

MAINTENANCE TECHNICAL SUPPORT CENTER  
HEADQUARTERS MAINTENANCE OPERATIONS  
UNITED STATES POSTAL SERVICE



# Maintenance Management Order

**SUBJECT:** Electronic Work Hour Estimator Program

**DATE:** August 12, 2019

**TO:** All Area Maintenance Offices and  
Maintenance Capable Offices

**NO:** MMO-102-18

**FILE CODE:** M

wvol:mm18208ab

This Maintenance Management Order (MMO) **supersedes MMO-059-16** and establishes guidelines for estimating maintenance work hours and determining the number of positions in each functional area. This MMO implements the electronic Work Hour Estimator Package (eWHEP) for calculating the annual maintenance staffing work hour allotment (staffing package) for each site. This MMO applies to all plants (Processing and Distribution Centers, Network Distribution Centers (NDC) and all other maintenance capable facilities) including the subordinate facilities associated with them such as: stations, branches, Air Mail Centers (AMC), annexes, etc.. This bulletin applies to Acronym ADMIN and Class Code EA.

MMO-100-18, Guidelines for Creating Detailed Local Building and Building Equipment Maintenance Preventive Maintenance (PM) Checklists and, MMO-101-18, Guidelines for Creating Detailed Local Building Equipment Emergency System (EMSYS) Preventive Maintenance (PM) Checklists in conjunction with this bulletin provide guidelines for calculating the work hours required for supporting Building Equipment Systems and Emergency Systems. This MMO also provides guidance for calculating the work hours required for supporting Mail Processing Equipment (MPE), Building Equipment Maintenance (BEM), Field Maintenance Operations (FMO), and Maintenance Operations Support (MOS) staffing. This MMO also addresses staffing allowances for special case situations that only exist at Network Distribution Centers (NDC).

Attachment 1 contains staffing information needed for all postal facilities. Attachment 2 contains staffing information needed only for NDC(s).

eWHEP has replaced the BMCGOLD spreadsheet based methodology of calculating NDC staffing packages. eWHEP will continue to be used in all other postal facilities such as Processing and Distribution Centers (PDC), including the subordinate facilities associated with them. eWHEP software calculates staffing hours for maintaining Mail Processing Equipment (MPE) platforms based on published maintenance support documentation. For MPE platforms currently lacking Article 19 approved maintenance support documentation, local management will add those platforms as an exception under a page (form) in the software called Section 2C

The Senior Maintenance Official must be personally aware and involved in applying this MMO. The Senior Maintenance Official is also responsible for maintaining this document so that it reflects all changes in guidelines distributed in subsequent issues of MMOs. A copy of the current completed maintenance-staffing package must be available for review by the Maintenance Technical Support Center, the Area Maintenance Support Office, or the Inspection Service.

Direct any questions or comments concerning this bulletin to the MTSC HelpDesk,



Frederick L. Jackson III

Frederick L. Jackson III  
Manager  
Maintenance Technical Support Center  
HQ Maintenance Operations

- Attachments:
1. Electronic Work Hour Estimator Program Overview
  2. Guidelines Only Applicable to Network Distribution Centers

## ATTACHMENT 1

### **ELECTRONIC WORK HOUR ESTIMATOR PROGRAM OVERVIEW**

#### **1.0. GENERAL**

- a. The electronic Work Hour Estimator Program (eWHEP) calculates staffing packages for all plants (Processing and Distribution Centers (PDC), NDCs, and all other maintenance capable facilities) including the subordinate facilities associated with them such as: stations, branches, Air Mail Centers (AMC)s, annexes, etc.
- b. Local management, with Area Maintenance concurrence, can adjust work hour allowances provided in the eWHEP program in response to local conditions. For mail processing equipment, adjustments can be based on factors such as: number, age, general condition of the machines; the usage by mail processing operations; the maintenance window's length and, the variety of non-standard processing equipment. For buildings and building equipment, local conditions such as geographic area, climate, customer/employee activity, type of construction, building age or unique equipment may be considered.
- c. The eWHEP estimates work hours by employee level, uses the "minimum skill level" provided by existing approved MMOs, and allows users to assign levels when approved MMOs do not exist.

#### **2.0. SCOPE**

The eWHEP:

- Is for use in plants (both PDC and NDC), stations, branches, annexes, airmail facilities, and all other maintenance capable facilities.
- Provides the means to estimate workhours for Mail Processing Equipment (Miscellaneous Postal Equipment and Major Equipment), Field Maintenance Operations (FMO), and Maintenance Operations Support (MOS).
- FMO Staffing Worksheet includes building and building related equipment work hours for supported offices such as Station/Branches and Associate Offices (AO) within the FMO framework.
- Does not estimate workhours for Building Services, but accepts and displays data from other sources to provide a complete work hour summary of a given facility.
- Does not estimate workhours for Building Equipment or structure, but accepts and displays data from other sources to provide a complete work hour summary of a given facility.

### **3.0. SUPPORT**

The Maintenance Technical Support Center (MTSC) provides continuing support for the eWHEP. Problems with the eWHEP should be reported to the MTSC Help Line, 1-800-366-4123.

### **4.0. ALLOWANCES AND ADJUSTMENTS**

The eWHEP calculates and includes various allowances and adjustments. These allowances are for staffing purposes only and do not require nor infer that this work cannot be assigned to lower level personnel, if it is within their position description.

- a. For Mail Processing Equipment (MPE), there is an 8% allowance for modifications, and a 6% allowance for alterations or training.
- b. For automated equipment, 80% of Operational Maintenance is assigned to level 10; 20% is considered level 9. For other equipment where Operational Maintenance (OpM) is authorized, 100% is assigned to level 9.
- c. For automated equipment, Corrective Maintenance (CM) work hours are spread evenly between levels 7, 9, and 10. For other equipment, Corrective Maintenance is spread evenly between levels 7, 9, and 10.
- d. Training hours for automation are allotted 20%, 30%, and 50% to levels 7, 9, and 10 respectively. Other training hours are allotted 20%, 30%, and 50% to levels 7, 9, and 10 respectively.
- e. Modification hours are allotted 20% to level 9 and 80% to level 10.
- f. Time for PM checklist items (other than items identified as accomplished by "All") are totaled by level. Non-productive time is then distributed among the levels in the same proportions. Time for items identified as accomplished by "All" is distributed among the levels in the same manner.
- g. In this section, you may make adjusting or compensating entries for equipment listed in other sections. For example, if Equipment A shows 100 hours of MM-4 and 50 hours of MM-5 for a total of 150 hours, but due to local conditions you need 75 hours MM-4 and 75 hours MM-5, you would create an entry for Equipment A in "Other Requirements" with MM-4 of -25 hours and MM-5 of +25 hours. You could also adjust total hours up or down in a similar manner.

### **5.0. INVENTORIES**

Each maintenance capable office shall complete and verify an accurate inventory of all maintained equipment and systems.

#### **Mail Processing Equipment (MPE)**

- This includes Mail Processing Equipment (MPE) and other miscellaneous equipment. Do not enter items not requiring maintenance or items that are under contracted maintenance support.
- Utilize the eMARS equipment module, previous staffing packages and physical inventories of equipment to assure this requirement is met.

### Field Maintenance Operations (FMO)

Utilize historical FMO work hours to calculate annual FMO staffing. The staffing module calculates and forwards totals to the appropriate summaries.

### Maintenance Support Clerk

The eWHEP calculates the number of recommended Maintenance Support Clerk (MSC) positions based on the latest updated Staffing Criteria for MSC positions listed below (Table 1-1).

**Table 1-1. Staffing Criteria for MSC**

Number of positions	0-19	20-39	40-59	60-79	80-100	101-125	126-150	151-175	176-200	201-225	226-250	251-285
MSC Positions Authorized	0	1	2	3	4	5	6	7	8	9	10	11
Number of positions supported	286-320	321-355	356-390	391-425	426-460	461-495	496-530	531-565	566-600	601-635	636-670	671-705
MSC Positions Authorized	12	13	14	15	16	17	18	19	20	21	22	23

In addition to the number of recommended MSC positions based on the above chart, NDCs are allocated one (1) additional MSC position provided there are at least 20 maintenance positions supported.

Number of positions supported calculation in the eWHEP does not include Station/Branch maintenance personnel.

The local site may request a variance to the Maintenance Support Clerk staffing chart, adding one additional Maintenance Support Clerk position. The Area Office will consider the request and, based on site-specific requirements, may approve one additional Maintenance Support Clerk position.

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**ATTACHMENT 2****GUIDELINES ONLY APPLICABLE TO NETWORK DISTRIBUTION CENTERS****1.0. OPERATIONAL MAINTENANCE ALLOWANCES (ONLY APPLIES TO NDC)**

For mail processing equipment having published Article 19 approved maintenance support documentation such as the PM plan, Operational Maintenance (OpM) plan, or other procedures and plans, the OpM allowance(s) for those specific piece(s) of equipment will be subtracted from the standard Network Distribution Center (NDC) OpM allowance.

Table 2-1 provides the guideline relationship between the size of the Network Distribution Center, the average number of personnel assigned to operational maintenance per tour, and the number of equivalent personnel charged to operational maintenance per tour for staffing study purposes.

**Table 2-1. Operational Maintenance**

Mail Processing Area Square Feet	Number Assigned To Oper. Maint. Per Tour	Equiv. Emp. To PM, CM	Operational Maintenance Allowance
200,000 - < 300,000	3	0.9	2.1
300,000 - < 400,000	4	1.2	2.8
400,000 - < 500,000	5	1.5	3.5
500,000 - < 700,000	6	1.8	4.2
700,000 - < 900,000	7	2.1	4.9
900,000 - < 1,000,000	8	2.4	5.6
1,000,000 - < 1,200,000	9	2.7	6.3
1,200,000 - < 1,400,000	10	3.0	7.0
1,400,000 - < 1,600,000	11	3.3	7.7
1,600,000 - < 1,800,000	12	3.6	8.4
1,800,000 - 2,000,000	13	3.9	9.1

The following example demonstrates how to use Table 2-1 for staffing purposes.

Assume a facility has a mail processing area of 299,000 square feet and operates 21 tours per week. The chart shows that 3 people will be assigned to operational maintenance, while the equivalent of 2.1 persons will be charged to operational maintenance for staffing purposes.

$$2.1 \text{ persons (equiv.)} \times 21 \text{ tours} \times 8 \text{ hours} \times 52 \text{ weeks} = 18,345.6 \text{ hours}$$

(per tour) (per week) (per tour) (per year) allowed for Oper. Maint.

In addition, if maintenance personnel are required to support Parcel Automatic Container Unloader/Sack Automatic Container Unloader (PACU/SACU), 1/2 hour of operational maintenance time will be allowed for each hour that any or all of PACU/SACU or equivalent is running based on historical data. (Only for the original PACU/SACU installations.)

## **2.0. ALTERATIONS AND MODIFICATIONS ALLOWANCES (ONLY APPLIES TO NDC)**

### **a. Definition**

Dynamics and complexity of the NDC System dictate resources be made available to accomplish alterations and modifications.

Alterations and Modifications are schedulable tasks, which are non-repetitive or normally occur less often than once per year. Examples of such activities are equipment modifications and major equipment refurbishment.

Specifically excluded from this definition are project cleaning, minor space adjustments, small renovation projects, unscheduled cleaning of equipment, shop clean-ups, training, and meetings. Allowances for these items have been made in Building Staffing [MS-1] and Custodial staffing [MS-47].

### **b. Alterations and Modifications Plan**

Alterations and Modifications are given an 8 percent allowance of Categories 1, 2, and 3.

## **3.0. HIGH BAY CLEANING (ONLY APPLIES TO NDC)**

The allowances provided herein for high bay cleaning are intended to include structural cleaning and cleaning of high bay.

For mail processing equipment having published Article 19 approved maintenance support documentation such as the PM plan, Operational Maintenance (OpM) plan, or other procedures and plans; the mail search allowance(s) for those specific piece(s) of equipment will be subtracted from the standard NDC mail search allowance.



For staffing calculations, the building shall be divided into the following types of areas:

- a. **Type I, Light** - Areas which have a low density of overhead structures or mechanization. Typically, this type of area will have one "layer" of conveyors or no overhead mechanization. Type 1 work is performed by the custodial labor force (LDC 38) and is work loaded on form 4852 as specified in MS-47 TL5. Cleaning of Mail Processing Equipment (MPE) within Type 1 areas is included in the equipment's PM tasks.

**TYPE I:** 7,000 square feet (floor area) per workday  
(Quarterly) = 0.069 min/SF

- b. **Type II, Medium** – Areas with a medium density overhead. This type of area will have two layers of conveyors or a similar density of other mechanization and/or structural steel.

**TYPE II:** 3,100 square feet per workday  
(BI-monthly) = 0.155 min/SF

- c. **Type III, Heavy** - This type area will have 3 or more layers of conveyors or similar density overhead.

**TYPE III:** 2,550 square feet per workday  
(Monthly) = 0.188 min/SF

#### 4.0. PROCEDURE

- a. Use HighBay worksheet (Figure 2-1) to identify Type II and III areas.
- b. Each block side of eWHEP High Bay matrix represents individual column lines in a facility. Measure the distance between columns in your facility that form a block and enter the square footage in "Sq Ft" space (cell) below the grid.
- c. Enter a "2" in blocks that represent Type II, medium density areas.
- d. Enter a "3" in blocks that represent Type III, heavy density areas.
- e. Based on entries in the facility grid, the total cleaning allowance will be listed in the "Total" space (cell).

High Bay Cleaning Classification                      Enter Space Type as a 2 or 3 in the appropriate squares.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42							
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Enter Square footage of grid =  Sqft.

	<u>SUM</u>	<u>SQFT</u>	<u>MIN</u>	
SUM TYPE II	<u>0</u>	<u>0</u>	<u>0</u>	TOTAL: 0.0
SUM TYPE III	<u>0</u>	<u>0</u>	<u>0</u>	

LDC 36

**Figure 2-1. High Bay Worksheet**

**5.0. MAIL SEARCH ALLOWANCE (ONLY APPLIES TO NDC)**

The following guidelines should be applied for mail search:

Interior and Exterior Mail search time will be calculated based on 15 workhours per 1000 square feet of the Building as defined in the MS-1.