *Operation Maintenance Schedule*

572 Weekly Maintenance Workload Scheduling

Weekly maintenance schedules are developed using the MARS Workload Scheduling module. Maintenance should convene weekly to review the upcoming week's maintenance schedule.

573 Daily Maintenance Work Scheduling

Daily maintenance workload scheduling through MARS allows sufficient time to incorporate reactive maintenance requirements into the daily portion of the weekly schedule. The daily schedule must be flexible enough so that reactive maintenance occurring during the day can be absorbed without upsetting the primary schedule. To maintain a flexible schedule, a percentage of the total available workhours should allow for unplanned work.

574 Form Retention

File in accordance with Appendix 6.

575 Form 4778

575.1 Use

Maintenance may use Form 4778 as a control document to ensure that all routes and work orders scheduled are recorded and returned (see Exhibit 575.1). A MARS generated Form 4778 may also be used.

U.S. Postal Service
Daily Assignment Sheet

Name of Supervisor	Operations No.	Day of Week	Date *(Mo. Day Year)*	Tour	Sheet of

MAINTENANCE CONTROL/FOREMAN: Enter all scheduled routes and work orders daily.
FOREMAN: As assignments are completed, enter time used by each employee.

PSDS SOM *(1)*	LOM *(2)*	TRANS ID *(3-4)*	SUB-SITE *(5-6)*	Office:
&	ø	L 1	ø ø	

Route Work Order Identification

Work Code *(7-8)*	Equipment Acronym *(9-13)*	Equipment Number *(14-17)*	Route-Work Order Number *(18-21)*	Eqpt Class *(22-23)*	RTE Freq-W.O. Priority *(24)*	Maintenance Status *(25)*	EFFECTIVE DATE (AP AND DAY OF AP) AP *(26-27)*	Day *(28-29)*	Actual time required to perform this assignment Hours & Tenths *(30-33)*	End of Message (EOM) *(34)*	SCHEDULED TIME Hours & Tenths	EMPLOYEE'S NAME Show assignment by check "✓" in corner of block
										@		
										@		
										@		
										@		
										@		
										@		
										@		
										@		
										@		
										@		
										@		
										@		
										@		
										@		
										@		
										@		
										@		

Productive Hours (Hours Worked)	
Non-Productive Hours (Locally Authorized Breaks Etc.)	
Absences, All Categories (Except L.W.O.P.)	
Total Paid Hours	
Hours Included Subject to Overtime or Compensation	
Leave Without Pay (L.W.O.P.)	

PS Form **4778,** July 1979

Facsimile, April 1996

Exhibit 575.1 (p. 1)

Form 4778, *Daily Assignment Sheet*

WORK CODES *(Positions 7-8)*

01 Traveling & Stationary Routes (MS-1)
02 Inspection
03 Routine Maintenance
04 Clean & Lubricate
05 Training
06 Building Services
07 Planned Corrective
08 Breakdown Corrective
09 Area Assurance
10 Contract Services
11 Modifications (Area or Locally Approved)
12 Modifications (Headquarters ECB Approved)
13 Construction/Alterations
14 Overhaul
15 Breakdown Assistance
16 Indirect Maintenance

MAINTENANCE STATUS *(Position 25)*

1 Bypassed (Non availability of manpower)
2 Not accomplished as scheduled, place on Backlog Report for rescheduling
3 Accomplished full job as rescheduled
4 Completion with significant variance
5 Suspend scheduled seasonal routes
6 Activate scheduled seasonal routes
7 Bypassed (Due to operational requirement)
8 Bypassed (Due to equipment down for maintenance)
9 Bypassed (Equipment not operated since last scheduled maintenance performed)

WORK STATUS CODES *(NOT to be reported via PSDS)*

I Incomplete
R Reschedule
S Incomplete - reschedule
X Completed prior to schedule
Y Work completed from prior tour
Z Route-WO started - To be completed on subsequent tour

Borrowed Employees

Name	Borrowed From	OPS #	Loaned To	OPS #	Hours

Remarks

PS Form 4778, July 1979 (Reverse)

Facsimile, April 1996

Exhibit 575.1 (p. 2)
Form 4778, Daily Assignment Sheet, Example

Facsimile, April 1996

Exhibit 575.1 (p. 3)

Form 4778, *Daily Assignment Sheet*, Example

U.S. Postal Service
Daily Assignment Sheet

Name of Supervisor | Operations No. | Day of Week | Date *(Mo. Day Year)* 11-14-93 | Tour | Sheet of

MAINTENANCE CONTROL/FOREMAN: Enter all scheduled routes and work orders daily.
FOREMAN: As assignments are completed, enter time used by each employee.

PSDS: SOM (1) & LOM (2) Ø | TRANS ID (3-4) L 1 | SUB-SITE (5-6)

Office:

EMPLOYEE'S NAME

Show assignment by check "✓" in corner of block

Route Work Order Identification

Work Code (7-8)	Equipment Acronym (9-13)	Equipment Number (14-17)	Route-Work Order Number (18-21)	Eqpt Class (22-23)	RTE Free-W.O. Priority (24)	Maintenance Status (25)	EFFECTIVE DATE (AP AND DAY OF AP) AP (26-27)	EFFECTIVE DATE (AP AND DAY OF AP) Day (28-29)	Actual time required to perform this assignment Hours & Tenths (30-33)	End of Message (EOM) (34)	SCHEDULED TIME Hours & Tenths
Ø2	MPLSM	3	ØØ17	GQ		1				@	
Ø3	MPLSM	3	ØØ18	GT		1			3Ø	@	
Ø4	MPLSM	3	ØØ2Ø	GM		2	Ø42	11		@	
Ø4	MPLSM	3	ØØ2Ø	GM		3				@	
Ø4	MPLSM	3		GM		4			45	@	
Ø1	HVACB	1		AA	T	5	Ø61	15		@	
	HVACB					5				@	
Ø1	HVACB	1		AA	T	6	13	Ø1		@	
	HVACB					6				@	
Ø3	FC	2	ØØ1Ø	D	D	7				@	
Ø3	FC	3	ØØ3Ø	D	D	8				@	
Ø3	FC	4	ØØ4Ø	D	D	9				@	
Ø7	BBC	C3	ØØ4Ø	DBF		2	Ø42	11	17Ø	@	
Ø7	BBC	C3	ØØ4Ø	DBF		3				@	
Ø3	MPLSM	3	ØØ18	GT		1				@	
Ø4	MPLSM	3	ØØ2Ø	GM		4				@	
										@	

Productive Hours (Hours Worked)	
Non-Productive Hours (Locally Authorized Breaks Etc.)	
Absences, All Categories (Except L.W.O.P.)	
Total Paid Hours	
Hours Included Subject to Overtime or Compensation	
Leave Without Pay (L.W.O.P.)	

PS Form **4778,** July 1979

Facsimile, April 1996
Exhibit 575.1 (p. 4)
Form 4778, *Daily Assignment Sheet*, Example

U.S. Postal Service
Daily Assignment Sheet

Name of Supervisor: Jackson
Operations No.: 75ø
Day of Week: Monday
Date *(Mo. Day Year)*: 3-8-93
Tour: 2
Sheet 1 of 1

MAINTENANCE CONTROL/FOREMAN: Enter all scheduled routes and work orders daily.
FOREMAN: As assignments are completed, enter time used by each employee.

PSDS: SOM (1) = &; LOM (2) = ø; TRANS ID (3-4) = LI 1; SUB-SITE (5-6) = ø ø
Office:

Route Work Order Identification

Work Code (7-8)	Equipment Acronym (9-13)	Equipment Number (14-17)	Route-Work Order Number (18-21)	Eqpt Class (22-23)	RTE Freq-W.O. Priority (24)	Maintenance Status (25)	EFFECTIVE DATE (AP AND DAY OF AP) AP (26-27)	EFFECTIVE DATE (AP AND DAY OF AP) Day (28-29)	Actual time required to perform this assignment Hours & Tenths (30-33)	End of Message (EOM) (34)	SCHEDULED TIME Hours & Tenths	Smith	Jones	Wallace	Adams	Bell	Mathis
												Show assignment by check "✓" in corner of block					
ø3	FC	1	øøø9	M	W					@	18						
ø3	FC	2	øøø9	M	W					@	18						
ø2	MPLSM	11	øø11	K	D					@	22						
ø2	MPLSM	12	øø12	K	D					@	22						
ø3	QCRCS	11	øø21	D	D					@	23						
ø3	QCRCS	22	øø22	D	D					@	23						
ø3	QCRCS	33	øø23	D	D					@	23						
ø3	SBCS	11	ø131	B	Q					@	ø						
										@							
										@							
										@							
										@							
										@							
										@							
										@							
										@							
										@							

EMPLOYEE'S NAME

Productive Hours (Hours Worked)
Non-Productive Hours (Locally Authorized Breaks Etc.)
Absences, All Categories (Except L.W.O.P.)
Total Paid Hours
Hours Included Subject to Overtime or Compensation
Leave Without Pay (L.W.O.P.)

PS Form **4778,** July 1979

Item	Col.	Description
Name of Supervisor		Enter name of supervisor responsible for assigning workload.
Operations No.		Enter number of operation assigned to this maintenance function.
Day of Week		Enter day of week (Saturday, Sunday, etc.) that work is to be done.
Date		Enter date (month, day, year) that work is to be done.
Tour		Enter the tour during which the work is to be done.
Sheet		Enter number and amount (example: 1 of 2) of sheets used to list all routes and work orders.
EMPLOYEE'S NAME		List names of each employee responsible to above supervisor.
PSDS		
SOM	1	Start of message. No entry necessary.
LOM	2	Length of message. No entry necessary.
TRANS ID	3–4	No entry necessary.
SUBSITE	5–6	Enter appropriate two-digit subsite code.
Office		Enter facility name and address.
Route Work Order Identification		
Work Code	7–8	Enter work code as shown on route sheet or work order.
Equipment Acronym	9-13	Enter acronym of equipment for which route or work order is scheduled (refer to local PM and equipment inventory catalogs).
Equipment Number	14-17	Enter equipment number for which route of work order is scheduled.
Route-Work Order Number	18-21	Enter number of route or work order being scheduled.
Eqpt Class	22–23	Enter appropriate equipment class.
RTE Freq-W.O. Priority	24	Enter frequency of route or priority of work order being scheduled.

Exhibit 575.1 (p. 5)

Form 4778, *Daily Assignment Sheet*—Completion Instructions

Item	Col.	Description
Maintenance Status	25	Enter maintenance status code for each route or work order not done as scheduled. (See code listing on reverse side of form.) This code should be entered by the supervisor responsible for making work assignments.
EFFECTIVE DATE		
AP	26–27	Enter the effective date, if necessary, for the transaction.
Day	28–29	Enter the effective day for the transaction
Actual time required to perform this assignment	30-33	(Optional) Enter total time for each route or work order done by all employees on this assignment. This time is to be entered by supervisor or employee assigned to complete Form 4778.
SCHEDULED TIME		
Productive Hours		(Optional) Enter on line under employee's name, total time used for all routes and work orders performed.
Non-Productive Hours		(Optional) Enter on this line under employee's name, total non-productive time used for all routes and work orders performed. (Include time for locally authorized breaks, wash-ups, meetings, etc.)
Absences, All Categories		(Optional) Enter on this line, under employee's name, all hours absent, all categories (except leave without pay).
Total Paid Hours		(Optional) Enter on this line, under employee's name, total paid hours. All categories.
Hours Included Subject to Overtime or Compensation		(Optional) Enter on this line, under employee's name, total paid hours, hours subject to overtime or compensation.
Leave Without Pay (L.W.O.P.)		(Optional) Enter on this line, under employee's name, all hours in a leave without pay status.
Reverse of Form		
Borrowed Employees		Record names and operation number of employees borrowed from, or lent to, other than their regularly assigned operations.

575.2 Number of Hours Reported

There is no specific number that should be entered in this category. The hypothetical goal of 7.5 hours of productive work serves only to distort the overall maintenance equipment costs and true productivity. Only by reporting the actual maintenance time can the USPS determine true equipment costs.

575.3 Assignment Changes

When employees are taken from their normal assignments or work orders for short periods, appropriate entries should be made on the route sheets and additional duties and times posted on Form 4778. The supervisor should combine all time spent in the same reporting category to reduce the number of entries.

575.4 Optional Reporting

The recording of administrative hours for management, supervision, and Maintenance Operations Support (MOS) personnel is optional unless directed by higher authority. If required, the data may be entered on a separate form by operation number and entered into the system.

576 Supervisor or Designee

576.1 Assignments

The supervisor initiates the *Daily Assignment Sheet*, including work orders and route sheets, and assigns the work to the appropriate employee. At the same time, the supervisor may give special instructions for certain jobs such as the type of work to do first on specific equipment, the material that should be obtained, or the safety precautions that apply to the tasks.

576.2 Inspections

As jobs are completed, the supervisor inspects the work, then recovers and completes the paperwork required on work orders and route sheets. Time spent by each employee may be posted on Form 4778. The information provides a means for evaluating performance of maintenance employees and estimating future time allowances.

576.3 Responsibilities

The supervisor is responsible for completing all entries, accounting for all routes and work orders recorded on Form 4778.

577 No Supervisor

When there is no supervisor, the Daily Assignment Sheet may be retained by maintenance. When there are no supervisors on a tour, the single sheet may cover more than one tour within a 24-hour day. Designated maintenance employees, in the absence of a supervisor, may make entries or provide information for entries on the form.

58 EQUIPMENT BREAKDOWN INVESTIGATION REPORT

Form 4774 provides information to local offices about deficiencies in the maintenance or operation of equipment. Distribution of completed reports, other than in-house copies, must be determined by Area offices. Copies should not be submitted routinely to the MTSC.

581 Preparation

Form 4774 (Exhibit 581) may be prepared by the maintenance supervisor or designee on duty when a breakdown occurs causing downtime in excess of 18 minutes.

Equipment Breakdown Investigation Report

Instructions for Completing Form 4774

1. Use this form to inform maintenance managers when 18 minutes or more of mail processing time has been lost because of a postal equipment breakdown or stoppage.
2. Each report must be limited to a single breakdown.
3. The maintenance supervisor concerned must prepare and sign the report.
4. **The operations supervisor concerned must review and sign the report.**

Postal Facility *(City, state, and ZIP+4)*	Time		Date
	Down	: AM PM	
Equipment	Reported	: AM PM	
Report No. *(Numerical sequence, i.e., 77-1, 77-2, etc.)* / Date of Report	Repaired	: AM PM	
	MAIL PROCESSING TIME LOST ▶		Hours and Tenths of Hours

Cause of Breakdown *(Describe)*

Last Scheduled Maintenance Performed By *(Employee's name)*	Date Maintenance Performed

Reason Defect Not Detected During Last Scheduled Maintenance

Determine Cost of Breakdown		Recommendations *(Check)*
Maintenance Labor Cost	$	☐ 1 – Change Frequency of Inspection ☐ 3 – Modify Equipment ☐ 5 – Alter Lubrication Schedule ☐ 7 – Reinstruct Operator ☐ 2 – Establish Part Replacement Period ☐ 4 – Revise Check Out ☐ 6 – Change Cleaning Schedule ☐ 8 – Replace Equipment
Materials	$	Explain
Other	$	
		Investigated By
Total Cost of Breakdown ▶	**$**	▶ Maintenance Supervisor *(Signature)* / ▶ Operations Supervisor *(Signature)*

Action Taken and Date

Work Order Number	Posted to Equipment Inventory-History Record, If Required By *(Name and Date)*
Was failure reported on ☐ Form **4805** or ☐ Form **4941**? ☐ Yes *(If "Yes," give date reported)* ☐ No *(If "No," give reason)*	Maintenance Manager *(Signature)* ▶

PS Form **4774**, May 1994

Exhibit 581

Form 4774, Equipment Breakdown Investigation Report

582 Completion

The maintenance supervisor or designee initiates the breakdown report, participates in the investigation, and recommends corrective action. The report should cover as much of the following as applicable:

a. Exact nature of the breakdown.
b. Root cause of the breakdown.
c. Date of the last scheduled examination or repair and the name of the person doing it.
d. Reason any defect causing the breakdown was not detected earlier.
e. Cost of labor and material needed to repair the damage, including the cost of mail processing workhours lost and attributable to the breakdown or stoppage. This information must be shown on the recommendation portion of the form and include the signature and title of the operations supervisor.
f. Action recommended to decrease recurrences of this type of breakdown.
g. Actions taken to implement the recommendation.

583 Submission and Handling

The following procedures apply to submitting and handling Form 4774:

a. Form 4774 must be submitted to the senior maintenance official for approval.
b. Information from Form 4774 may be posted to the appropriate equipment history record card with a notation indicating the existence of the report. All breakdown reports must be filed separately.

59 POSTAL EQUIPMENT PROBLEM FEEDBACK (FORM 4568)

Form 4568 (see Exhibit 59) is a means of reporting operating failures, malfunctions, or other deficiencies in new equipment or material. Reports using this form provide the basis for equipment modifications and for enforcing the terms of the warranty. Form 4568 is also used to identify problems that contribute to excessive maintenance costs. The form is used by Area and Headquarters personnel to learn of problems experienced in the field.

1. System/Equipment Nomenclature	2. Make and Model	3. Reparable Component Serial Number OEM - CRF -
4. Reparable or Consumable Nomenclature/Type	5. NSN and OEM Part Number	6. Reference Designator (*See MS Handbook*)
7. Postal Facility and ZIP + 4	8. Contact Person's Name and Phone Number with Area Code	
9. Warranty ☐ Yes ☐ No	10. Date Replaced	11. Quantity *(Consumable Items Only)*
12. Check Box If Reviewed by Maintenance Manager ☐		

13. Description of Problem, Cause, and Action Taken*(If more room is needed, attach additional sheets and mail in envelope to address on opposite side.)*

Complete and mail in this card when reporting warranty defects and for each case of unusual or persistent defect or problem in Postal equipment. Pay particular attentior to those items still within their warranty period. Should be filled out by person actually making the repair. Discuss only one reparable component failure/problem per card. Fill in completely information blocks 1 through 13. Do not list/discuss different types of failures/problems on the same card. When reporting Defective on Arrival or warranty items, send a copy of this form to the Topeka Material Distribution Center along with the part. This card should be used by all offices with maintenance capabilit

U.S. Postal Service
Postal Equipment Problem Feedback

PS Form 4568, November 1993 **MTSC PN 003-00000083, NSN 7530-02-000-9270**

UNITED STATES POSTAL SERVICE ™

MAINTENACE TECHNICAL SUPPORT CENTER

UNITED STATES POSTAL SERVICE

PO BOX 1600

NORMAN OK 73069-8592

First-Class Mail
Postage & Fees Paid
U.S.P.S.
Permit No. G-10

MODIFICATION AND DESIGN
MAINTENANCE TECHNICAL SUPPORT CENTER
US POSTAL SERVICE
PO BOX 1600
NORMAN OK 73069-8592

Facsimile, April 1996
Exhibit 59
Form 4568, Postal Equipment Problem Feedback (Front and back)

591 Preparation

The originator must include the name and telephone number of the person most familiar with the problem.

Note: Personnel completing Form 4568 and Form 4774 must identify equipment by standard titles (e.g., tray transport conveyor or edge stacker); use of local numbers or such titles as #105E2 might not be understood by those who review the forms.

6 Equipment Inventory and Reporting

61 EQUIPMENT

POLICY—The local maintenance organization inventories all equipment at Maintenance Capable Offices (MCOs) and records the equipment inventory in the Maintenance Activity Reporting and Scheduling (MARS) system. An equipment file for all items governed by Publication 101, Engineering Change Board Organization and Operation will be maintained.

611 General

This chapter provides the requirements and procedures for establishing equipment files. Equipment is the basic entity for which workhours and other costs are collected. All equipment installed and identified in Appendix 1 is reported even if it is maintained under contract.

612 Definitions

612.1 Postal Equipment

Postal equipment includes equipment used directly or indirectly in moving the mail (e.g., facer cancelers, letter sorting machines, collection boxes, scales, commodity vending machines).

612.2 Building Equipment

Building equipment includes the building's physical structure, electrical, mechanical, and environmental systems.

612.3 Fixed Equipment

Fixed equipment is designed to conform to the shape, space, or other requirements of a United States Postal Service (USPS) facility (e.g., tray transport system).

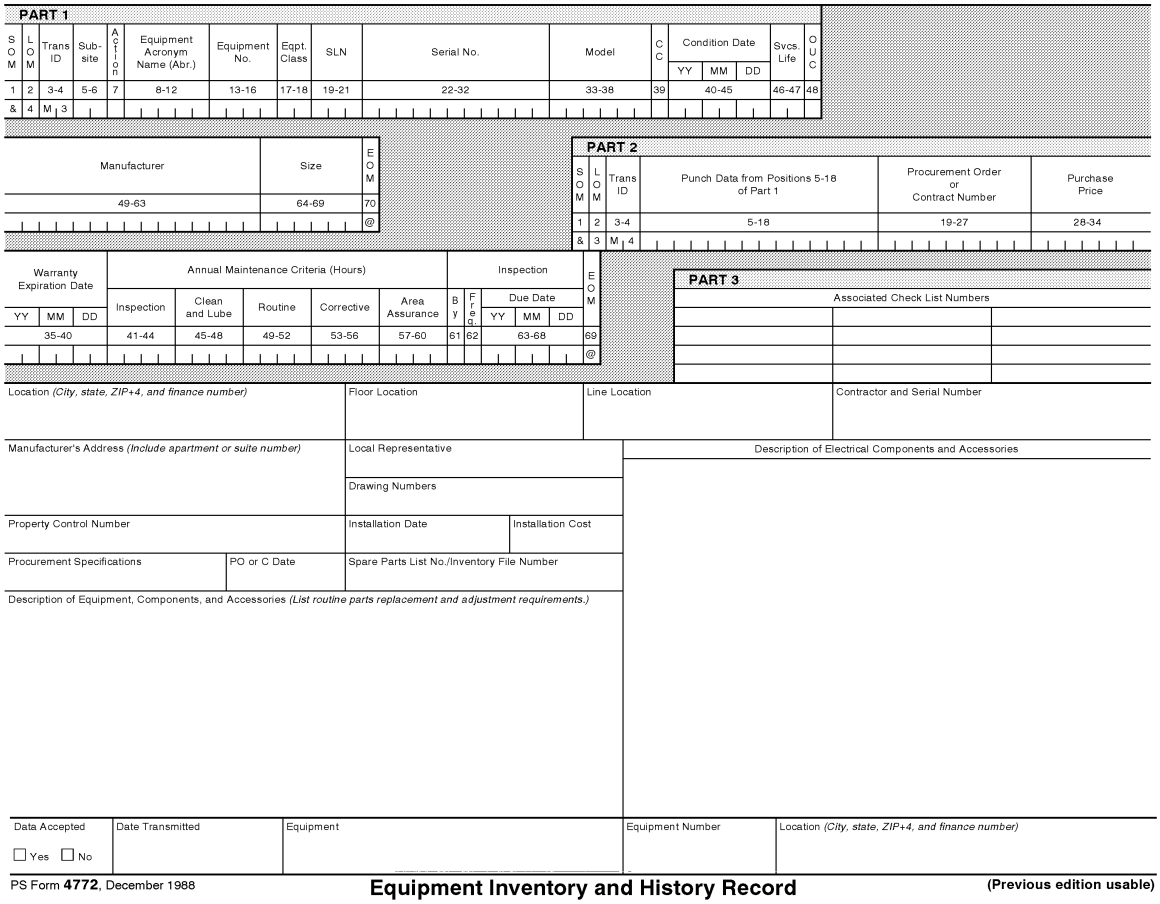
612.4 Nonfixed Equipment

Nonfixed equipment is used in mail processing activities exclusive of mail transport conveyor systems. Generally, this equipment was not designed to conform to the shape of any specific USPS facility.

613 Equipment Inventory and History Record

613.1 Description

Form 4772 (Exhibit 613.1 (pp. 1 and 2)) and MARS Equipment Inventory module provide information such as serial number, model, and manufacturer. Both provide a record of parts and identification for requisitioning parts, locating drawings, and securing service assistance from manufacturers or local representatives. They also are used to establish and maintain the equipment inventory history file. It is extremely important that all data is fully documented and entries are correct. Equipment inventory data is the responsibility of maintenance.



PART 1

SOM	LOM	Trans ID	Sub-site	Action	Equipment Acronym Name (Abr.)	Equipment No.	Eqpt. Class	SLN	Serial No.	Model	CC	Condition Date YY MM DD	Svcs Life	OUC
1	2	3-4	5-6	7	8-12	13-16	17-18	19-21	22-32	33-38	39	40-45	46-47	48
&	4	M	3											

Manufacturer	Size	EOM
49-63	64-69	70
		@

PART 2

SOM	LOM	Trans ID	Punch Data from Positions 5-18 of Part 1	Procurement Order or Contract Number	Purchase Price
1	2	3-4	5-18	19-27	28-34
&	3	M	4		

Warranty Expiration Date YY MM DD	Annual Maintenance Criteria (Hours): Inspection	Clean and Lube	Routine	Corrective	Area Assurance	Inspection: By	Freq	Due Date YY MM DD	EOM
35-40	41-44	45-48	49-52	53-56	57-60	61	62	63-68	69
									@

PART 3

Associated Check List Numbers

Location *(City, state, ZIP+4, and finance number)* | Floor Location | Line Location | Contractor and Serial Number

Manufacturer's Address *(Include apartment or suite number)* | Local Representative | Drawing Numbers | Description of Electrical Components and Accessories

Property Control Number | Installation Date | Installation Cost

Procurement Specifications | PO or C Date | Spare Parts List No./Inventory File Number

Description of Equipment, Components, and Accessories *(List routine parts replacement and adjustment requirements.)*

Data Accepted ☐ Yes ☐ No | Date Transmitted | Equipment | Equipment Number | Location *(City, state, ZIP+4, and finance number)*

PS Form **4772**, December 1988 **Equipment Inventory and History Record** **(Previous edition usable)**

Exhibit 613.1 (p. 1)

Form 4772, *Equipment Inventory and History Record*

MAINTENANCE COST SUMMARY

	Fiscal Year ▶														Total
1st Quarter	Labor Cost														
	Material Cost														
	Total Cost														
2nd Quarter	Labor Cost														
	Material Cost														
	Total Cost														
3rd Quarter	Labor Cost														
	Material Cost														
	Total Cost														
4th Quarter	Labor Cost														
	Material Cost														
	Total Cost														
F.Y. Total	Labor Cost														
	Material Cost														
	Total Cost														

RECORD OF REPAIRS AND REPLACEMENTS

Date	Route or Work Order No.	Repairs Made	Time (Hours)	Parts Used		
				Name of Part	Stock No.	Parts Cost

PS Form **4772**, December 1988 *(Reverse)* **(For Continuation Use Form 4772-B)**

Exhibit 613.1 (p. 2)

Form 4772, *Equipment Inventory and History Record*

Item	Col.	Description
PART 1		
SOM	1	Start of message.
LOM	2	Length of message.
Trans ID	3–4	Message ID.
Subsite	5–6	Enter two-position subsite code.
Action	7	Action code entered in this position identifies type of action to be generated. Use code “A” for initial recording of equipment or equipment items in approved-but-not-installed status. Use code “D” if action is a deletion, e.g., when equipment is no longer in inventory and has been disposed of. All other actions require code “C” to show changes in data already entered. When initiating changes to existing records, complete positions 1 through 18 exactly as shown in inventory catalog and positions that require a change.
Equipment Acronym Name (Abr.)	8–12	Enter equipment acronym for equipment or system being reported as shown in Appendix 1.
Equipment No.	13–16	Enter locally assigned equipment number. Field is four positions and may include letters and/or numbers. Enter numbers (such as last four digits of ZIP Code) or letters.
Eqpt. Class	17–18	Enter equipment class from Appendix 1 for equipment being reported. An alphabetic code has been assigned, using either one or two positions depending on complexity of equipment. Only items shown in this listing should be included in equipment inventory. Instructions for determining class code is in Appendix 1.
SLN	19–21	Sublocation number. Enter standard three-position alphanumeric code identifying buildings, such as stations, branches, and annexes, where various equipment might be located. This number can be found in listing titled “Inventory of Postal Real Estate.” District offices have this listing. This number must be reported for all equipment records transmitted and entered on equipment inventory master file.
Serial No.	22–32	Enter serial number of equipment from manufacturer's nameplate. Use significant digits only. Disregard zeros not preceded by a letter or numeral. Example: for 000134, drop three zeros and enter as 134. Serial number is normally numeric; however, it can contain a combination of letters, numbers, or dashes. Serial number must be reported for major MPE and building equipment.

Item	Col.	Description
Model	33–38	Enter model number from manufacturer's nameplate. Model number can be all numbers but can also be alphanumeric. Model number/quantity must be reported for major MPE and building equipment.
CC	39	Condition code. Enter single position alphabetic code that identifies operational capability of equipment. Condition codes and descriptions are as follows: **A. Approved for installation.** This condition identifies time office is notified of impending installation of equipment until equipment becomes operational (Code B). **B. Operational.** This condition identifies time equipment is accepted by USPS. It remains in this condition until a different condition takes effect. **C. Unserviceable.** This condition identifies time equipment is out of service (nonoperable) for more than 60 days. This condition may be temporary or permanent and can be result of modification, overhaul, no spare parts, uneconomical to repair, etc. **D. Surplus.** This condition identifies time equipment is classified as surplus. This condition exists until equipment is disposed of or returned to operational status. **E. Disposal action taken.** This action usually follows time that equipment is declared surplus. This condition refers to scrapping, selling, or otherwise disposing of equipment. Equipment in this condition is carried in master file until end of fiscal year of disposal action. It is then deleted from Equipment Inventory Catalog and added to history file automatically. **F. Training equipment.** This condition is for equipment used for training, such as MPLSM training consoles. **G. Non-USPS maintained.** This condition is for equipment owned but not maintained by USPS personnel. If maintenance is done under contract, costs must be reported on Form 4803, *Contract Maintenance Cost.* **H. Leased USPS-maintained.** This condition is for equipment owned by lessor and maintained by USPS.
Condition Date	40–45	Enter date planned for installation of equipment when it becomes operational. Once equipment is installed and operational, condition date does not change, for example: June 28, 1991, is recorded as 910628.

Item	Col.	Description
Svcs. Life can	46–47	Enter expected service life of equipment in years. This information be obtained from capital equipment property control records kept by property and supply office.
OUC	48	Operational use code. Enter a single-position code to indicate operational use of equipment reported. Correct usage must be determined according to MS handbook instructions. Leave this section blank if OUC does not apply.
Manufacturer	49-63	Enter name of manufacturer listed on nameplate. Enter up to 15 spaces of manufacturer's name beginning with leftmost position.
Size	64–69	Enter size of equipment. The size identifies physical capability of system (such as length of conveyors or horsepower of boilers). Enter equipment's capability in whole numbers, numeric digits only. Do not include unit of measurement. If capability cannot be learned, leave blank. Samples of equipment and their sizes follow.
EOM	70	End of message.

Code	Meaning
L	light service
M	moderate service
S	severe service

Examples:

Stewart-Glapat = STEWART - GLAPAT

Westinghouse Electric = WESTINGHOUSE EL (too many characters)

Equipment	Size	Unit
bulk belt conveyors	total length	FT
tray transport conveyors	total length	FT
boiler (1 hp-33, 457 Btu)	total capacity	HP
air conditioning chillers	total capacity	Tons
air handling units (HVACA)	total capacity	CFM
elevators (pass & freight)	total number of landings	
powered portable conveyors	total length	FT
window unit A/C	less than 5 tons	TN
direct expansion A/C	greater than 5 tons	TN
cooling tower	tonnage/cell	TN/CL

PART 2

Data from Parts 1 and 2 must be transmitted for records to be added to master file with an action code “A". Records may be deleted from master file by transmitting data from positions 1 to 18 with an action code “D” on an M3 or M4 transaction. Do not transmit both.

Note: Data for positions 5 through 18, Part 2, must be same as in Part 1 positions 5 through 18.

Item	Col.	Description
ADPC-PSDS Site		Four-position ADPC/PSDS code.
SOM	1	Start of message.
LOM	2	Length of message.
Trans ID	3–4	Message ID.
Positions 5–18 of Part 1 in Part 1.	5–18	Enter data from positions 5 through 18 (Subsite, Action, Equipment Acronym Name, Equipment Number, and Eqpt. Class fields)
Procurement Order or Contract Number	19–27	Enter procurement order or contract number by which equipment was originally purchased in left side of space. Show dashes where applicable. Enter as much of number as nine spaces permit. If the number is unavailable, leave blank. Obtain information from office keeping capital equipment records.
Purchase Price	28–34	Enter cost of equipment when originally purchased. Record cost in whole dollars to right of section. Insert zeros in unused spaces on left using no commas, decimal points, or dollar signs. For example, $4,311.20 is posted as 4311. Record parts of a dollar, $.50 or greater, to next higher whole dollar. If purchase price is not available, leave section blank.
Warranty Expiration Date	35–40	Enter warranty expiration date for specific equipment. Warranties are generally for 1 year and usually start at date of equipment acceptance. This could vary by location and type of equipment. Refer to specific equipment contract or get warranty information from procurement office. Leave this section blank in initial data submission if warranty has expired. **Example:** September 28, 1990, is recorded as 900928.

Item	Col.	Description
ANNUAL MAINTENANCE CRITERIA (HOURS)		
Inspection	41–44	Enter annual staffing requirements, in workhours, for inspection maintenance. These hours are determined by each office based on maintenance performance standards in MS handbooks or interim guidelines. These performance standards include PM actions, time, and frequency. Complete calculation can be found on “Maintenance Staffing Work Sheet” for specific equipment on file at each office. Record all workhours to whole numbers rounding up for 0.5 or greater decimals. **Example:** 105.4 workhours for inspections is to be recorded in columns 41 through 44 as 0105.
Clean and Lube	45–48	Enter annual staffing requirements in workhours for cleaning and lubrication. Hours are determined by each office based on maintenance performance standards listed in MS handbooks or interim guidelines. These performance standards include PM actions, time, and frequency. Complete calculation can be found on “Maintenance Staffing Work Sheet” for specific equipment on file at each office. Record all workhours in whole numbers, rounding up to 0.5 or greater decimals.
Routine	49–52	Enter annual staffing requirements, in workhours, for routine maintenance. Hours are determined by each office based on maintenance performance standards in MS handbooks or interim guidelines. These performance standards include PM actions, time, and frequency. Complete calculation can be found on specific equipment's “Maintenance Staffing Work Sheet” on file at each office. Record all workhours to whole numbers, rounding up for 0.5 or greater decimals. All custodial workhours should be recorded as routine maintenance in columns 49 to 52.
Corrective	53–56	Enter annual staffing requirements by workhours for corrective (repair) maintenance. Basis for determining these workhours is described in positions 49 to 52 above. Corrective maintenance workhours are defined as a percentage of total preventive maintenance workhours. This percentage is provided in MS handbooks or interim guidelines. “Maintenance Staffing Work Sheet” provides source of this information. Enter workhours in whole numbers.
Area Assurance	57–60	Enter annual staffing requirements by workhours. Operating routes are authorized only for specific building equipment. They are authorized as a maintenance performance standard as listed in MS handbooks or interim guidelines. These routes can also be authorized by local management. Calculated workhours can be found on “Maintenance Staffing Work Sheet". Post workhour figures in whole numbers. Hours for operating routes (01) must be recorded when record involves building equipment. Hours for operation maintenance (work code 09) must be recorded when a record refers to mail processing equipment. Operational maintenance is authorized only for specific mail processing equipment. Leave this section blank if neither is authorized or applies.

Item	Col.	Description
By	61	Enter code that identifies who completed last inspection/overhaul.

Code	Description
A	city
B	state
C	private contract (including insurance companies)
D	USPS equipment inspector
E	GSA
F	other federal agency
G	USPS overhaul center
H	regional overhaul team
I	overhauled by locally assigned employees
J	never inspected/overhauled

Freq. 62 — For acronyms EL, HVACB, and UPV, enter code to identify frequency of required inspection.

Code	Description	Code	Description
A	never inspected	H	every 5 years
B	every 6 months	I	every 6 years
C	less than 6-month intervals	J	every 7 years
D	every year	K	every 8 years
E	every 2 years	L	every 9 years
F	every 3 years	M	every 10 years
G	every 4 years		

Freq. (continued) 62 — For acronyms FC, MPFSM, OCRCS, SBCS, SPFSM, SPLSM, PSM, and SSM, enter code to identify number of times equipment overhauled.

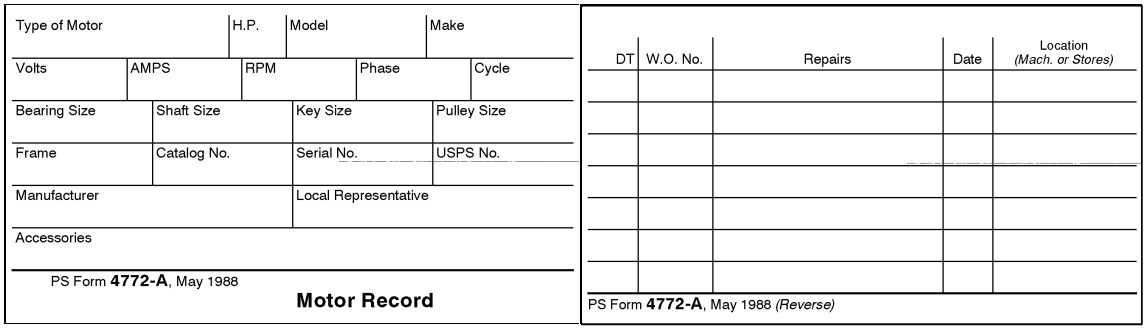
Code	Description	Code	Description
A	never overhauled times	G	overhauled 6
B	overhauled 1 time	H	overhauled 7 times
C	overhauled 2 times	I	overhauled 8 times
D	overhauled 3 times	J	overhauled 9 times
E	overhauled 4 times	K	overhauled 10 times
F	overhauled 5 times		

Due Date 63–68 — For acronym EL, HVACB, and UPV, enter date next inspection is due to be performed: for acronyms FC, MPFSM, MPLSM, OCRCS, SBCS, SPFSM, SPLSM, PSM, and SSM, enter date last overhaul was completed. If equipment is new, enter installation date. Example: Enter March 31, 1991, as 910331.

EOM 69 — End of message.

613.2 Motor Record Cards

Form 4772-A, *Motor Record* (Exhibit 613.2), may be completed for motors one horsepower or greater. When an equipment motor is replaced with a different motor, all corresponding motor history data should be updated.



Type of Motor	H.P.	Model	Make
Volts	AMPS	RPM	Phase / Cycle
Bearing Size	Shaft Size	Key Size	Pulley Size
Frame	Catalog No.	Serial No.	USPS No.
Manufacturer		Local Representative	
Accessories			

PS Form **4772-A**, May 1988

Motor Record

DT	W.O. No.	Repairs	Date	Location *(Mach. or Stores)*

PS Form **4772-A**, May 1988 *(Reverse)*

Exhibit 613.2
Form 4772-A, *Motor Record* (Front and back)

613.3 Coordination

Each office must establish local procedures to ensure that maintenance is informed when equipment is added to or removed from the local office and from other offices supported by local maintenance. These procedures must involve the material accountability officer.

614 Use

Equipment history records provide a central source of information about equipment. These records provide maintenance personnel with location, cost, drawing numbers, and other identification required to write work orders and requisitions.

614.1 Availability

Equipment history records are stored in MARS and available for reference upon request.

615 Equipment Inventory

615.1 Description

The local office transmits the equipment inventory data to the national maintenance data base. This data provides the local facility, Area office, and Headquarters information such as location, model, capacity, size, and manufacturer. This data also identifies equipment that is surplus to the local office. Identical equipment, regardless of equipment class, must have a unique locally assigned number.

615.2 Updates

The local office does all updates and transmits them via the MARS system. The updates to the equipment inventory file are processed daily.

616 Required Data

The subsite, action, equipment acronym, equipment number, and equipment class make up the required data fields for the master files. Changes or errors in these sections, if there has been no history established, require a delete and an add transaction. If a history has been established and a change in the controlled field is required, a change transaction with condition code E allows the history to be carried in the master file until the end of the Fiscal Year (FY). An add transaction shows corrected field data. For any changes in the remaining section of the form, enter only the data previously reported and accepted in the controlled fields with a C action code and the changed data in the section affected.

617 Pseudo-Equipment

Equipment inventory data for pseudo-equipment are not required unless directed by the senior maintenance official (see Exhibit 613.1). Pseudo-equipment is equipment not listed in Appendix 1.

7 Maintenance Stockroom

71 STORES CONTROL

POLICY—All maintenance personnel are responsible for the accountability, control, and safeguarding of United States Postal Service (USPS) inventory assets under the jurisdiction of the senior maintenance official or designee.

711 General

711.1 Description

The maintenance stockroom maintains an inventory of parts and supplies, initiates replacement of stocked and nonstocked inventory items, and controls the flow and accountability of material. The concepts and functions in this section are written to ensure compatibility with Handbook AS-701, *Material Management.* The efforts of stockroom personnel must be directed continually toward maintenance support. The stockroom's capability to support the maintenance effort depends on accurate inventory records and timely forecasts of material requirements by senior maintenance officials.

711.2 Accountability

An effective maintenance management program requires control and accountability of stocked and nonstocked material (e.g., parts, tools, supplies, and equipment). Control and accountability are required to ensure the availability of parts, tools, and supplies to minimize equipment breakdown time and to expedite repairs and routine custodial work. To reduce inventory, only authorized reserves of parts and material should be stocked. Control is also necessary to prevent misuse and pilferage. Stockroom personnel must note the withdrawal of parts in excess of normal requirements and alert the senior maintenance official or designee.

711.3 Coordination With Suppliers

Stockroom personnel must keep in contact with sources of supply to establish and maintain stock levels required to support unusual situations and forecasted changes in maintenance requirements.

711.4 Requirements

The described systems and procedures cover the normal requirements for maintaining stocks of spare parts, tools (including safety and test equipment), and material for:

a. Maintenance of mail processing equipment.
b. Maintenance and operation of buildings and building equipment.
c. Performance of custodial services.
d. Maintenance of other designated equipment.

711.5 Responsibilities

Stockroom personnel support the maintenance effort by providing the following:

a. Accurate, timely forecasting of material requirements.
b. Central receiving of material.
c. Secure and proper storage.
d. Accurate system of recording receipts, issues, and transfers on all material requisitioned by maintenance.
e. Issue and transfer of material.
f. Accurate stockroom inventory catalog.

712 Setting Up Main Stockroom

712.1 Location

The shape and dimensions of stockrooms can vary and consist of one or more rooms and areas. Stockrooms should be next to the Maintenance Operations Support (MOS) office and convenient to the general shop areas. Handbook AS-701, *Material Management* provides the USPS criteria for planning and layout of warehouse and storage space.

712.2 Layout

Some open space is needed for floor storage of items such as heavy motors, large shafts, drums of solvents, and lubricants. Open space is also needed for palletized storage such as for paper towels or canvas hamper replacements. Stockroom personnel should use available vertical and horizontal storage space if storage and retrieval can be done safely and access is not unduly hindered.

712.3 Organization

When organizing the stockroom, allowances must be made for tool checkout and storage. Pegboards can be installed for smaller tools, and bins can be used for items such as portable electric drills. The tools storage should be easily accessible. An organized stockroom should have the following:

a. Parts and supplies stored so that items used most frequently are closest to the parts counter or checkout area.
b. Advance stockroom planning that allows for the passage of supply trucks, with consideration given to the accessibility of elevators, loading platforms, and ramps.
c. Small items stored in compartment drawers of storage cabinets or in a single container large enough to hold the maximum inventory quantity. Larger items can be stored on shelves in the boxes in which they were received or in compartment storage cabinets. Loose and bulk items can be separated into normally issued units and placed in plastic bags to enable easy identification and to ensure that they are dust free.
d. Static-sensitive items stored in protective containers and handled according to current directives.
e. The National Stock Number (NSN), nomenclature, and any cross-references to a secondary storage location should displayed on each storage location.
f. Procedures developed locally to ensure that all stockrooms (main and remote) are secure with controlled accessibility.
g. A list of all employees having access to stockroom areas. This list will be maintained and filed in the maintenance area
h. Procedures developed locally to ensure that all incoming parts, supplies, and tools are brought to the facility's receiving area. On receipt of new items, stockroom personnel should unpack, identify, receipt, and store parts or supplies in the proper location.
i. Old stock moved to the front when storing parts or supplies. When initially arranging supplies, some vacant space should be left for additional items.
j. Strict observance of safety rules when storing supplies. Storage cabinets must be securely anchored to the wall or floor, and back-to-back rows anchored to each other. Supplies must not be placed on top of cabinets or stored so that they extend into aisle space. If the latter is unavoidable, the hazard should be tagged to make them clearly visible.
k. Storage of hazardous material in proper cabinets. Flammable and combustible liquids such as lubricants, paints, and other items stored in an area constructed to conform with Occupational Safety and Health Administration (OSHA) and Environmental Protection Agency (EPA) standards.

713 Remote Stockrooms

713.1 Definition

Remote stockrooms are away from the main stockroom and their bin locations are reflected in the MARS Tool & Parts Catalog. A remote stockroom must have the same level of control used for the main stockroom.

713.2 Management of Stock

713.21 Incoming Material

Procedures must be developed locally for controlling accessibility and restocking of shelves and bins.

713.22 Withdrawals

The senior maintenance official initiates action to ensure that all withdrawals from remote stockrooms are properly recorded. Any employee withdrawing parts or supplies from a remote stockroom must prepare Form 4800 (or facsimile) (Exhibit 713.22) itemizing the parts or supplies used, indicating a work order or route number, and entering all required data against which the parts (or supplies) should be charged. The Form 4800 (or facsimile) should be forwarded to the main stockroom for processing.

PSDS

SOM (1)	LOB (2)	Trans ID (3–4)		Subsite (5–6)	
&	5	N	1		

U.S. Postal Service

Parts/Supplies Issue Slip—Stocked Items

Read instructions on reverse before completion.

Serial Number

Tour

Date (Mo.) (Day) (Year)

NSN (7–22)	Quantity Issued (23–25)	Cause Code (26-27)	Work Order or Route Sheet: Work Code (28-29)	Equipment Acronym (30–34)	Equipment Number (35–38)	Number (39–42)	Eqpt. Class (43-44)	Assembly: Code (45-46)	Number (47–53)	Downtime Due to Parts Unavailability (54-60)	Item Serial Number (61–70)	EOM (71)	Local Use: Parts/Sup. Issued To (Initials)
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Completed Form Reviewed By	Data Entered By	Date	PNMIC Report Date	Verified By	Date

PS Form **4800**, February 1991

Exhibit 713.22 (p. 1)

Form 4800, *Parts/Supplies Issue Slip Stocked Items*

Instructions for Completing Form 4800

Handbook references are to MS-63, *Maintenance Operations Support.*

Item	Positions	Entry
Start of Message	1	No entry necessary.
Length of Message	2	No entry necessary.
Trans ID	3–4	No entry necessary.
PSDS Subsite	5–6	Enter assigned two-position numeric subsite code from Appendix 3.
NSN	7–22	Enter NSN; enter dashes in positions 11, 14, and 18.
Quantity Issued	23–25	Enter quantity issued. Fill unneeded positions to the left with zeros.
Cause Code	26–27	Enter two-position code from back of Form 4805, *Work Record Sheet,* if line entry is associated with work code 08 only. Otherwise leave blank. Position 26 is numeric; position 27 is alphabetic.
Work Code	28–29	Enter Work Code from Work Order or Route Sheet, authorizing issue of part (Appendix 4).
Equipment Acronym	30–34	Enter acronym or pseudo-acronym for equipment as shown in Appendix 1. Leave unneeded positions to the right blank.
Equipment Number	35–38	Enter any combination of one to four alpha and/or numeric characters, locally assigned, to the right. Leave unneeded positions to the left blank.
Number	39–42	Enter locally assigned four-position numeric Work Order or Route Sheet number. Number 6 would be entered as 0006.
Equipment Class	43–44	Enter one- or two-position code as shown in Appendix 1. If not applicable, leave blank.
Assembly Code	45–46	See list of assemblies by equipment acronym in Appendix 5. If not applicable, leave blank.
Assembly Number	47–53	Enter assigned number from Appendix 5 or locally assigned number as applicable to the left, leaving unused positions to the right blank. If not applicable, leave blank.
Downtime Due to Parts Unavailability	54–60	Enter total equipment downtime due to parts unavailability from associated Work Record Sheet in hours and tenths of hours. Fill unneeded positions to the left with zeros.
Item Serial Number	61–70	Enter item serial number to the left, leaving unused positions to the right blank. If not applicable, leave blank.
End of Message	71	No entry necessary.

NOTE: All of the above are required.

PS Form **4800,** February 1991 *(Reverse)*

Exhibit 713.22 (p. 2)

Form 4800, *Parts/Supplies Issue Slip Stocked Items*

713.23 **Control Levels**

The remote stock control level is a quantity of parts and supplies based on the site's initial spare parts kit and demand. This stock is part of the main stockroom's inventory level.

713.24 **Restrictions**

The remote stockroom must not:

a. Stock office furniture.
b. Operate as a tool crib.
c. Issue tools or equipment.

714 Bulk Stock Items

714.1 Definition

Bulk stock consists of high-usage, low-cost items (e.g., nuts, bolts, washers, nails, grommets, shear pins) that do not relate to a specific piece of equipment. These items are issued in bulk (ZBLK) and placed in bins for easy access and withdrawal. Hardware and material items with a per-piece cost of $3 or less and not related to a specific type of equipment are usually considered expendable.

714.2 Location

Bulk stock is usually kept in a local stockroom or in areas of maintenance activity and placed in bins for easy access and withdrawal.

714.3 Receipting and Issuing

Bulk stock items are receipted and issued using the Maintenance Activity Reporting and Scheduling (MARS) system.

714.4 Quantities

Bulk stock is established at the option of the senior maintenance official. The quantities established should support 10 days or less of usage.

715 Tool Crib and Tool Room Operation

715.1 General

Control of specialized tools and test equipment is an essential maintenance function. Authorization limitations and economics require that procedures be established to ensure tool control and availability. Whether an activity has a tool crib, a tool room, or both, depends on the requirements of the activity.

a. A tool crib is defined as a storage and issue point for tools. Tool cribs must be limited to one per common work area and operated by stockroom personnel.
b. Tool rooms are authorized to store and issue special tools and test equipment. Stockroom personnel should consolidate tool rooms when:
   (1) Shops are in the same building.
   (2) The maintenance stockroom is in or near the shops.
   (3) Combined operations are feasible and efficient.
   (4) No additional workhours are needed.
   (5) The size of the tool crib permits consolidation.

A neat, clean, and well-arranged tool crib or tool room can efficiently provide required tool support. Special tools can be organized by applicable equipment or displayed on shadow boards. Each item displayed on a shadow board must be assigned an item location designation. This designation is imprinted on the tool and its storage position displayed on the shadow board. Item identification and location lists must be posted near issue counters. Common items and those items not suitable for shadow board locations must be stored in bins or cabinets.

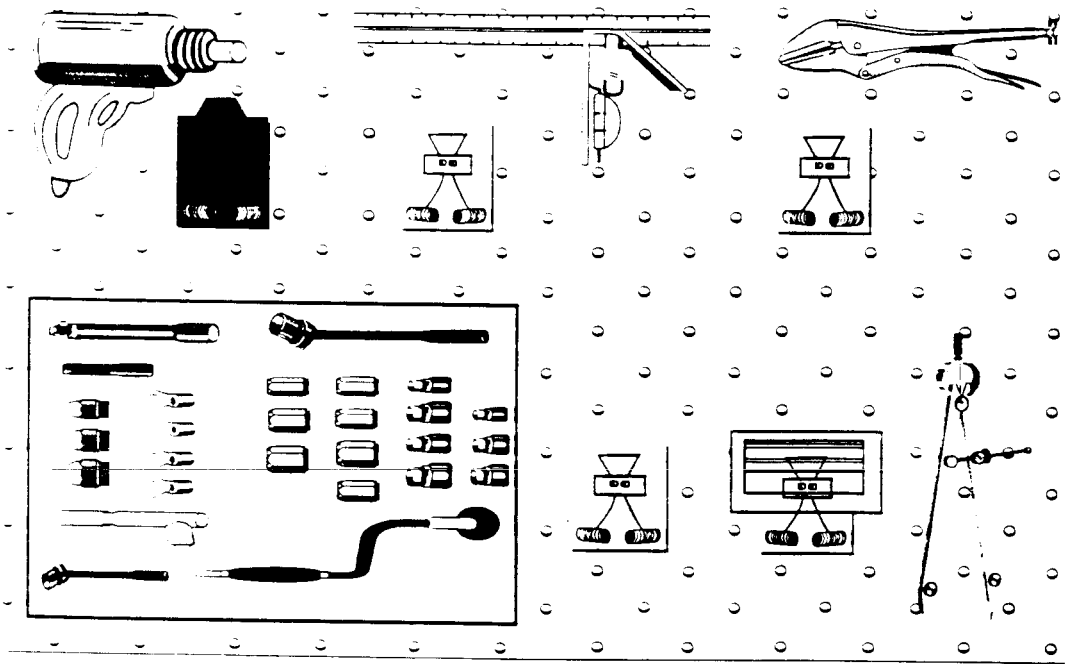


Exhibit 715.1
Tool Shadow Board

715.2 Tool Control

In addition to the everyday hand tools required, higher priced or specialized tools and instruments are needed. Control is required to ensure that the proper types and quantities of tools are available. Tools and special devices must be maintained in working order and replaced when damaged or worn beyond repair. Since tools are subject to abuse or theft, tool accounting records must be kept. Some test equipment requires calibration at stated intervals to ensure that accuracy is maintained. The date of the next calibration on each piece of equipment must be scheduled in the PM Master File.

715.3 Permanent Issue of Tools to an Employee

Tools that maintenance employees normally use in the performance of daily duties should be issued on a permanent basis. Employees are responsible for the safekeeping of all tools issued to them and for protecting them from loss, damage, or destruction. All tools permanently issued to employees must be recorded using procedures noted in the MARS software user manuals. Employees must sign for all tools.

The employee to whom tools are permanently assigned must account for the tools and obtain a release of accountability when transferring from the position requiring their use or before receiving final payment of salary when terminating employment.

715.4 Permanent Issue of Tools and Test Equipment to Shop Tool Box

Permanent issue of tools and test equipment (excluding large fixed items) is made to a maintenance supervisor or employee designated by the senior maintenance official. A method must be established to secure or otherwise protect these tools.

715.5 Temporary Issue of Tools and Test Equipment

U.S. Postal Service
Tool Order

This order good for one item only.
Tool is to be returned upon completion of Work Order.

Work Order No.	Tool No.	
Employee No.	Date	
	In	Out

Quantity	Description

Signature of Employee

PS Form **4786**, August 1971

Exhibit 715.5
Form 4786, *Tool Order*

715.51 Numbered Tags

The system of accounting for a temporary loan or assignment of tools uses numbered tags or equivalent exchanged by an employee for the tool needed. When this process is not satisfactory, Form 4786, *Tool Order* (Exhibit 715.5), may be used. Forms may be filed in pigeon hole separations or on a spring-clip charge board.

715.52 Special Tools

When a work order requires special tools, the employee obtains them from the stockroom at the same time the required parts and material are received. Stockroom personnel issue tools in accordance with local policy.

715.53 Retention of Tools

The need to retain a tool on a regular or daily basis should be determined at the time of issue. If long-term retention is justified, the tool should be added to the employee's permanent kit with supervisory approval. Higher priced or special purpose instruments should not be permanently assigned.

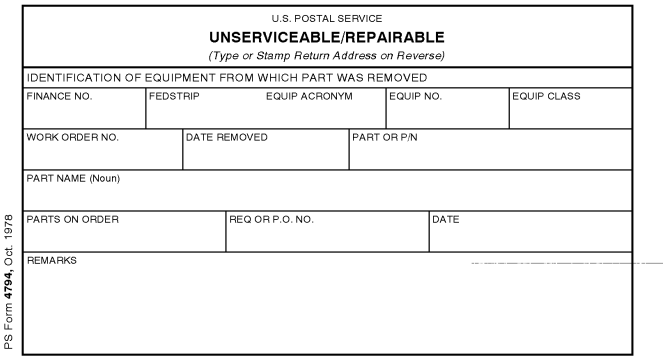
715.6 Damaged Tool Control

715.61 Responsibilities

Issued tools are the responsibility of the employee, and replacement of worn, broken, or damaged tools may be made only with proper documentation and supervisory approval. Stockroom personnel are responsible for inspecting all tools returned to the stockroom. If a tool is returned in worn, broken, or damaged condition, stockroom personnel must advise the senior maintenance official or designee. If the tool shows evidence of misuse or unwarranted damage, the senior maintenance official may have the employee submit a written statement detailing the reasons or causes for the damage.

715.62 Repairs

If the tool is to be repaired, Form 4794, *Unserviceable/Repairable* (tag) (Exhibit 715.62), must be prepared and attached to the tool.



U.S. POSTAL SERVICE

UNSERVICEABLE/REPAIRABLE

(Type or Stamp Return Address on Reverse)

IDENTIFICATION OF EQUIPMENT FROM WHICH PART WAS REMOVED

FINANCE NO.	FEDSTRIP	EQUIP ACRONYM	EQUIP NO.	EQUIP CLASS

WORK ORDER NO.	DATE REMOVED	PART OR P/N

PART NAME (Noun)

PARTS ON ORDER	REQ OR P.O. NO.	DATE

REMARKS

PS Form **4794**, Oct. 1978

Exhibit 715.62

Form 4794, *Unserviceable/Repairable* (tag)

On return of a repaired tool, Form 4794 must be filed to maintain a record of tool damage. An accumulation of damaged tool records by the same employee can indicate the need for additional training in the proper use of tools.

715.63 Tool Disposal

When it is not practical to repair a tool, it should be disposed of in accordance with procedures in Handbook AS-701, *Material Management.*

715.64 Lost or Stolen Tools

When tools are lost or stolen, the employee must provide a written statement describing the circumstances of the loss or theft. The employee's supervisor must approve the statement before replacement tools are issued.

715.65 **Replacements**

When issuing replacements for tools that are broken, lost, stolen, or worn beyond repair, a copy of the signed document that includes an explanation of the circumstances for the replacement should be placed in the employee's tool file.

716 Parts Identification Using National Stock Number (NSN)

716.1 Available National Stock Number (NSN) Information

The following publications and listings should be available in the stockroom area to help employees identify parts:

a. Current General Services Administration (GSA) and Defense Logistics Agency (DLA) material listings.
b. Publication 247, *USPS Materiel Management Equipment and Supply Catalog.*
c. Publication 112, *Repair Parts Catalog.*
d. Supply Bulletins/Repair Parts Bulletins.
e. Applicable technical directives.
f. Applicable illustrated parts breakdown technical directives.

716.2 Assignment of National Stock Numbers (NSNs) to Locally Purchased Items

Items purchased locally that do not have an official NSN and meet stockage criteria should be assigned an NSN and added to the MARS Tool and Parts Catalog using the following standard 16-position (13-digit) format:

a. The first four digits of the assigned number are the four-digit Federal Supply Code (FSC), which may be obtained from the *Federal Supply Class Cataloging Handbook* and *Federal Item Name Directory for Supply Cataloging.* These directories are available from the Government Printing Office (GPO) (see Exhibit 716.2 for sample codes).
b. The National Codification Bureau code (positions 6 and 7) is always 99.
c. Positions 9 through 16 are sequentially assigned from within each FSC beginning with 000-0001. For example, 7510-99-000-0001, 5120-99-000-0001, 3030-99-000-0001. For positions 9 through 16, when number 000-9999 is reached, the next sequential number is 001-0001.

Code	Nomenclature
5342	Abrasive disks/stones/belts
5350	Abrasive paper/powder/ compounds
8040	Adhesives
6350	Alarm and signal systems
6399	Alarm system
5915	Audio filters
2520	Automotive power transmission equipment
2530	Automotive steering/brake components
8105	Bags and sacks
6250	Ballasts/lamp holders/starters
6135	Batteries
6140	Batteries, rechargeable, wet/ dry cell
3030	Belting, drive belts, V belts
3110	Ball/roller bearings
5306	Bolts
8125	Bottles and jars
8115	Boxes/cartons/crates
7920	Brooms/brushes/mops/ sponges
8135	Bulk packaging material
5910	Capacitors
5820	CCTV equipment
4010	Chain and wire rope
6810	Chemicals, industrial
6850	Chemicals, miscellaneous
6505	Chemicals/reagents/medical
5925	Circuit breakers/beaters
7930	Cleaning compounds/ preparations
5950	Coils and transformers
5360	Coil/flat/sire springs
8120	Commercial gas cylinders
6830	Compressed/liquefied gases
4310	Compressor/vacuum pumps
8950	Condiments
7440	Data processing system components
5399	Deadbolt lock
7690	Decals/labels
6675	Drafting/surveying/ instruments
7230	Draperies/shades/blinds
5133	Drill bits/countersinks
8340	Drop cloths/tarpaulins
5977	Electrical brushes/electrodes
5935	Electrical connectors/plus
6150	Electrical equipment, miscellaneous
5975	Electrical hardware
5970	Electrical insulators/ insulating material
6240	Electric lamp/bulb/tube
6105	Electrical motors
6145	Electric wire/cable
6625	Electric/electronic testing equipment
2940	Engine air/oil filters, strainers, cleaners
2930	Engine cooling system components
2920	Engine electrical system components
2910	Engine fuel system components
5325	Eyelets, grommets, fasteners
4140	Fan/blower equipment
5660	Fencing
4020	Fiber rope, cord and twine
4210	Firefighting equipment
8345	Flags and pennants
7220	Floor covering
7910	Floor polishers/vacuum cleaners
3930	Forklifts/platform trucks, mobile
7290	Furnishings,miscellaneous
5920	Fuses
3750	Gardening implements and tools
3665	Gas generating/dispensing equipment
2805	Gasoline reciprocating engine component
3020	Gears, pulleys, sprockets, chain
5620	Glass/tile/brick/block
5110	Hand tools, cutting
5120	Hand tools, other
5340	Hardware, miscellaneous
5965	Headsets/handsets/ microphones/speakers
4420	Heat exchangers, steam condensers
3950	Hoists and lifts
4720	Hose and flexible tubing
7105	Household furniture
4410	Industrial boilers
5830	Intercom/PA equipment
5962	Integrated circuits
5355	Knobs and pointers
6640	Laboratory supplies
8330	Leathers
6210	Lighting fixtures
4930	Lubrication equipment
8460	Luggage/briefcase
5940	Lug/terminal/terminal strips
5510	Lumber
3460	Machine tool accessories
3455	Machine tool cutting tools
3590	Mailbox/lock box parts and supplies
7490	Mail processing machinery
4910	Maintenance equipment
4920	Maint. equipment, special
4820	Manual valves
5210	Measuring tools/gauges
6515	Medical supplies
5670	Metal door/window frames/ sash
9620	Minerals
5610	Mineral construction material
7195	Miscellaneous furniture
6110	Motor starters/speed controls
5315	Mail keys and pins
3920	Non-powered trucks, hampers, handcarts
5310	Nuts and washers
4470	Nuclear reaction parts
7520	Office equipment
7110	Office furniture
7510	Office supplies
9150	Oils and greases
6650	Optical instruments
5330	Packing/gasket material
8020	Paintbrushes/rollers/ applicators
4940	Paint/cleaning spray equipment
8010	Paints/lacquers/enamels/ thinners
7350	Paper cups
7050	PC boards-amps

Facsimile April 1996

Exhibit 716.2 (p. 1)

Federal Supply Classification Codes

Code	Nomenclature
6840	Pest control/disinfectants
5961	Photocells/diodes/transistors
6750	Photographic supplies
3130	Pillow block/flange/take-up bearings
4710	Pipe and tube, rigid
4730	Pipe/hose/tube/grease fittings
9330	Plastic materials
4510	Plumbing fixtures and accessories
5530	Plywood
6230	Portable electric lighting
6230	Power supplies
4320	Power/hand pump
5130	Power hand tools
3825	Power sweepers and snow-blowers
4810	Power valves
8030	Preservative/sealing compounds
4330	Pressure/vacuum filters
3040	Shafts/shafting/collars
9905	Signs/advertising displays/ ID plates
3120	Sleeve bearings/bushings
9920	Smokers articles
4530	Space/domestic water heaters
8415	Special purpose clothing
7810	Sporting equipment
7540	Standard forms
7530	Stationary/paper/tape/carbon
9510	Steel bars/rods
5307	Studs
5930	Switches
6680	Tachometers/counters/meters
5136	Taps, dies, collets
5805	Telephone Equipment
5815	Teletype equipment
8305	Textiles
6685	Thermometers/thermostats gauges
6645	Time measuring equipment
2630	Tires, solid and cushion
8510	Toilet preparations
8520	Toilet soap
8530	Toiletry articles
8540	Toiletry paper articles
5140	Tool boxes, pouches
5999	Printed circuit boards
3610	Printing equipment
9350	Refractory/fire surfacing material
4130	Refrigeration/air conditioning equipment
5945	Relay/contractors/solenoids
5905	Resistors
5365	Rings/shims/spacers
5320	Rivets
4240	Safety and rescue equipment
5440	Scaffolding/ladders/step ladders
6670	Scales and balances
5305	Screws
5180	Tool sets/kits
5960	Tubes, electronic
7240	Utility containers
3550	Vending machines
7460	Visible index equipment
5640	Wallboard/building paper/ insulation
4110	Water coolers
4610	Water purification equipment
5680	Weather Stripping
3439	Welding/soldering/brazing supplies
3540	Wrapping/packaging machinery

716.3 Changing Assigned National Stock Numbers (NSNs) for Locally Procured Items

When DLA or USPS Inventory Management assigns an official number to a locally procured item, the locally assigned number must be changed to correspond to the nationally assigned number.

716.4 Inventory Management Changes Assigned National Stock Number (NSN)

When Inventory Management changes an assigned NSN to another assigned NSN, the local site must update their MARS Tool and Parts Catalog.

72 DEGREE OF CONTROL

721 Procedures

721.1 Inventory Frequency

Control must be maintained over the stockage and procurement of parts and material. MARS cycle counts must be performed daily. Items with an individual value of $10,000 or extended value of $10,000 must be inventoried once per AP.

721.2 Balance on Hand (BOH) Changes

The senior maintenance official or designee must review and approve any changes to the balance on hand (BOH) so that management is aware of any shortages or overages of parts in the stockroom.

721.3 Accountability

All items used in support of the maintenance functions, regardless of source, must be accounted for. Receipts and issues must be completed for all items requisitioned by maintenance.

721.4 Inventory Discipline

Inventory discipline, essential to successful stockroom management, applies to all maintenance personnel. Maintenance must clearly understand that:

a. Repetitive ordering, which is not condoned, wastes funds and reduces credibility.
b. A delivery priority is assigned to each requisition for supplies. The delivery priority is identical to the maintenance repair priority, and supervisors share the responsibility for maintaining an effective, credible priority system. A genuine effort must be made to obtain the best quality of parts or supplies at the lowest cost. Maintenance personnel must

become familiar with items available from GSA and DLA and use these agencies as the first source of supply before making purchases on the commercial market.

c. Stockroom personnel must record receipts of parts. *All maintenance employees must record their withdrawals.*
d. Stockrooms must not stock office furniture.

721.5 Receiving Material

Procedures must be devised locally to ensure that all parts, supplies, and tools are brought to the stockroom as they are received. Designate a receiving area within the stockroom to process receipts to maintain material control. Stockroom personnel must use the following procedures.

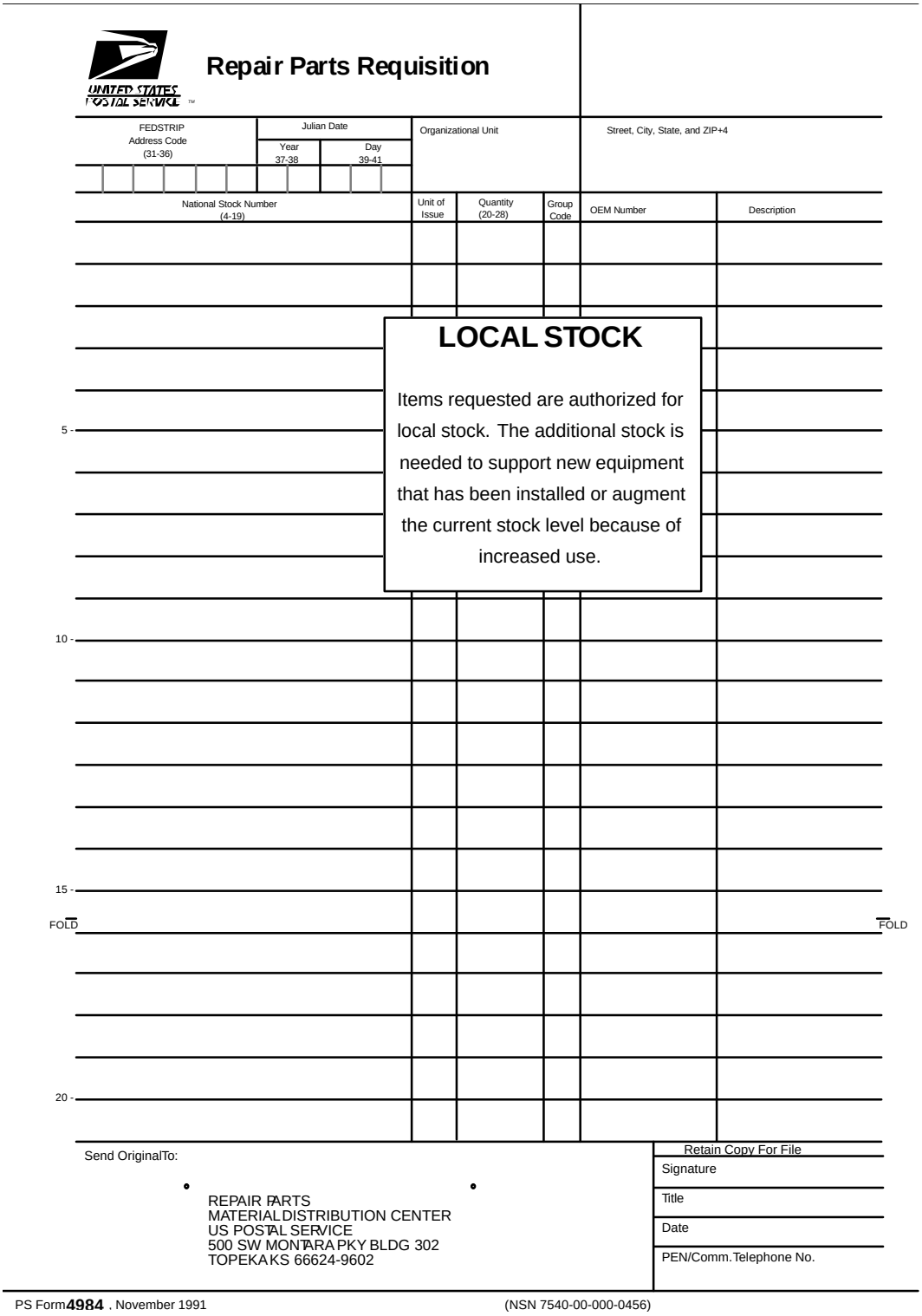
a. Check carrier seals and physical condition of material (e.g., obvious evidence of damage or shortages). For processing claims, see Handbook AS-701.
b. Document discrepancies for overages or shortages of material.
c. Mark supplies properly before moving them to storage to ensure accurate stock records and inventories.
d. Record shipping information through the MARS Receipts module.
e. Move supplies or material as quickly as possible in a cost-effective manner to avoid confusion with subsequent shipments.
f. Correct any discrepancies and process corrected data.
g. When receiving parts or supplies, receipt the unit of issue reflected on the shipping document.

Note: All transferred items must be receipted through MARS local purchase.

722 Tool and Parts Forms

722.1 Repair Parts Requisition (Form 4984)

Form 4984, *Repair Parts Requisition* (Exhibit 722.1), is used to requisition repair parts from the material distribution center. Requests on Form 4984 must include an explanation of the requirements and be approved by the senior maintenance official or designee.



Repair Parts Requisition

FEDSTRIP Address Code (31-36)	Julian Date: Year (37-38)	Julian Date: Day (39-41)	Organizational Unit	Street, City, State, and ZIP+4

National Stock Number (4-19)	Unit of Issue	Quantity (20-28)	Group Code	OEM Number	Description
5 -					
10 -					
15 -					
FOLD					FOLD
20 -					

LOCAL STOCK

Items requested are authorized for local stock. The additional stock is needed to support new equipment that has been installed or augment the current stock level because of increased use.

Send Original To:

REPAIR PARTS
MATERIAL DISTRIBUTION CENTER
US POSTAL SERVICE
500 SW MONTARA PKY BLDG 302
TOPEKA KS 66624-9602

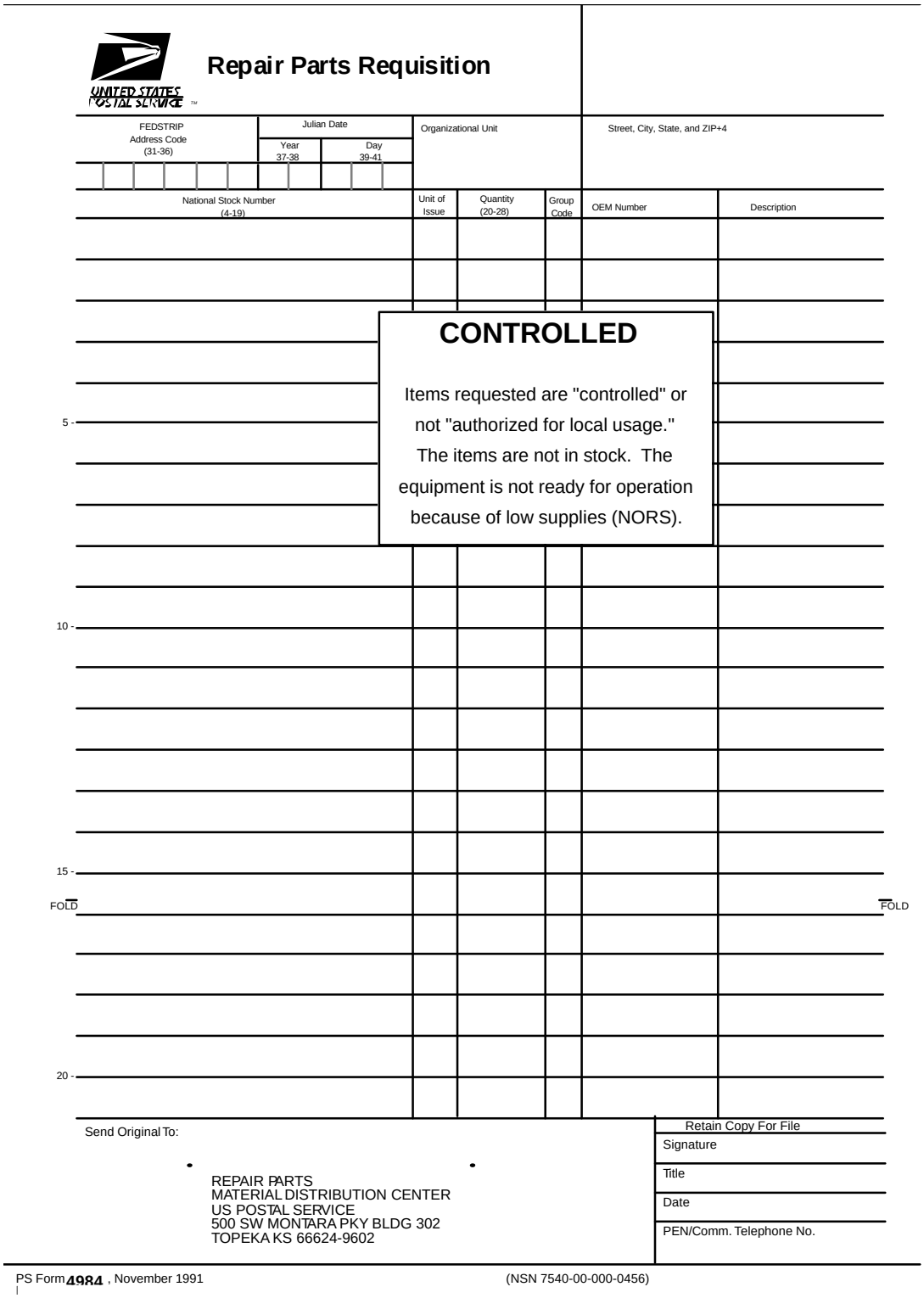
Retain Copy For File
Signature
Title
Date
PEN/Comm. Telephone No.

PS Form **4984**, November 1991 (NSN 7540-00-000-0456)

Facsimile, April 1996

Exhibit 722.1 (p. 1)

Form 4984, *Repair Parts Requisition*



Repair Parts Requisition

UNITED STATES POSTAL SERVICE ™

FEDSTRIP Address Code (31-36)	Julian Date: Year 37-38	Julian Date: Day 39-41	Organizational Unit	Street, City, State, and ZIP+4

National Stock Number (4-19)	Unit of Issue	Quantity (20-28)	Group Code	OEM Number	Description

5 -
10 -
15 -
20 -

FOLD FOLD

CONTROLLED

Items requested are "controlled" or not "authorized for local usage." The items are not in stock. The equipment is not ready for operation because of low supplies (NORS).

Send Original To:

REPAIR PARTS
MATERIAL DISTRIBUTION CENTER
US POSTAL SERVICE
500 SW MONTARA PKY BLDG 302
TOPEKA KS 66624-9602

Retain Copy For File

Signature

Title

Date

PEN/Comm. Telephone No.

PS Form 4984, November 1991 (NSN 7540-00-000-0456)

Facsimile, April 1996

Exhibit 722.1 (p. 2)

Form 4984, *Repair Parts Requisition*

723 Control of Repairable Items

723.1 General

Repair parts designated as *authorized for local stockage* (A), *controlled* (C), or *not authorized for local stockage* (R) must be requisitioned using Form 4984 (Exhibit 722.1).

723.2 A Items

723.21 Description

Repairable parts designated as *authorized for local stockage* are replenished by the MDC at the time the item is issued. Items listed as one-for-one on the current repair parts bulletins and transferred to another office are not replenished automatically. The office that sends the defective carcass to the MDC receives replenishment and is charged the cost of the item.

723.22 Instructions and Approval

Requisitions for additional A items must be submitted on Form 4984 with an explanation (Exhibit 722.1 (p. 1)) and must be approved and signed by the senior maintenance official or designee.

723.3 C Items

723.31 Instructions and Approval

Repairable parts designated as controlled must be requisitioned as single line items using Form 4984 with an explanation and must be approved and signed by the senior maintenance official or designee (Exhibit 722.1 (p. 2)).

723.32 Nonautomatic Replenishment

Items in stock determined to be controlled by the MDC are not automatically replenished. Instructions for replenishment must be provided using Form 4686 as follows: *This is a controlled item, not automatically replenished. Order using Form 4984.*

723.4 R Items

Repairable parts designated as *not authorized for local stockage* must be requisitioned using Form 4984 (Exhibit 722.1) with an explanation. The form must be approved and signed by the senior maintenance official or designee.

723.5 Emergency Situation

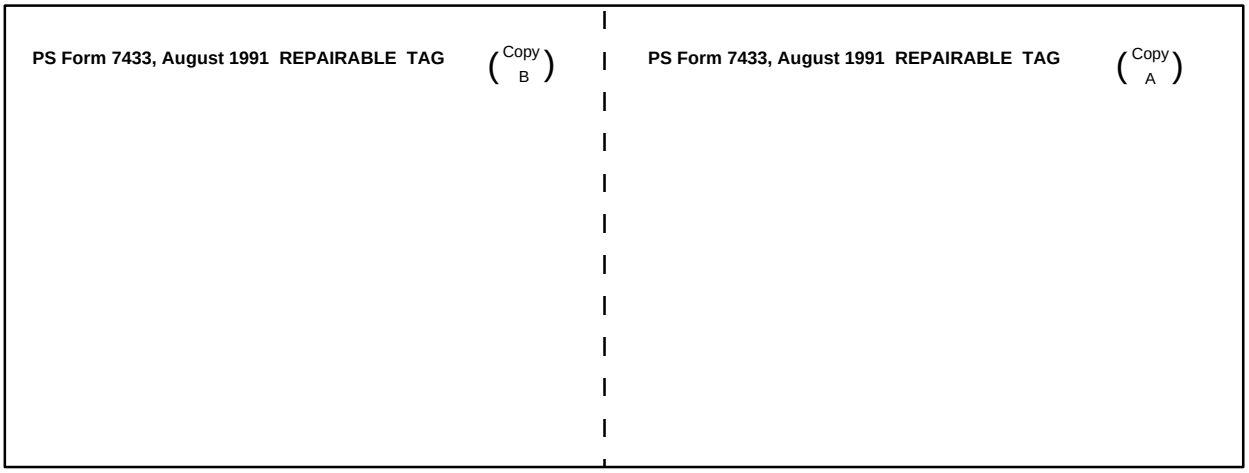
In an emergency situation, the requiring office should contact the critical spare parts site by telephone per *Repair Parts Bulletin,* a list of critical

stockroom parts. If the part is not available, the designated maintenance employee on duty at the requesting office should contact an MDC for replenishment.

724 Returning Defective Repairable Items

724.1 General

Form 7433, *Repairable Tag* (Exhibit 724.1), should be used when returning a defective repairable item (carcass) to the designated repair facility. *Only one repairable part may be returned per tag*.



Facsimile, July 1996

Exhibit 724.1

Form 7433, *Repairable Tag*

724.2 Entry

The following information must be entered on both sections A and B of Form 7433:

a. Federal Standard Requisitioning and Issue Procedures (FEDSTRIP) number of office.
b. Quantity (the quantity is always 1).
c. National Stock Number (NSN).
d. Original Equipment Manufacturer (OEM).

724.3 Attachment

The local office must attach the completed Form 7433 tag to the item (both sections A and B), preferably with string or rubber bands.

724.4 Shipping

After the completed Form 7433 is attached, the item should be shipped to the designated repair facility.

724.5 Returning Unserviceable Items on Back Order

724.51 Form 7433

To return an unserviceable item to the designated repair facility when the requested replacement is on back order, Form 7433 should be completed. Both sections A and B of the tag should state *Item on Back Order* and the tag should be attached to the item and returned to the designated repair facility.

724.6 Reimbursement of Credit for Repairable Items Returned

724.61 Form 4686

Offices returning repairable items to the designated repair facility for repair may receive a credit when the item is repaired, not when it is received at the designated repair facility. Credit appears on Form 4686, *Shipping Order,* when the returned item is completely processed (repaired).

724.62 Procedures

To receive credit for the return of a repairable carcass, the repairable tag must be attached to the part when it is returned to the designated repair facility. When a repairable carcass is returned to the designated repair facility and section A of the repairable tag is processed, a message appears on Form 4686, *Shipping Order*, *Repairable Carcass Returned for Repair* to indicate the part has been received by the designated repair facility.

724.63 Processing Section B

When section B is processed, the message *Not Repaired, No Credit Given* or *Credit Given for Repaired Assembly* appears on Form 4686, *Shipping Order*. Several months may elapse before section B is processed.

724.64 Loss of Credit

No credit may be given for repairable units received with the wrong tag, received without a repairable tag, or returned to the designated repair facility in a nonrepairable status.

724.65 Prior Approval

Each repairable part listed on Form 4686, *Shipping Order,* when shipped includes the following message as a reminder: *Comply With Supply Bulletin When Returning Unserviceable Unit*. No prior approval is required to return repairable items to the designated repair facility.

724.7 Tracking of Credit Due

A log should be kept by the local office to track credit due and credit given for repairables returned to the designated repair facility. Disposition messages from Form 4686 must be written in the log.

725 Pending Requisitions

Documents pertaining to outstanding requisitions (e.g., Form 4984 and Form 7381) should be maintained and reviewed once a week. Follow-up action must be taken as required. Emergency shipment requests should be reviewed daily.

726 Control of Locally Repaired Items (Form 4794 and Form 4795)

726.1 Description

Locally repaired items are repairables procured from the MDC or any other source. They are repaired locally by USPS employees or by an outside contractor.

726.2 Instructions for Form 4794

When a repairable is to be repaired locally, Form 4794, *Unserviceable/ Repairable* (tag) (Exhibit 715.62), must be prepared and affixed to the part when it is removed from the equipment. The part must be identified on Form 4794 by acronym, equipment number, equipment class, work order number, part name, parts on order, requisition or post office number, and date.

726.3 Work Orders

When items are to be repaired locally (in-house), a work order must be created to ensure that all workhours expended and parts used to repair the item are charged to the equipment from which the part was removed.

726.4 Contractor-Repaired Items

When items are repaired by a contractor, costs are reported in MARS. The costs must be charged against the specific piece of equipment from which the part was removed as indicated on Form 4794, *Unserviceable/Repairable* (tag) (Exhibit 715.62).

726.5 Locally Repaired Items

Locally repaired items are to be issued as stocked items. The MARS software user manuals detail procedures for issuing parts.

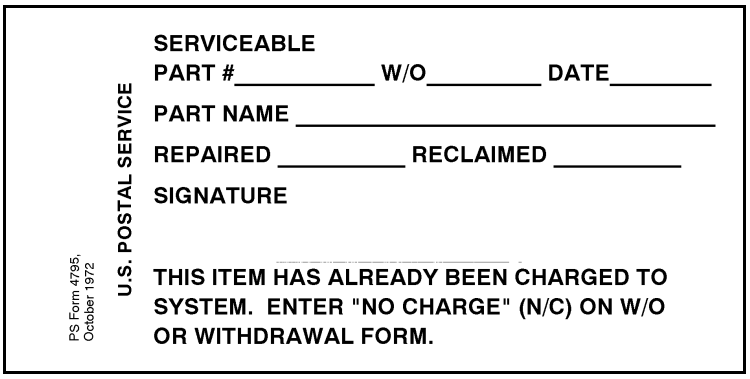


Exhibit 726.5
Form 4795, *Serviceable Tag*

73 DAILY INVENTORY CYCLE COUNTS

POLICY— Each line item stored in a stockroom must be inventoried at least once each Fiscal Year (FY).

731 ABC Stratification

731.1 Classification

The ABC factor code is used to classify inventory into three stratified categories based on value and demand. This classification is used to determine which inventory items must be controlled more closely than others.

731.2 Rankings

All items in the stockroom inventory are ranked by MARS and assigned a factor code of A, B, or C. MARS stratifies the inventory count to ensure that:

a. A items are 5 percent of the total line items and represent 80 percent of the total dollar value. They are inventoried four times a year.
b. B items are 15 percent of the total line items and represent 15 percent of the total dollar value. They are inventoried twice a year.
c. C items are 80 percent of the total number of line items and represent 5 percent of the total dollar value. They are inventoried once a year.

732 Handbook AS-701, *Material Management* Procedures

Stockroom employees must follow the steps in accordance with Handbook AS-701, *Material Management*, Chapter 5, for each NSN listed on the Daily Cycle Count report. Employees must verify the bin location of the item, condition of the item, item count, unit of issue, and total. The current

balance in the bin should be recorded on the count sheet. All variances must be reconciled by the stockroom employee. Reconciliation actions should be annotated on each line.

733 Reconciliation

If the resulting balance agrees with the current balance, no action is required. If the resulting balance disagrees with the current balance, the item issue, receipt, transfer, and adjustment records should be reviewed to reconcile the discrepancy.

74 INVENTORY BALANCE ON HAND (BOH) ADJUSTMENT

741 Authorizations

Before adjustments are made for variances and entered into the inventory transaction system, the approving official must authorize the adjustment and sign the count sheet so that management can be apprised of any shortages or overages in the stockroom. Approval is based on dollar limits as follows.

Approving Official	Percentage of Value of Item in Stock
Supervisor	Up to 5 percent
Manager	Up to 10 percent
Installation Head	10 percent or more

Exhibit 741
Authorized Stockroom Dollar Adjustment Limits

Adjustments to the inventory BOH should be the last option in record correction. Item demand history is lost when adjustments are made.

742 Critical and Insurance Items

742.1 Critical Items

A critical item is a component part required to repair a major mail handling system whose failure would impair, impede, or stop the handling, processing, or delivery of mail.

742.2 Insurance Items

An insurance item is a component subassembly or assembly with a very low mortality rate, a long lead time for procurement, and infrequent use. These

items are stocked as insurance against lengthy equipment shutdown or a disruption of mail delivery service.

742.3 Responsibilities

The identification of critical and insurance items is essential for achieving optimum service at each site at all times. Employees at each site must be aware of the existence of such items, their use, and their location, and they must ensure that the stock of such items is equal to the minimum requirements. These items must be inventoried each accounting period.

743 Cannibalization

743.1 Definition

Cannibalization is the locally authorized removal of a specific assembly, subassembly, or part from one system, subsystem, or equipment for installation on another similar equipment end item to meet operational requirements with an obligation to replace the removed item.

743.2 Authorization

The senior maintenance official or designee authorizes all cannibalization of equipment.

743.3 Effects on Work Force and Schedules

The senior maintenance official or designee must consider the effects of increased workload on the work force and schedules when making the decision to cannibalize.

743.4 Red Tagging

All cannibalized subassemblies and equipment must be red-tagged, using Form 4707 to include a description of the item removed and the work order information. When the replacement part is received and workhours are required to make cannibalized equipment serviceable, the time expended should be charged to the original work order.

75 Reporting of Excess/Surplus Items

751 Yearly Review

Offices must review each item in the stockroom at least once a year to determine whether the item can be declared excess/surplus. Those items declared excess/surplus must be reported in MARS.

752 Return of Item to General Services Administration (GSA) and Defense Logistics Agency (DLA)

Procedures for returning GSA items are described in the *GSA Supply Catalog*. Procedures for returning the DLA items are described in the *DLA Catalog*.

753 Return of Excess Repair Parts to Material Distribution Center (MDC)

753.1 Submitting Requests

When excess repair parts are identified by the local office, a request for return and credit must be submitted in writing to the MDC. Upon MDC approval, the office should package the excess items for shipment. All items being returned must be identified and the quantity stated to receive proper credit from the MDC.

753.2 Suspense File

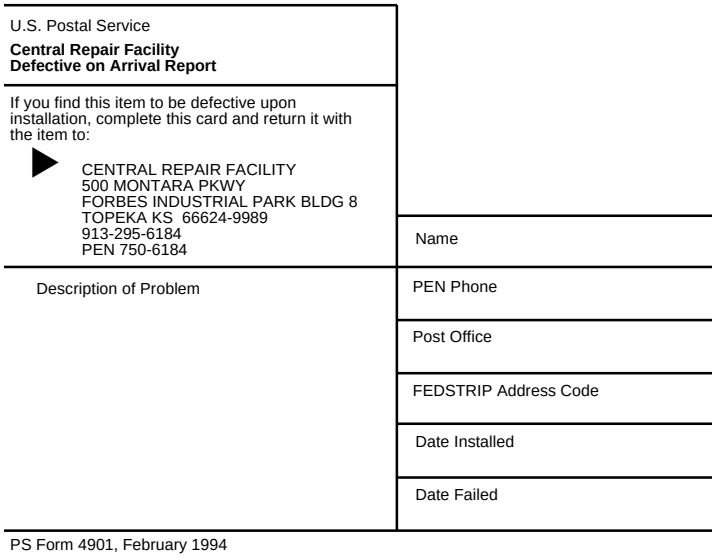
A copy of the receipt of authority and disposition instructions from the MDC should be filed in the suspense file until credit for the items appears on a Form 4686, *Shipping Order.* If a credit does not appear within 28 days, a memorandum requesting credit should be prepared and forwarded to the manager of the MDC. A copy of this request should be filed in the suspense file for another 28 days or until a response is received from the MDC.

754 Return of Defective Parts to Source of Acquisition

754.1 Reporting

Repairable parts received and found to be defective on arrival or that fail within 24 hours after installation must be reported as follows:

a. Form 7433 (Exhibit 724.1) must be prepared (both sections A and B) and attached to the item before packing and shipping.
b. Form 4901, *Defective on Arrival Report* (Exhibit 754.1), must be completed and returned with the item following procedures described in applicable maintenance bulletins.



U.S. Postal Service

Central Repair Facility
Defective on Arrival Report

If you find this item to be defective upon installation, complete this card and return it with the item to:

CENTRAL REPAIR FACILITY
500 MONTARA PKWY
FORBES INDUSTRIAL PARK BLDG 8
TOPEKA KS 66624-9989
913-295-6184
PEN 750-6184

Name

Description of Problem

PEN Phone

Post Office

FEDSTRIP Address Code

Date Installed

Date Failed

PS Form 4901, February 1994

Facsimile, April 1996

Exhibit 754.1

Form 4901, *Defective on Arrival Report*

c. Form 4568, *Postal Equipment Problem Feedback*, must be forwarded with the repairable part to the designated repair facility and a copy filed in the suspense file.

754.2 Items Not Repairable Locally

All parts identified as repairable by Inventory Management must be returned to the designated repair facility for repair or disposal, including items with source code U when the item cannot be repaired locally. Items coded U that cannot be repaired locally must be reported in MARS.

754.3 Parts Acquired Elsewhere

Parts acquired from sources other than the MDC, GSA, or the DLA must be returned for reimbursement according to procedures provided by the source of supply.

754.4 Parts Under Warranty

Parts under warranty must be returned to the source of supply, manufacturer, or as otherwise directed with a completed Form 4568. A record must be established to track parts returned to the manufacturer or any other source to ensure replacement. The record must be maintained by the senior maintenance official or designee.

755 Return of Parts or Supplies to Stockroom

Items previously issued may be returned to the stockroom.

756 Procedures for Receiving Spare Parts Under Warranty

756.1 Stocked Items

Stocked items received under warranty for new equipment are processed in accordance with the MARS software user manuals.

756.2 Nonstocked Items

Nonstocked items received under warranty for new equipment must be added to the MARS Tool and Parts Catalog in accordance with the MARS software user manuals.

757 Maintenance Stockroom Inventory Management

757.1 Purpose

The goal of the USPS is to bring inventory management quality in line with industry standards. To achieve this goal, the USPS must have the right assets in the right quantities for Inventory Management and Maintenance Policies and Programs to support the corporate automation plan. The Asset Inventory Management (AIM) program, initiated by the former Office of Material Management and the Office of Maintenance Management, laid the foundation for the effort and reemphasized the Handbook AS-701, *Material Management* goals of 97.5 percent location accuracy and 95 percent inventory accuracy. The principles and practices of good inventory management must become part of the standard operating procedures. Senior maintenance officials are responsible for ensuring that established goals are achieved and maintained.

757.2 Responsibilities

If stockroom inventory accuracy goes below 90 percent, or location accuracy goes below 95 percent, the organizational material management specialist and senior maintenance official must take appropriate action to evaluate causes and initiate corrective actions.

757.3 Submitting Information

The information generated by the inventory accuracy procedures in Handbook AS-701, *Material Management,* is submitted to the senior maintenance official for review. Corrective action should be initiated, if required. Cause and corrective actions are required to improve inventory

accuracy. Adjustments reflect poor record-keeping practices. The goal is to improve record accuracy and customer satisfaction.

757.4 Forwarding Documents

A copy of applicable documents must be forwarded to the organizational material management specialist for review and further processing.

Appendix 1 Equipment Acronyms

Instructions: Insert the latest Maintenance Management Order (MMO) on:

Subject: Update to Acronym File.

File Code: Q1

The acronyms are being developed by the Maintenance Technical Support Center (MTSC) and will be incorporated by periodic MMOs.

Appendix 2 Labor Groups and Classes

Code	Labor Group
A	Mail Processing Equipment
B	Building Equipment Maintenance
C	Field Maintenance Operations
D	Shop Services
E	Building Services
F	Tools/Parts Room
G	Maintenance Operations Support
H	Plant Maintenance
I	Custodial Services
J	Window/Services
K	Casual
L	Transitional Employee

Code	Labor Class
A	Electronic Technician
B	MPE Mechanic
C	Overhaul Specialist
D	Postal Machine Mechanic
E	Maint Mech Level 5
F	Maint Mech Level 4
G	Reserved
H	Stationary Engineer
I	Supervisor
J	Elevator Mechanic
K	Reserved
L	Electrician
M	BEM Mechanic
N	Area Maintenance Tech/Spec.
O	Machinist
P	Plumber
Q	Letter Box Mechanic
R	Carpenter
S	Group Leader-Custodial
T	Laborer-Custodial
U	Custodian
V	Maint Support Clerk 5
W	Maint Support Clerk 6
X	Materials Handling Equipment Operator
Y	Painter, Blacksmith-Welder
Z	Other

Appendix 3 Reporting Offices

Definitions

Maintenance Capable Office (MCO) is an office that has assigned maintenance personnel qualified to maintain a facility and the equipment installed in that facility. The office must maintain a maintenance stockroom and be authorized to requisition repair parts from material distribution centers (see *Administrative Support Manual* (ASM) 531.5).

Maintenance capable offices are required to:

1. Establish preventive maintenance.
2. Establish equipment inventory master files.
3. Report material expenditures.
4. Report labor expenditures.
5. Report contract expenditures.

Non–Maintenance Capable Office (Non-MCO) is an office that does not meet the criteria for a maintenance capable office.

Appendix 4 (Reserved)

Appendix 5 (Reserved)

Appendix 6 Forms Retention

Form	Title	Hard Copy Retention Period	Electronic Copy Retention Period
4568	Postal Equipment Problem Feedback	6 APs	Not applicable
4707	Out of Order (tag)	Dispose of when defective equipment is returned to service.	Not applicable
4772	Equipment Inventory and History Record	For the life of the equipment	For the life of the equipment
4772-A	Motor Record	For the life of the equipment	For the life of the equipment
4772-B	Equipment History Record (Continuation)	For the life of the equipment	For the life of the equipment
4774	Equipment Breakdown Investigation Report	1 year	Not applicable
4775	Work Order Register	1 year	1 year
4776	Prevention-Custodial Maintenance Route	1 year upon completion	1 year upon completion
4777	Maintenance Checklist	For the life of the equipment	For the life of the equipment
4778	Daily Assignment Sheet	1 AP	Not applicable
4786	Tool Order	Until the tool is returned	Not applicable
4800	Parts/Supplies Issue Slip—Stocked Items	1 AP	Not applicable
4802	Preventive Maintenance Exceptions	1 AP	Not applicable
4803	Contract Maintenance Cost	1 AP	Not applicable
4804	Equipment Workload/Hours Operated Record	1 AP	Not applicable
4805	Maintenance Work Order Request	2 years	1 year
4840	Operation Maintenance Schedule	Until revised	Not applicable
4984	Repair Parts Requisition	1 year	Until cleared by cancellation
8152	Employee Daily Activity Card	Destroy upon data entry into MARS	Not applicable

Additional forms used for maintenance (but not listed above) should be kept for 1 year or as long as local requirements dictate. Files should not be discarded solely because the retention limit has been reached. Good judgment should be applied in all instances.

Appendix 7 (Reserved)

Appendix 8 Frequency Codes

Frequency	Code	Frequency Table
A	ANNUAL	Once every 13 APs.
B	BIWEEKLY	Once every 2 weeks (enter a 1 or 2 in position 28).
C	BIMONTHLY	Once every 2 APs (enter a 1 or 2 in positions 26 and 27).
D	DAILY	Once a day, 7 days a week.
E	DAILY	Once a day, 6 days a week.
F	DAILY	Once a day, 5 days a week.
G	DAILY	Once a day, 4 days a week.
H	DAILY	Once a day, 3 days a week.
J	SEMIWEEKLY	2 days a week.
K	BIANNUAL	Once every 2 years.
L	TRIENNIAL	Once every 3 years.
M	MONTHLY	Once every AP.
N	QUAD-ANNUAL	Once every 4 years.
P	QUINT-ANNUAL	Once every 5 years.
Q	QUARTERLY	4 times every 13 APs.
S	SEMIANNUAL	Twice every 13 APs.
T	TOURLY	3 times a day, 7 days a week.
U	TOURLY	Twice a day, 7 days a week.
V	TOURLY	3 times a day, 6 days a week.
W	WEEKLY	Once a week.
X	TOURLY	Twice a day, 6 days a week.
Y	TOURLY	3 times a day, 5 days a week.
Z	TOURLY	Twice a day, 5 days a week.

Appendix 9 Glossary

Availability Inherent availability of equipment. Equipment availability percentage is obtained by dividing the hours operated (MTBF) by the hours operated plus total equipment downtime (MTBF + MTTR) times 100. Inherent availability is the probability that a system or equipment (e.g., readily available tools, spares, or maintenance personnel) will operate satisfactorily at any point in time as required.

Average Demand (AD) The AD is calculated using the issue history and the number of APs the record has been on file, up to 13. The AD that appears on the maintenance tool and parts catalog is rounded to zero if the number is .4 or less and to 1 if the number is .5 to .9. The AD is used when calculating the reorder point (ROP).

Bench Check A workshop check that includes the typical check or actual functional test of an item to ascertain what is to be done to return the item to a serviceable condition or ascertain the item's temporary or permanent disposition. This term includes any action by maintenance in determining the condition of an item and the determination of capability or lack of capability to return an item, removed for a malfunction or an alleged malfunction, to a serviceable status. It also includes repair action when the repair is accomplished concurrently with the bench check.

Checklist Technical orders that provide instructions in abbreviated form for use by maintenance employees in performing various tasks or operations sequence. Checklists contain what to do and the proper sequence of performance.

Equipment Maintenance The sustaining of system, subsystem, or equipment in an operational status, restoring to a serviceable condition.

Equipment Modification Standard configuration changes to a piece of equipment. Modifications of selected major pieces of equipment are controlled by the Engineering Change Board (ECB). See Publication 101, *Engineering Change Board Organization and Operation*. Approved changes are distributed by Modification Work Order (MWO) and Software Modification Order (SMO).

Equipment Overhaul Rebuilding and restoring of equipment to prolong equipment life and improve reliability.

Function The appropriate or assigned duties, responsibilities, or tasks of an individual, office, or activity.

Life Cycle Support Planning (LCSP) Life Cycle Support Planning, also known as the total systems approach, is a customer oriented strategy to fully meet USPS major operations and equipment requirements in a timely, cost-effective manner. It requires all organizations to work together to completely identify the customer's requirements, translate those requirements into a system, provide the system to the customer, and support the customer once the system is placed into operation. This approach is intended to cause all organizations to consider all elements and phases of an automation system's life cycle. Life cycle design is economically beneficial because it considers cost from cradle to grave. A quality design can inhibit

unnecessary maintenance, maximize operational efficiency, and avoid early system replacement. The total systems approach requires quality, cost, schedule, and user requirements to be considered at all life cycle phases. The three critical components of LCSP are the product, the people, and the process.

Maintenance Activity Reporting and Scheduling (MARS). A computerized maintenance management system designed to automate the majority of administrative functions and assist in improving financial accountability of maintenance assets.

Maintenance Capability The ability to provide resources, facilities, tools, test equipment, drawings, technical publications, trained maintenance employees, engineering support, and availability of spare parts, required to modify, retain, or restore system, subsystem, or equipment to a serviceable condition.

Maintenance Data Collection A procedure for recording and collecting production material, labor, and costs information for all tasks accomplished by maintenance employees.

Maintenance Effectiveness A measurement of accomplishment that considers only maintenance-caused deviations from those that were planned.

Maintenance Operation The staff, management support, and maintenance production elements or activities directly or functionally responsible to a single maintenance manager.

Maintenance Production The physical performance of equipment maintenance and related functions of service, repair, test, overhaul, modification, calibration, modernization, conversion, and inspection.

Maintenance Responsibility The obligation and authority to complete assigned maintenance tasks and to direct and take necessary action to ensure the proper care, custody, and safekeeping of maintenance resources.

Management The process of planning, organizing, coordinating, directing, controlling, and evaluating the use of employees, money, material, and facilities to accomplish assigned tasks.

Mean Time Between Failure (MTBF) The average operating time between breakdowns. The average is calculated by dividing the hours operated by the number of breakdowns.

Mean Time To Repair (MTTR) The average maintenance time required to repair breakdowns. The average is calculated by dividing the total workhours (work code 08) reported to repair the breakdown by the number of reported breakdowns.

National Maintenance Data Base (Formerly NMICS) A computer-assisted management and control system to assist Headquarters and Area personnel in managing, controlling, and monitoring maintenance activities.

Operating Maintenance (Traveling/Stationary Routes) Monitoring, starting/stopping, logging, and performing minor maintenance and adjustments to building systems

Plant Equipment A building's physical structures, utilities, and environmental systems.

Postal Equipment Equipment used directly or indirectly in moving the mail (e.g., facer cancelers, letter sorting machines, collection boxes, scales, commodity vending machines).

Reorder Point The reorder point (ROP) is automatically calculated each AP after the item has been on the tool and parts catalog for 6 accounting periods or more. The ROP is calculated as:

ROP = [(AD x PLD/28) + (AD x .25)]

AD is average demand (accounting period usage),
PLD is pipeline delay (days required to fill order).

Replenishment Quantity The replenishment quantity is calculated as:

RQ = [(PLD/28) + (AD x .25)]/BPQ

where RQ is replenishment quantity,
AD is average demand (accounting period usage),
PLD is pipeline delay (days required to fill order), and
BPQ is bulk pack quantity.

The replenishment quantity appearing on the procurement notice is:

3 x RQ if RQ times unit price is less than $2.50.
2 x RQ if RQ times unit price is greater than $2.49 and less than $5.00.
1 x RQ if RQ times unit price is greater than $4.99.

Standing Work Orders A work order for recording workhours expended during the performance of repetitive maintenance activities.

Appendix 10 (Reserved)

Appendix 11 Reference Documents

The following documents are recommended for a library in a maintenance capable office.

Administrative Support Manual

DSA Handbook HS-1, *Introduction*

DSA Handbook HS-2, *Numeric Index of Classes*

DSA Handbook HS-3, *Alphabetic Index of Classes. Federal Property Management Regulation (FPMR 101-27.5)*

Federal Supply Class Cataloging Handbook

Federal Item Name Directory for Supply Cataloging

GSA Supply Catalog

Handbook AS-550, *Recycling Guide*

Handbook AS-551, *Clean Air Act Compliance Handbook*

Handbook AS-552, *Waste Reduction Guide*

Handbook AS-553, *Hazardous Waste Guide*

Handbook AS-554, *NPDES/Stormwater Guide*

Handbook AS-701, *Material Management*

Handbook EL-801, *Supervisor's Safety Handbook*

Handbook EL-803, *Maintenance Employee's Guide to Safety*

Handbook EL-809, *Guidelines for Local Joint Labor-Management Safety & Health Committees*

Handbook EL-812, *Employee Awareness-Hazardous Materials*

Handbook EL-814, *Employee's Guide to Safety*

Handbook MS-1, *Operation and Maintenance of Real Property*

Handbook MS-7, *Repair and Alteration of Real Property*

Handbook MS-10, *Floor Care*

Handbook MS-11, *Industrial Storage Batteries*

Handbook MS-21, *Elevator Maintenance*

Handbook MS-24, *Heating, Cooling and Ventilating*

Handbook MS-28, *Maintenance of Electrical Switchgear*

Handbook MS-39, *Fluorescent and Mercury Vapor Lighting*

Handbook MS-42, *Air and Water Balancing*

Handbook MS-45, *Field Maintenance Program*

Handbook MS-47, *Housekeeping*

Handbook MS-49, *Energy Conservation and Maintenance Contingency Planning*

Handbook MS-50, *Energy Conservation and Maintenance Contingency Planning in Small Postal Facilities*

Handbook MS-56, *Fire Prevention and Control*

Handbook RE-6, *Facilities Environmental Handbook*

Handbook RE-9, *Energy Consumption System*

Maintenance Activity Reporting & Scheduling (MARS) User Documentation

Maintenance Bulletins (applicable as appropriate)

Management Instruction AS-510-92-6, *Minimum Requirements for Specifications of Underground Storage Tank Systems*

Management Instruction AS-550-91-10, *Pollution Prevention Program*

Management Instruction AS-550-91-11, *Clean Air Compliance*

Management Instruction AS-550-92-2, *Waste Reduction*

Management Instruction AS-550-92-7, *Stormwater Management*

Management Instruction AS-550-92-8, *Hazardous Waste Management*

Management Instruction AS-550-95-9, *Underground Storage Tank Management*

Management Instruction EL-810-90-6, *Hazardous Materials Spill or Leak Standard Operating Procedures*

Management Instruction EL-810-93-1, *Confined Space Entry*

Management Instruction EL-810-94-2, *Hearing Conservation Programs*

Management Instruction EL-810-94-3, *Asbestos-Containing Building Materials Control Program*

Management Instruction EL-820-80-4, *Procurement of Prescription Safety Glasses*

Management Instruction EL-830-95-2, *Control of Asbestos Exposure from Brake and Clutch Repair Service*

Maintenance Management Order MMO-038-94, OSHA Lockout Forward/Tagout Procedures

Publication 101, *Engineering Change Board Organization and Operation*

Publication 112, *Repair Parts Catalog* (Microfiche/CD ROM)

Publication 129, *Safety Talks*

Publication 223, *Directives and Forms Catalog*

Publication 247, *USPS Materiel Management Equipment and Supply Catalog*

Appendix 12 Establishing Maintenance Capable Offices (MCOs)

Pre-MARS Installation

To become an active MARS office:

1. **Obtain a Finance Number**
   The senior maintenance official must get a finance number to use when recording maintenance activities. Maintenance requests a finance number from Finance**.** Finance notifies Maintenance Operations Support (MOS) of the finance number to use when recording maintenance activities.

2. **Obtain a FEDSTRIP Number**
   The senior maintenance official must obtain a maintenance capable FEDSTRIP number (MCFN) for stockroom inventory as follows:

   a. Maintenance requests a new FEDSTRIP number through the organizational material management specialist (MMS). The MMS requests the new FEDSTRIP number from the Material Distribution Center (MDC), Topeka, Kansas (as described in Handbook AS-701 and Publication 247).
   b. MDC notifies the District Material Management Specialist (DMMS) when the FEDSTRIP number is assigned.
   c. The MMS forwards a copy of the new FEDSTRIP number to MOS and/or the requesting office.

3. **Obtain a PSDS Site Code**
   To transmit MARS transactions to the host computers for processing, each maintenance office needs to be identified to PSDS with a four-digit PSDS site code. Maintenance Policies and Programs (MPP) will assign a two-digit subsite code.

   PSDS site codes are obtained from PSDS Operations. PSDS subsite codes are obtained from:

   MAINTENANCE POLICIES & PROGRAMS
   USPS ENGINEERING
   8403 LEE HWY
   MERRIFIELD VA 22082-8101

   A host site has the PSDS equipment (e.g., Main Facility Device Controller (MFDC)) and a subsite transmits using the PSDS equipment at the host site. If the new maintenance office is a host site, it is assigned a subsite code of 00. Subsites share the host PSDS site code and have a unique subsite code to identify them as new 00 sites.

4. **Obtain a Printer ID and Telecommunicator ID**
   These identification numbers enable the national host computers to send reports and administrative notices through PSDS to the local printer. The maintenance office contacts PSDS Operations for these numbers.

5. **Complete Form 3**
   A new maintenance office must complete the PCD Form 3 (Exhibit A12-1). This form is used to identify valid MARS offices. The completed Form 3 is sent to:

   MAINTENANCE POLICIES & PROGRAMS
   USPS ENGINEERING
   8403 LEE HWY
   MERRIFIELD VA 22082-8101

6. **Complete Form 8**
   If an office requires parts support, it must send its new maintenance capable FEDSTRIP number with a request to add its new FEDSTRIP number to the national host. A copy of the FEDSTRIP letter from the MDC must accompany the request letter along with appropriate approvals (Exhibit A12-3). The local office is responsible for filling out Form 8 (Exhibit A12-2) and entering the data.

7. **Required information**
   All requests about Form 3 (Exhibit A12-1) and Form 8 (Exhibit A12-2) must contain the following information:
   a. Facility name.
   b. The PSDS Operations information (PSDS site and subsite number).
   c. Contact person.
   d. Contact telephone number.
   e. Nature of request.
   Further information can be obtained from USPS Engineering at 1-800-877-7435, option 5.

How MARS Information Is Processed

The MARS software application uses a modem to communicate to the PSDS data site. The MARS system initiates the modem dialing and the connect operation, then automatically uploads all queued MARS transactions.

Before records are transmitted, the MARS transaction files should be reviewed for accuracy.

After records are transmitted to the MFDC, the MFDC transmits them to Minneapolis via the PSDS network. If a transmission to the MFDC is successful, but the records do not appear on the feedback reports, the data site should verify that the MFDC received all reports for the host site and subsites. If any of the reports were not received, the host site should call the Minneapolis Computer Operations Service Center (COSC) to correct the problem.

MARS Software Responsibility

Engineering, Maintenance Policies and Programs (MPP), is responsible for maintaining the MARS software that runs on the personal computer. Problems or questions should be directed to Raleigh Customer Support Group at 1-800-877-7435, option 5.

Maintenance Checklist

Items required to run on MARS at a local office:

1. Where applicable, a dedicated phone line must be installed.

2. The MARS software, hardware, and installation instructions are obtained by sending a written request through to the Area Maintenance Support office for approval, then to Engineering, Maintenance Policies and Programs.

3. MARS PSDS must have site and subsite codes assigned.

4. A copy of Handbook MS-63, *Maintenance Operations Support* must be available. If not, order copies by sending Form 7380 to the appropriate MDC.

MATERIAL DISTRIBUTION CENTER
US POSTAL SERVICE
500 SW MONTARA PKY
TOPEKA KS 66624-9998

MATERIAL DISTRIBUTION CENTER
US POSTAL SERVICE
152 HWY 206 SOUTH
SOMERVILLE NJ 08877-9998

5. A copy of pertinent MARS manuals must be available. Copies may be obtained by contacting the Raleigh Customer Support Group.

NMICS Location Table

Requesting Office

PSDS Number _____

Facility Name _____

Facility Address _____

MOS Contact Person _____

MOS Contact Telephone Number _____

Senior Management Official _____

(Signature)

PSDS			Location Information				Finance Number		Building Interior			Utilities	Outside Area	Contract					
									Main-tained	Cleaned									
ROPC	PSDS	Subsite	BA Code	State Alpha	Facility	ZIP Code	State	PO Number	Gross Area Sq Ft (000)	Area Sq Ft (000)	Num-ber of Bldgs.	Area Sq Ft (000)	Area Sq Ft (000)	Area Cleaned Area Sq Ft (000)	Office Type	T/C	PID	Leave positions 70 to 79 blank	Action
1	2-4	5-6	7-8	9-10	11-28	29-37	38-39	40-43	44-47	48-51	52-54	55-58	59-62	63-66	67	68	69		80

Action Legend (column 80): A or blank=Add C=Change D=Delete

PCD Form 3, November 1994
Facsimile, April 1996

Facsimile, April 1996

Exhibit A12-1

PCD Form 3, *NMICS Location Table*

PCD Form 3, *NMICS Location Table*—Completion Instructions

Item	Col.	Description
REQUESTING OFFICE	BLOCK	(TOP OF FORM)
PSDS Number		PSDS number of requesting office.
Facility Name		Name of facility to appear on National Host reports.
Facility Address		Mailing address of requesting office.
Contact Person		Contact.
Contact Phone No.		Phone number.
Senior maintenance official		Signature.
PSDS CODE		
ADPC & PSDS	1–4	Assigned four-position site code from where MARS data is to be transmitted.
Subsite	5–6	Assigned two-position subsite code.
BA Code	7–8	Assigned two-digit Budget Authorization Code.
	8	Facility's district (alpha).
State Alpha	9–10	Facility's state (alpha).
Facility	11–28	If an FMO, enter FMO before the name of the facility. If a station/branch, enter “ST/BR” after the name of the facility.
ZIP Code	29–37	ZIP+4 without dash.
Finance Number		
State	38–39	Two-digit numeric state code.
Facility	40–43	Four-digit numeric facility number assigned to Maintenance.
Building Interior Maintained	44–47	Accumulated gross square footage rounded to the nearest thousand as defined in Handbook MS-1 for all buildings maintained by maintenance employees via PM (Form 4776) or CM (Form 4805) and material expenses entered into MARS. Gross area is the sum on the floor areas including the normal outside faces of exterior walls. Compute gross area by measuring from the normal outside face of exterior walls. In addition to areas obviously in this category, gross area includes basement (except unexcavated portions), attics, garages, roofed porches, mezzanines, shipping platforms, penthouses, and mechanical equipment floors, lobbies, and corridors, if they are within the normal face lines of the building. The gross area does not include unroofed features such as cooling towers.

Item	Col.	Description
Cleaned	48–51	Accumulated interior square footage including dock (platform) areas rounded to the nearest thousand. As defined in Handbook MS-47, for all buildings cleaned by custodial maintenance employees via PM (Form 4776) or CM (Form 4805) and material expenses entered into MARS. Compute the floor area by measuring from the normal finish of an interior wall to the opposite interior wall. Interior square feet is determined by conducting an inventory, in a logical sequence, and type of space. Type of space examples: workroom, offices, supply room, active storage room, inactive storage room, and oil storage room. Compute the floor area of each corridor, entrance, or lobby by measuring from the finished surface of the walls or partitions that enclose such areas.
Number of Buildings	52–54	Number of buildings assigned to this subsite (Positions 5 and 6) for which the maintenance manager has maintenance responsibility.
Utilities Square Feet	55–58	Leave blank.
Outside Area	59–62	Accumulated exterior square footage rounded to the nearest thousand as defined in Handbook MS-47 for outside grounds, lawns, and landscaping maintained by maintenance employees. Exterior (outside area) should be inventoried according to the type covering of the area (e.g., unpaved areas may include lawns, hedges, and shrubs. Paved areas may include sidewalks and parking/maneuvering areas). Enter labor, material, and contract costs into MARS using acronym Z0BS or Z0BM.
Contract Area Cleaned	63–66	Accumulated interior square footage assigned to this subsite to be cleaned by contract employees and costs entered into MARS. Do not include area for which lessor has cleaning responsibilities.
Office Type	67	A = Office that reports directly through PSDS (usually subsite 00 or a unique number approved by the Maintenance Policies and Programs Office). This office can report labor, tools, and parts, and order parts directly. B = Office that shares FEDSTRIP of a type A office. C = Office that can order parts directly but receives no reports and does not input data for labor or material costs.
TC (Teleconcentrator)	68	Obtained from Support PSDS.
PID (Printer ID)	69	Obtained from Support PSDS.
Blank	70–79	Leave blank.
Action	80	A for add. C for change. D for delete.

U.S Postal Service

NMICS FEDSTRIP Address Update

Date

Action	Office Identification							Location						
Action	ADPC	Site	Subsite	ADPC	Site	Subsite	FEDSTRIP Address Code	Facility	Alpha State	Printer ID	Catalog Seq.	Catalog Cycle	Auto Reorder	Office Type
1	2	3-5	6-7	8	9-11	12-13	14-19	20-27	28-29	30	31	32	33	34

PCD Form **8**, November 1994
Facsimile, April 1996

Action Legion: A=Add C=Change D=Delete

Facsimile, April 1996

Exhibit A12-2

PCD FORM 8, ***NMICS FEDSTRIP Address Update***

PCD Form 8, *NMICS...Address Update*—Completion Instructions

Item	Col.	Description
Action	1	Action A = Add – Leave positions 2 through 7 blank. Fill out all other positions on form. Action C = Change – To change a PSDS number, fill in complete form. – To change a FEDSTRIP Address Code, leave positions 8 through 13 blank. Fill in all other positions on the form. – To change the facility name, leave positions 8 through 13 blank. Fill in all other positions on the form. Action D = Delete – To delete a site from the FEDSTRIP Address Code, leave positions 8 through 13 blank. Fill in all other positions on form.
ADPC/Site	2–5	Current PSDS number
Subsite	6–7	Current PSDS subsite number
ADPC/Site	8–11	New PSDS number
Subsite	12–13	New PSDS subsite number
FEDSTRIP Address Code	14–19	FEDSTRIP Address Code (must be a maintenance capable FEDSTRIP number) (MCFN)
Facility	20–27	Name of facility
Alpha State	28–29	Two-letter state alpha code
Printer ID	30	Printer ID obtained from the PSDS site
Catalog Seq.	31	Catalog sequence 1 = National Stock Number (NSN) 2 = NSN within source code 3 = NSN within group code 4 = Bib location 5 = Nomenclature
Catalog Cycle	32	Week of AP catalog will be printed (1, 2, 3, 4)
Auto Reorder	33	Automatic reorder desired (Y=Yes/N=No)
Office Type	34	Type of office updating FEDSTRIP A = Office reporting directly through PSDS (usually subsite 00) B = Office reporting through a type A office

MAINTENANCE POLICIES & PROGRAMS
8403 LEE HIGHWAY
MERRIFIELD VA 22082-8101

Subject: Inclusion on the host Location Directory File for Maintenance Capable Offices

This is a request that the following office be included in the host location table file for labor and/or parts replenishment.

Name of Facility		Finance No.
Address of Facility	ZIP+4	FEDSTRIP No.
Name of Requestor (Contact Person)	(___) Telephone Number	Subsite No.

It is understood that in requesting these actions, funds may be expended. Such expenditures require the approval of the following officials.

Approved by Installation Head (Requesting Office)

Approved by Manager, Maintenance (Host Office)

Approved by District Manager (Customer Service ONLY)

Approved by Area Manager (Customer Service/Processing and Distribution)

Exhibit A12-3
Sample Letter Requesting Host Reporting for Maintenance Capable Office

Appendix 13 Unit of Issue Codes

Description	Code
AMPULE	AM
ASSORTMENT	AT
ASSEMBLY	AY
BALL	BA
BUNDLE	BD
BALE	BE
BOARD FOOT	BF
BAG	BG
BOOK	BK
BARREL	BL
BOLT	BO
BAR	BR
BOTTLE	BT
BOX	BX
CARTRIDGE	CA
CARBOY	CB
CUBIC YARD	CD
CONE	CE
CUBIC FOOT	CF
CAKE	CK
COIL	CL
CAN	CN
CONTAINER	CO
CARTON	CT
CYLINDER	CY
CUBIC METER	CZ
DRUM	DR
DOZEN	DZ
EACH	EA
FOLDER	FL
FOOT	FT
GALLON	GL
GROUP	GP
GROSS	GR
HUNDRED	HD
HANK	HK
INCHES	IN
JAR	JR
KIT	KT
POUND	LB
LENGTH	LG
LITER	LI
MEAL	ME
METER	MR
MAT	MT
THOUSAND	MX
OUTFIT	OT
OUNCE	OZ
PAD	PD
PIECE	PE
PACKAGE	PG
PECK	PK
PAIL	PL
PLATE	PM
PAIR	PR
PINT	PT
PACKET	PZ
QUIRE	QR
QUART	QT
RATION	RA
ROD	RD
REEL	RL
REAM	RM
ROLL	RO
THOUSAND ROUNDS	RX
SCORE	SC
SKID	SD
SET	SE
SQUARE FOOT	SF
SHEET	SH
SKEIN	SK
SPOOL	SL
SHOT	SO
STRIP	SP
STICK	SX
SQUARE YARD	SY
TAG	TG
THOUSAND CUBIC FT	MC
TON	TN
TROY OUNCE	TO
TUBE	TU
VIAL	VI
YARD	YD

Appendix 14 Abbreviations and Acronyms

Abbreviations and acronyms used throughout this handbook are defined in the following table.

Abbreviation/Acronym	Definition
AIM	Asset Inventory Management
AP	Accounting Period
BEM	Building and Equipment Maintenance
BOH	Balance on Hand
CM	Corrective Maintenance
COSC	Computer Operations Service Center
CS	Custodial Services
DLA	Defense Logistics Agency
DMMS	District Material Management Specialist
ECB	Engineering Change Board
ECO	Engineering Change Order
FEDSTRIP	Federal Standard Requisitioning and Issue Procedures
FMO	Field Maintenance Operations
FSC	Federal Supply Code
FY	Fiscal Year
GPO	Government Printing Office
GSA	General Services Administration
ISC	Information Service Center
ISSC	Information System Service Center
LCSP	Life Cycle Support Planning
MARS	Maintenance Activity Reporting and Scheduling
MCFN	Maintenance Capable FEDSTRIP Number
MCO	Maintenance Capable Office
MDC	Material Distribution Center
MFDC	Main Facility Device Controller

MMO	Maintenance Management Order
MMS	Material Management Specialist
MOS	Maintenance Operations Support
MPE	Mail Processing Equipment
MPP	Maintenance Policies and Programs
MS	Maintenance Series
MTBF	Mean Time Between Failure
MTSC	Maintenance Technical Support Center
MTTR	Mean Time To Repair
MWO	Modification Work Order
NMICS	National Maintenance Information and Control System
NSN	National Stock Number
O&M	Operations and Maintenance
OCR	Optical Character Reader
OEM	Original Equipment Manufacturer
OJT	On the Job Training
OSHA	Occupational Safety and Health Administration
PdM	Predictive Maintenance
PFY	Postal Fiscal Year
PLD	Pipeline Days
PM	Preventive Maintenance
PSDS	Postal Source Data System
PTR	Part Time Regular
RCM	Reliability Centered Maintenance
ROP	Reorder Point
RPM	Routine Preventive Maintenance
RQ	Replenishment Quantity
SMO	Software Modification Order
TPM	Total Productive Maintenance
TQM	Total Quality Maintenance
USPS	United States Postal Service