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Title

Preventive Maintenance for Mail Processing Equipment

Signature & Title

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Operations Support Group

# I. Purpose

This Instruction updates the policy and scheduling guidelines for performing preventive maintenance on mail processing equipment. It also emphasizes the importance of this function to the overall operating efficiency of the Postal Service.

#### II. Definitions

#### A. Preventive Maintenance

This is the scheduled systematic inspection and servicing of equipment to maintain it in optimum condition. It is also an essential factor contributing to the effective and efficient operation of the automated and mechanized mail processing system used in postal facilities. Performance of this maintenance helps keep machine error rates low, throughput high, and reduces unplanned downtime. Thorough, regular, and precise preventive maintenance is critical to the proper operations of the computer controlled automation equipment currently being deployed. Proper scheduling of trained employees is essential to providing this maintenance in the most costeffective manner. USPS budgetary objectives and service quality commitments to our customers depend on optimum mail processing capability.

## **B.** Maintenance Windows

These are times set aside from the processing of mail for the scheduled maintenance of equipment.

## C. Operational Maintenance

This is monitoring of operational performance, and adjustments and corrective actions to improve the performance of equipment.

# III. Responsibility

The installation head must ensure that maintenance windows are established and strictly followed. Variations in maintenance window times may be necessary to satisfy certain local situations. In these cases, the senior maintenance official must obtain concurrence of the General Manager, Maintenance Overhaul and Technical Service Center and approval of the Regional Director of Operations Support. The senior maintenance official also must retain this concurrence on file for reference during audits. Equipment that malfunctions, uses excessive spare parts, or does not reach its expected life as the result of a lack of required preventive maintenance may result in disciplinary action.

# IV. Scheduling Maintenance

## A. Responsibility

Local mail processing management, in cooperation with the senior maintenance official, must schedule a regular increment of time to perform maintenance routines for each individual piece of mail processing equipment.

#### B. Criteria

- a. This schedule must take into account local processing requirements. To the extent possible, preventive maintenance windows for specific machine types should be staggered to ensure availability of processing capacity.
- b. All organizations involved in maintenance must adhere to this schedule. This ensures that a sufficient number of trained maintenance personnel are available to perform required maintenance.

#### Distribution

Standard Distribution plus:

One copy each to Mail Transport Equipment Centers and CAG A-E post offices; 10 copies each to Maintenance Capable Offices: and 5 copies each to Mechanization Overhaul Centers and Maintenance Overhaul and Technical Service Centers

#### Special Instructions

Organizations listed under Distribution may order additional copies from materiel distribution centers. Use Form 7380, *MDC Supply Requisition*, and specify the filing number.

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c. The length of the maintenance window varies depending on the time required to perform each scheduled maintenance routine.

- (1) As a general rule, the window is the time required to perform the scheduled maintenance routine, plus up to two additional hours.
- (2) This additional time is necessary to perform planned corrective maintenance. to correct deficiencies discovered during the preventive maintenance routine, and to allow sufficient time for maintenance personnel to become familiar with new equipment.
- d. During the maintenance window, maintenance personnel must have unrestricted access to and complete control of the piece of equipment. The machine will not be available for operational purposes until maintenance has been completed.

#### V. Maintenance Routines

#### A. Daily Preventive Maintenance

- 1. Routines. Daily preventive maintenance routines usually include those actions required to keep the equipment in good appearance and operating condition. Mail search is also part of these routines. Examine equipment to detect potential malfunctions before they occur. During the daily maintenance window, time is allowed to:
- a. Perform all items identified on the checklists issued in Maintenance Bulletins, also called Maintenance Management Orders (MMOs).
- b. Perform additional items required based on operational experience at each individual site (e.g., more frequent cleaning of filters or special adjustments).
- 2. Preventive Maintenance Windows. The approved daily preventive maintenance windows for some of the more critical pieces of mail processing equipment are listed below. As indicated in section IV., these windows allow sufficient time to perform all items on the maintenance route sheets, plus any additional corrective items deemed necessary. All equipment should be returned to mail processing promptly upon completion of the maintenance activities regardless of the amount of time left in the maintenance window.

| Equipment | Single time |
|-----------|-------------|
|           | bloc        |

Optical Character Reader Channel Sorter Single time

4 Hours

| Multiline Optical Character<br>Reader Channel Sorter | 4 Hours   |
|--|-----------|
| Bar Code Sorter                                      | 2.5 Hours |
| Flats Sorting Machine-Model 775                      | 2.5 Hours |
| Small Parcel and Bundle Sorter                       | 4 Hours   |
| Multi-Position Letter Sorting Machine                | 3 Hours   |
| Advanced Facer Canceller<br>System                   | 3 Hours   |

**Note:** The above daily preventive maintenance windows are subject to change. Revised preventive maintenance window times will be published periodically in MMOs.

#### B. Weekly Preventive Maintenance

Weekly maintenance is especially critical for automation equipment since it includes important alignments (e.g., 'scanner adjustments). These routines ore generally more time consuming than daily preventive maintenance routines. They should be scheduled when the equipment will not be needed for extended periods of time, such as on weekends.

# C. Monthly and Less Frequent Preventive Maintenance

These routines are usually very long and in most cases include major disassembly of portions of the machine. Routines of this type are essential to the life of the equipment. If they are not performed, overall equipment performance will decline, and the equipment itself will not reach its life expectancy.

# VI. Planning A Maintenance Window

### A. Procedures

Mail processing and maintenance officials should jointly plan, establish, and follow these procedures:

- a. Obtain the operating schedule for each machine.
  - b. Plan maintenance for times when:
- (1) The machine is not scheduled for operation.
- (2) The machine is not needed to meet critical dispatch schedules.
- (3) Alternative processing capacity is available.
- c. Total the maintenance work hours available for each type of equipment for each hour of the day.
- d. Schedule preventive and planned corrective maintenance tasks during the maintenance windows.

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- e. Review scheduling of the maintenance work force to:
- (1) Ensure adequate coverage of approved operation maintenance and
- (2) Match properly trained maintenance staffing to the work to be done, during a period when equipment will be available for maintenance. This may require changing reporting times and days off.
- f. Post the established preventive maintenance window times near each piece of equipment.
- g. Testing for operational and performance measurement purposes as well as OCR readability testing requires time other than the normal maintenance window. The installation head should schedule this testing separate from the maintenance window, and send a copy of the testing period to the General Manager, Maintenance Overhaul and Technical Service Center.

# VII. Performance of Equipment

# A. Review of Daily Performance Reports

Optimum mail processing equipment performance can only be achieved by reviewing the daily performance information, especially accept error, and throughput rates. Deficiencies in these critical performance measurements are normally resolved during the daily preventive maintenance window. If degradation becomes excessive, corrective actions should be taken immediately.

#### **B.** Documentation

Technicians should be given the opportunity to review operation and maintenance documentation, including MMOs, Modification Work Orders, and other technical directives. The senior maintenance official is responsible for ensuring that appropriate personnel have received copies of the documentation.

## C. Operational Maintenance Activities

Operational maintenance is a critical function that must be performed to ensure that equipment is operating in accordance with quality standards. All equipment, especially the OCR and BCS, should be checked during operation for proper performance. The majority of the operational checks do not interfere with mail processing. If cleaning is required, normally this should be clone during shift or sort plan changes to minimize 'the impact on operations. While problem areas are normally identified for further investigation and planned corrective actions during scheduled preventive maintenance windows, some problems may become severe enough to require immediate attention. Examples that may require immediate actions are as follows:

- a. High reject rates.
- b. Poor quality of bar codes.
- c. High frequency of jams.
- d. Not achieving operating performance objectives.