Manual Distribution Operating Guidelines

## Update Notice

Handbook PO-401
Manual Distribution Operating Guidelines

Handbook PO-401, originally published August 1983, has been updated online with Postal Bulletin revisions through June 4, 1987.

Affected sections:

- 673.3 - Calculations

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# U.S. POSTAL SERVICE <br> Washington, DC 20260 

MANUAL DISTRIBUTION OPERATING GUIDELINES
Transmittal Letter 1
Handbook PO-401
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## A. EXPLANATION

This handbook provides guidelines for mail distribution and is applicable (where appropriate) to all mail processing facilities. Despite the great impact that mechanized distribution has made in recent years, manual distribution still accounts for more workhours in mail processing. Consequently, this handbook has been prepared to:
a. Identify the functional areas in which workhour reductions can be made and
b. Describe how the reductions can be made through effective applications of equipment, techniques, layouts, and procedures.

## B. DISTRIBUTION

1. Initial. This handbook is being distributed to Headquarters, Regions, Districts, Management Sectional Centers, Bulk Mail Centers, Field Real Estate and Buildings Offices, and Transportation Management Offices.
2. Additional Copies. Order on Form 7380, Supply Center Requisition, from your area supply center.

## C. COMMENTS AND QUESTIONS

1. Content. Address any comments or questions regarding the content of this directive to:

> In-Plant Operations Division
> USPS Headquarters
> Washington, DC $20260-7115$
2. Clarity. Send any suggestions regarding this directive's organization or language to:

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## D. RECISSIONS

This rescinds Handbook M-75, Manual Letter Mail Distribution.


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Assistant Postmaster General
Mail Processing Department

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## CHAPTER 1 <br> INTRODUCTION

110 GENERAL

The continued increase in the cost of manual labor requires that the U.S. Postal Service (USPS) expand mechanized processing as rapidly as possible and explore all new potential mechanization concepts. This increased emphasis on mechanization has had a considerable effect upon many mail processing operations in the larger post offices.

112 EXTENT OF MANUAL PROCESSING

122 OPERATIONS DESCRIPTION-LETTERS
MOD
Opn. No.

029
030-039
040-042
043
044
045-049
050-054
055-059
134-139
150-159
160-167
168
169

Description
Riffle Mail
Combination Outgoing-Incoming Primary
Outgoing secondary
State Distribution
Sectional Center Distribution (used when Operation 134 is not)
Bulk Business Mail Distribution Air Priority Distribution-Main Facility
Air Priority Distribution-AMF Sectional Center Distribution (optional see 044 and 074)
Incoming Letter Primary
Incoming Letter Secondary Box Section-Main Office Primary Box Section-Main Office Secondary

The manual processing system, however, continues to require approximately one-half of the total mail processing hours used in letter mail distribution. Manual distribution also encompasses many processing hours used in flat distribution and in pouching/sacking operations (excluding BMC processing). The purpose of this handbook is to present equipment, techniques, and procedures that are available to improve and control manual operations.

123 OPERATIONS DESCRIPTION-FLATS
MOD
Opn. No.

029
050-054
055-058
060-069
070-072
073
074
120 MANUAL OPERATIONS DESCRIPTION

## 121 GENERAL

ocessing activities described in this section apply to offices which use the Postal Source Data System (PSDS).

## Description

Riffle Mail
Air Priority Distribution-Main Facility
Air Priority Distribution-AMF
Outgoing Flat Primary
Outgoing Flat Secondary
State Distribution-Flats Sectional Center Distribution (used when Operation 134

## is not)

Outgoing Flat SecondaryBulk Business Mail Section Center Distribution (optional, see 044 and 074) Box Section-Main Office Primary Box Section-Main Office Secondary Incoming Flat Primary Incoming Flat Secondary

## 124 OPERATIONS DESCRIPTIONPOUCHING/SACKING

$M O D$<br>Opn. No. 050-054<br>055-059 Air Priority Distribution-AMF<br>110-129 Outgoing Distribution-Pouch RackLoose Pack-Opening Unit<br>134-139 Section Center Distribution (optional, see 044 and 074)<br>180-189 Incoming Distribution-Opening and Traying

Note: Refer to Handbook M-32, Management Operating Data System for MOD 1 Offices, for detailed Operations descriptions.

## 130 INTERFACE WITH MECHANIZATION

## 131 MAIL FLOW

Manual operations should be located to take advantage of the mail flow within a facility. Therefore, flows from mechanized units (ZERO bin, 400 bin, uncoded, overflow, etc.) must be considered in conjunction with non-machinable mail sources. For example, a mail flow analysis should indicate that the 030 Operation be adjacent to mechanized outgoing primary Operations 081 , 089,091 , etc., as well as 010-028 mail preparation/opening units and within reasonable distance of the originating dock.

Note: Specific Operations are contained in Chapters II and III, and in related mail flow charts.

## 132 NON-MACHINABLE MAIL

By definition, this category of mail cannot be processed on present mechanization due to physical characteristics not compatible with respective machine design capabilities. Four general categories of non-machinable mail are described below:
a. Letters-Non-machinable on LSMs
b. Flats-Non-machinable on FSMs
c. Irregular Parcels-Non-machinable on BMC mechanization
d. Outside Parcels-Cannot be processed in postal sacks

The minimum and maximum machinable size dimensions for each category of mail listed in a, b, c, and d are contained in the Domestic Mail Manual.

## 133 MACHINABLE MAIL

If an office does not have sufficient machine capacity to process mail volume within the time available to meet service standards, the machines must be augmented by manual distribution. Generally, machinable mail processed in a manual operation should maintain its identity and be processed apart from non-machinable. This will enable subsequent operations and/or facilities to make machine distribution.

## 140 EQUIPMENT AND EQUIPMENT LAYOUTS

## 141 BASIC DISTRIBUTION EQUIIPMENT

### 141.1 General

The distribution equipment items referred to in this handbook are standard USPS procurement items listed in Publication 47, Equipment Catalog. Chapters 2,3, and 4 give details relative to selection and use of the equipment within each operation.
141.2 Distribution Equipment-Letters

Item
No. Description

Incoming or Outgoing Letter Case and Table (closed back) 49 separation Incoming or Outgoing Letter Case and Table (open back) 49 separation Incoming or Outgoing Swinging Wing (closed back) 28 separation

| 78 | Incoming or Outgoing swinging wing <br> (open back) 28 separation |
| :--- | :--- |
| 53 | Adjustable Platform Stool |

### 141.3 Distribution Equipment-Flats

| W | Cell |  |  |  | No. of |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (in.) | (in.) | (Approx.) | High | $A$ | B | C | D |
| 10 | $121 / 4$ | 4 1/2-5 1/2 | 7 | 28 | 42 | 56 |  |
| 11 | $141 / 3$ | $71 / 2$ | 6 | 24 | 30 | 36 | 42 |
| 11 | $241 / 2$ | $71 / 2$ | 6 | 24 | 30 | 36 | 42 |
| 11 | $141 / 3$ | $71 / 2$ | 6 | 24 | 30 | 36 | 42 |
| 11 | $241 / 4$ | $71 / 2$ | 6 | 24 | 30 | 36 | 42 |

141.4 Distribution Equipment-Pouching/ Sacking

```
Item
No. Description
61A Loose Pack-Single Rack-2 Separations
61B Loose Pack-Single Rack-4 Separations
30 Pouch Rack-Single Rack-5
    Separations
31A Pouch Rack-Double Rack-10
    Separations (use with 31B when double
    depth is required)
31B Pouch Rack-Double Rack-10
    Separations (use with 31A when double
    depth is required)
```


## 142 BASIC EQUIPMENT LAYOUTS

### 142.1 General

To develop specific case deployments and space requirements, refer to Publication 37, Postal Facilities Planning Data and Equipment Layouts. Some general considerations for manual operation layouts are listed below:
a. Minimize the material handling distances involved in ledge loading and sweeping.
b. Provide adequate aisle space for sweepers to move freely between cases.
c. Provide cross-aisles as required to facilitate access to and exit from laterally located operations.
d. Provide adequate and conveniently located floor space for staging unworked and worked mail and for storage of material-handling equipment (empty trays, tray carts, utility carts, platform trucks, etc.).
$e$. Minimize distances between operating areas and stationary scales used for weighing mail.
f. Orient case rows in a manner which permits supervisory observation of all cases as well as good visibility from lookout galleries.
$g$. Provide suitable environmental conditions, i.e., light and sound levels, temperature, humidity, etc.
h. Provide for safe working conditions and practices.

### 142.2 Equipment Layout-Letters

Recommended layouts for letter mail operations are shown in each respective letter mail chapter of this handbook. The layouts shown are intended to support overall operational efficiency and do not represent the least possible floor space requirements.

### 142.3 Equipment Layout-Flats

The wide variety of flat case designs in use throughout the USPS precludes specific layout recommendations. Therefore equipment layouts for flat operations must be determined at the individual office level in conjunction with required separations and available space. (Refer to Chapter 3.)

### 142.4 Equipment Layout-Pouching/Sacking

In these operations, as in flat operations, layouts must be determined at the individual office level as dictated by the number of required separations and available space. However, since rack designs are generally considered in multiples of five, recommendations may be listed in order of the preference indicated below:
a. Parallel tiered arrangement required one Item 31A (double rack) with 10 separations or two Items 30s (single racks) with 5 separations each.
b. L shaped arrangement requiring the addition of a second parallel unit located at the right perpendicular of the initial unit.
c. U shaped arrangement requiring the addition of a third parallel unit located at the left perpendicular of the initial unit.
d. Additional units of 5 separations should ordinarily be added in the order of preference until a maximum of 45 separations is attained.
$e$. Rack capacity may be expanded beyond the 45 -separation capacity indicated in 142.4 d , as needed until the number of separations required for the corresponding letter/flat case operation is provided. The triple tier rack arrangements should be maintained until separations in excess of 60 are required (refer to 141.4 for double depth racks). At this point the necessity for an additional pouching/sacking work unit should be closely examined.

## 150 BASIC MATERIAL HANDLING EQUIPMENT

## 151 GENERAL

The material handling equipment items listed in this section are (except as noted) standard equipment items listed in Publication 47, Equipment Catalog.

152 MATERIAL HANDLING EQUIPMENT-LETTERS

## Item No.

1033
1046
$0-1046-\mathrm{T}^{1}$

1070

1074

1075
1226 B, C

Description
Gurney (10 cubic feet) Hamper (21 cubic feet) Canvas Insert Tray (use with Item 1046 hamper) Platform Truck (32" x 74") Platform Truck (27" x 58")
Utility Cart (UCart) Letter Tray Cart ("A" Frame Design-16 tray capacity)

1226 D

1262
-3-Sided, plastic letter trays
Managed Mail Cardboard Trays and Boxes
Portable, collapsible transport distribution container Portable, collapsible transport and distribution container
Powered Conveyors
Letter Tray Cart ("A"
Frame Design- 16 tray capacity)
4-Sided, plastic letter tray

General Purpose Mail
Container (GPMC) ${ }^{2}$
POST-CON
Container ${ }^{2}$

Letter Tray Transport System ${ }^{3}$
${ }^{1}$ Refer to Publication 24, Supply Catalog
${ }^{2}$ Local funding, Headquarters procurement only
${ }^{3}$ Refer to Mechanization Standards, MW-14-3, Tray Conveyor System

Note: Except for Items 1226B, C and D, Item 1262, the Managed Mail Trays, and the Letter Tray Transport System, the equipment described can be used for all types of mail.

## 153 MATERIAL HANDLING EQUIPMENTFLATS

## Item No.

Description

```
138
```

1255
DWG No. ORE $2958^{1}$
DWG No. ORE $2845^{1}$
DWG No. 3620-8062
IOE-I ${ }^{1}$
Fiberboard Flats
Sorting Trays ${ }^{2}$

Portable Paper Table (4'6" x 1'8"W x 2'3") 4-Sided, Plastic Flat Tray 4-Sided, Cardboard Flat Tray 4-Sided, Fiberboard Flat Tray 3-Sided Tray Insert (Flat Case)
3-Sided Distribution Tray used in conjunction with the GPMC and POST CON

[^0]Note: All items described in 152 are applicable to flat handling except for Items 1226 B, C, and D, Item 1262, the Managed Mail Trays, and the Letter Tray Transport System.

## 154 MATERIAL HANDLING EQUIPMENTPOUCHING/SACKING

## Item No.

Description
1922A
1922B
Portable Sorting Conveyor (Length 17' Model 89-A Portable Sorting Conveyor (Length 25') Model 89-B

Note: All items described in 152 are applicable to pouching/sacking operations except for Items 1226 B, C, and D, Item 1262, the Managed Mail Trays, and the Letter Tray Transport System.

## 160 MANUAL OPERATIONS DIAGRAM TECHNIQUES

## 161 LETTER CASE DIAGRAMS

A case diagram is a graphic representation of a case that indicates the physical arrangement of the separations. Each separation is normally identified by the name and/or ZIP Code or route number of the destination. Form 1620, Arrangement of Separations on Distribution Gases, Exhibit 652.2 a is designed for this purpose. Sample diagrams are shown in Chapter 2.

## 162 FLAT CASE DIAGRAMS

Diagram techniques described in 161 are applicable to flat cases. Sample diagrams are shown in Chapter 3.

## 163 POUCH/SACK RACK DIAGRAMS

Diagram techniques described in 161 are also applicable to pouch/sack racks. However, since pouch/sack operations require much more space, density analysis and central core applications are offset, to some degree, by the
need to arrange racks in units of five. Nevertheless, grouping by density may be done to a lesser degree within ZIP Code sequence both to the inside or outside perimeter where multiple separations of 15 or more are required.

## 164 AUTHORITY TO CHANGE SYSTEMS

164.1 The approval of distribution changes to be performed at the local office is as follows: Changes to intraSC/AO distribution may be approved by the MSC. InterSC changes must be approved by the district. Intraregional changes are approved by the Regional Distribution Systems Branch. Dispatch makeup must conform to national labeling instructions, and any inter-regional changes must be approved by Headquarters Mail Processing.
164.2 Postmasters are authorized to relocate or exchange separations, but not to add or delete separations (except local zones or firm directs). On incoming diagrams, postmasters may add, delete, or combine local zones and firm directs as needed. Conversion from Primary (only) to Primary-Secondary Incoming Distribution must be reviewed by the district and approved by the region.
164.3 At the option of the Regional Director, Mail Processing, all diagram changes are to be forwarded to the Regional Mail Processing Department to update the diagrams file.

## 170 DISTRIBUTION PROCEDURES

## 171 GENERAL

Mail processing activities at SC, MPCs, ADCs, AMFs, and other designated large offices must be incorporated into a detailed operating plan. These plans must reflect current operating procedures as outlined in management instructions and as approved by the responsible installation head and submitted to respective Regional Directors for Mail Processing. The operating guidelines set forth in this subchapter are designed to ensure that basic operating procedures are understood and implemented.

## 172 LETTER DISTRIBUTION

### 172.1 Ledge-Loading

. 11 This task refers to the procedure of handling mail from a staging area to case ledges. Ledge-loading can be performed by three basic methods:
a. Distributors obtain their own mail as required from a supply of unworked mail staged nearby.
b. A distributor is assigned the additional responsibility of loading ledges for a group of cases-normally those in the aisle in which he works.
c. Ledge-loading is performed by allied labor.
. 12 The choice of which ledge-loading method to use is generally dependent upon mail volume, number of cases used, and distribution time available. Regardless of the method employed to deliver mail to the ledges, the letters should always be positioned on the ledges with the stamps down and facing to the right. This facilitates the pickup and orienting of each stack of letters prior to distribution. The distributor should always work mail from the extreme left side of the ledge. By this method, the mail will be processed in the desired "first in" - "first out" sequence. All trayed mail should always be placed to the right of any mail remaining on the ledge. When letter mail is received at an office in loose pack and sacks and the contents are destined for manual case distribution, the sacks may bypass the opening units and be delivered to the case operation. These sacks should be staged on trucks located centrally in the distribution aisle(s)-as with tray carts of unworked mail. Sacks are obtained as required and delivered to cases, where mail is loaded to the ledges for distribution.

### 172.2 Address Reading

. 21 Address reading varies according to the type of distribution being performed:
a. Outgoing Mail. The basic method for reading outgoing mail is to read the ZIP Code (three digits in some instances, five digits in others). Unzipped outgoing mail requires reading the state and/or city, depending upon the particular type of distribution being made.
b. Incoming Primary. This distribution basically
involves reading five-digit ZIP Codes, but additional reading is required for zones that have holdouts (firm, building, address) on the case. Additional reading and scheme knowledge is requried to sort uncoded mail.
c. Incoming Secondary. Scheme knowledge is required. Varying portions of the next-to-last line of the addressee (first line) is read when there is a possibility of a Firm holdout.
. 22 Distribute mail addressed with ZIP + 4 using basic methods outlined in 172.21a, b, and c.

### 172.3 Distribution

. 31 An adjustable platform stool. Item 53 (rest bar), is used to reduce fatigue by permitting leaning instead of standing. By leaning, the trunk of the body can be maintained in an erect posture, close into the case, facilitating access to all of the case separations without requiring a dismount from the stool.
.32 A stack of letters (from 2 inches to 4 inches) is held in the left hand centered with the case. To facilitate distribution of letter mail both the hands and eyes should move in the direction of the desired separation. This arrangement also affords access to the wing case separation, if a wing case is used. The stack is held at a readable distance from the eyes, with the addresses positioned approximately 12 inches from the front surface of the case. Most case separations can be reached by employing only wrist and arm motions. Separations on the left edge of the main case, and those on the right side of the wing case, require body assists (shoulder turns) in conjunction with arm and wrist motions, while separations in the uppermost rows require slight forward leans by the trunk of the body.
. 33 The proper sequential distribution steps are as follows:
a. Using the thumb of the left hand, move (slide) the top letter to offset it from the stack held in hand.
b. Grasp the upper right comer of the letter with the right hand and move it to a position in front of the proper separation. (The eyes and left hand should also move simultaneously in the direction of the intended separation.)
c. Insert the letter into the separation to a depth of 1 to 2 inches and release it with a flicking motion of the fingers. (To effect optimum distribution, separations should be swept when filled to approximately 1 inch from the top so as not to impede insertion.)
d. Return the eyes to and read the address on the next letter in advance of the return of the right hand and grasp of the next letter. The motion of the eyes to the next letter should start immediately after the leading edge of the letter being cased enters the separation and before the letter is released.

### 172.4 Familiarization

Distributors should familiarize themselves with the location of the case separations in the central core. Colored tape that contrasts with the case background should be put around the perimeter of the core to help identify it. This distinctive outline is picked up by peripheral vision when the distributor's eyes move as described in 172.3.

### 172.5 Verification of Distribution

. 51 Distribution accuracy is an essential element in service expectations. Missorted mail causes delays and increases mail processing costs.
. 52 Procedures for verifying the proficiency of distributors are in Handbook M-5, Schemes: Construction, Assignment, Training, and Proficiency, and Interim Publication 118, Fair Labor Standards Policy and Instructions. Form 3974, Verification of Distribution Performed; Form 1639, Carrier's Report of Recurring Missorted Mail; and Form 1617, Missent Mail Notice, provide feedback on distribution accuracy. Proper use involves complete and accurate reporting, careful examination of the reports by responsible supervisors, and corrective follow-up action.

### 172.6 Sweeping

. 61 Manual distribution operations depend on effective sweeping. Efficient sweeping ensures meeting dispatch schedules, improves the flow of mail to subsequent operations, and facilitates distribution (by preventing separations from becoming too full). Open-back sweeping is generally preferred to closed-back sweeping since it is less time consuming and causes minimal interference with distribution personnel. Refer to

Chapter 2 for closed-back and open-back arrangements. A utility cart can be very useful when more than one full tray of mail is swept in an average sweep cycle. Most sweeping is done using one or a combination of the following methods:
a. Allied labor sweeps and disposes of the mail (by bundling, traying, or loose packing). This method is most appropriate in high volume operations where the workload permits full use of allied labor.
b. Distributors sweep some or all of the cases at various time. This method is appropriate in low volume operations where the workload does not warrant allied labor assignments, and in conjunction with the method in 172.61a when the workloadshows a need for a fractional sweeper; i.e., too much sweeping for one employee but not enough for two, or too much for-two employees but not enough for three, and so on.
c. A distributor sweeps mail from a particular separation in his own case only, and disposes of it. This method is recommended only when distributors can dispose of the swept mail without leaving their work stations; i.e., when sweeping to mail flow take-away belts, or when sweeping, bundling, and tossing bundles into utility carts or pouches.
d. Personnel from secondary units sweep their own unit's mail from a primary. For the method to be efficient, the same separation(s) should be swept from all of the primary cases during each sweep cycle. If done this way, this method is as efficient as method in 172.61a.
. 62 Sweeping Variables. The choice of n\&hod(s) depends on the individual operation and the volume of mail to be worked. Other important variables which influence sweeping requirements are:
a. Dispatch Schedules. Dispatch schedules are fixed requirements for sweeping. Sweeps must he made according to schedule-regardless of volume-to dispatches of value required to meet service standards.
b. Secondary Operation Needs. Secondary operation needs may also affect sweeping frequency. In some cases, however, inadequate flow to a secondary indicates improper staffing, either in the primary or in the secondary or in both. Primary and secondary staffing should
be balanced with dispatch schedules so as not to place unrealistic demands on the rate of mail flow from the primary to the secondary.
c. Travel Distances Involved in Disposition of Mail. Travel distances are dependent on the layout of a particular operation and the proximity of subsequent operations. Where the primary means of mail transport is walking, travel distance is a very important factor. Walking is costly and must be minimized to achieve reasonable cost performance. This can be done by effective use of material-handling equipment and by maximizing the amount of mail which can be safely moved at one time. Carrying a single tray to a secondary operation, for instance, is costly and should be avoided. Where operating conditions dictate that frequent deliveries be made to a secondary, the use of conveyors should be considered. If subsequent operations do not have critical dispatch requirements, mail should be moved on full tray carts.
d. Method of Disposal (Traying, Bundling, Loose Packing). The method used for disposing of mail can have a significant impact on sweeping requirements. If mail is swept and either bundled or loose-packed in conjunction with the distribution operation, more allied labor is required than if the mail is merely trayed for subsequent processing. This means that more sweepers are required (for method 172.61a), or that more of a distributor's time is required for sweeping (for method 172.61b).
e. Average Number of Letters Swept per Case. Each case separation receives mail at a certain unique rate (pieces per hour). In addition, the average number of letters swept per case depends on the sweeping frequency. Sweeping frequency, in turn, may depend on other variables, such as dispatch schedules. However, if none of these other variables is a controlling factor, sweeping should be only frequent enough to prevent distribution from being hindered by sorting to full, or almost full, holes.

## 173 FLAT DISTRIBUTION

### 173.1 Ledge-loading

The three basic methods described in 172.1 also apply to flat distribution. Item 138, Portable Paper Table, or Item 1075, Utility Cart, used with cases which do not have ledges or as a complement to General Purpose Mail Containers, POST CON Containers, and Items 1226 B and C, Tray Carts (when used for flats distribution) may be used instead of cases with fixed ledges. This procedure saves workhours by eliminating the transfer of mail from storage equipment to case ledges. (Also, this procedure eliminates the need for the additional storage equipment as well.)

### 173.2 Address Reading

The address reading requirements in 172.2 are valid for flat distribution.

### 173.3 Distribution

Pursuant to the provisions of Article 37, Section 5A, National Agreement, the employer will continue to furnish adjustable platform stools for periods of sustained distribution. The recommended position for personnel distributing flats is standing in a central position in front of the case, so that all separations are accessible with minimal foot movement. The only exception is that, when a wide main case is used with a right wing case, the distributor should stand to the right center. The distributor holds a stack of flats (approximately 4 inches) in the left arm in a readable position while distributing with the right hand. Personnel should not be allowed to distribute individual pieces directly from ledges. The need for distributors to be familiar with the physical location of case separations within the central core is reemphasized for flat processing. The sequential steps which describe the distribution method for flats are basically the same as those described for letters in 172.3.

### 173.4 Verification of Distribution

Supervisors should verify the distribution of flats to ensure distribution accuracy. Methods described in 172.5 also apply to flats distribution.

### 173.5 Sweeping

The methods described in 172.6 also apply to flat operations.

## 174 POUCHING/SACKING DISTRIBUTION

### 174.1 Address Reading

Address reading requirements are basically the same as those described in letter and flat operations with the added requirements concerning non-standard package labels and pressure-sensitive labels (for use on bundled mail) described below:
a. Red Label $D$-all mail is for the same five digit ZIP Code area.
b. Yellow Label C-bundle contains more than one ZIP Code but is directed to a multi-coded city.
c. Green Label 3-all for same first 3 digits of ZIP Code or SCF area on face.
d. Orange Label $S$-all for State on face Bulk Business Mail (BBM) only.
e. Pink Label A-all for ADC ZIP Code area.
f. Blue Label $F$-all mail in a bundle is for an individual firm.
g. White Non-Standard Facing Slip-NonStandard package label-mixed states, foreign.

### 174.2 Distribution

Pouch/sack rack distributors should stand in a central position so that immediate access to high-density separations and reasonable access to all separations is achieved with minimal foot movement. In addition, processing movements should be made with either hand to nearby separations. Distribution to the remaining pouch/sack separations should be accomplished by using one hand to pick up the mail and the hand to complete the distribution cycle.

### 174.3 Verification of Distribution

The procedures in 172.5 apply to this operation.

## CHAPTER 2

 LETTER MAIL OPERATIONS
## 210 COMBINATION OUTGOING/ INCOMING PRIMARY

## 211 TYPICAL MAIL FLOW

Exhibit 211 shows the flow of mail through a combined outgoing-incoming primary operation. The source operations are on the left, and the subsequent operations on the right. The cases receive both outgoing and localdestinating mail. Directs (mail requiring no further sortation prior to dispatch) are pouched immediately after sweeping. The balance of the mail receives further distribution as described in 218 .

## 212 TYPE OF MAIL DISTRIBUTED

Most mail distributed in a combination outgoingincoming primary (Operation 030) is either collection (originating) mail or outgoing transit mail. (Note: MMP Mail can be considered transit but should be worked in Operation 043.) In non-mechanized offices, all collection and transit mail is worked in the combination outgoing-incoming primary. In offices with letter sorting machines, the mail fills into the following categories:
a. Non-Machinable Mail. Mail that cannot be run on letter sorting machines because of incompatible size, shape, or distortion (bent, wrinkled, etc.).
b. Letter Sorting Machine Overflow. Mail that is mechanically acceptable for LSMs but, because of limited machine capacity, cannot be machine-processed in time for scheduled dispatches. When machinable mail is processed manually, every effort is to be made to maintain its identity as machinable mail so that subsequent operations or facilities can easily identify and machine it.
c. Uncoded Mail from LSMs. When LSM console operators are not schemequalified.)
d. LSM Unassigned Mail. This is machinable mail that has an unassigned ZIP Code. Offices may wish to establish a bin for unassigned ZIP Codes or program them to the 400 Bin . This allows periodic analysis and recycling which are useful since a large portion of the mail may be from bad key hits.
e. Zero and 400 Bin Mail. Mail in these bins should be accumulated for a specific period of time, say, one hour and then be added on one or two consoles for recycling. While this recycled mail is being keyed, all mail sent to the Zero and 400 Bins should be accumulated and sent to manual distribution cases. This procedure will prevent the possibility of any mail being continuously recycled through the machine.

## 213 STAGING UNWORKED MAIL

213.1 For a combination outgoing-incoming primary operation, unworked mail should be staged centrally in the distribution aisles. (Staging equipment may also be used to hold emptied trays, sacks, etc.) This minimizes the distance that the mail is carried to the cases.
213.2 Mail should be staged in equipment which minimizes costly rehandling-where possible, in the same equipment in which it was received; e.g., tray carts, hampers, platform trucks, utility carts, GPMCs, etc.
213.3 The mail for Operation 030 must be staged in a manner that insures that it is worked on a first-in firstout basis. Assure that all "p.m." collection mail receives processing priority over minus "p.m." collection mail. Color-coded trays or colored cards/paper strips (supply items No. 0-12451 0-1246), prominently displayed in trays, are useful for identifying priorities.

## Letter Mail Flow Chart (Typical) Combined Outgoing-Incoming Primary

[^1]
## 214 STARTUP OF THE OPERATION

214.1 The 030 Operation should be started after (a) there is at least one ledge-full of mail for each distributor, and (b) it has been determined that the flow of working mail into the unit will be maintained at, or above, the level required to sustain the assigned crew. Good judgment, based upon knowledge of mail volume arrival, numbers of personnel, equipment availability, and service/dispatch commitments, must be used in determining the optimum starting time.
214.2 As the first step in the manual distribution of outgoing mail, the 030 Operation is critical in meeting service standards. At the beginning of the high volume period (Tour III) personnel should start at times that assure timely mail flow to subsequent manual operations and assure that mail will be dispatched as scheduled. Increases and decreases in crew size should be made in a manner that maintains no more than a small amount (approximately thirty minutes) of unworked mail.
214.3 Start the operation by staffing the cases closest to the loose pack/dispatch area; this minimizes the distances involved in the disposition of swept mail. As additional distributors are needed, assign them to the cases nearest to the cases already staffed-expanding the operation outward, aisle by aisle. Close out in a step-by-step reversal of this procedure.

## 215 CASE AND CASE DIAGRAMS

215.1 For a combination outgoing/incoming primary operation, use a 49 -hole case, either Item 79 or 80 , with a corresponding 28 -hole wing, Item 77 or 78 , respectively. Using cases with fewer separation reduces the depth of sort, causing an increase in the number of subsequent total piece handlings.
215.2 The case diagram should ordinarily be based on numerical ZIP Code sequence, except for a core of high density separations. Determine the specific core size by using the procedures in Chapter 7. Exhibit 215.2 shows a case diagram based on ZIP Code sequence both in the perimeter and the core of the case.

## 216 SWEEPING CASES

### 216.1 Efficient Sweeping

Sweeping is most efficient when an assigned sweeper sweeps the same separation at the same times from a row or rows, of cases. In contrast, the method of distributors sweeping only their own cases and then transporting the mail to a staging area, one separation at a time, is inefficient.

### 216.2 Open-back Sweeping

The open-back case (supply Items 78 and 80 ) is preferred if there is sufficient floor space. The proper sweeping technique is to walk behind the cases sweeping the mail with one hand into a collection tray held in the other (cradled in forearm). As an alternative to this sweeping method, Item 1075, Utility Cart, or other locally approved conveyance may be pushed with cardboard trays through the aisleway to allow sweeping of two or more separations at the same sweeping pass. The most efficient direction of travel for the sweeper is from right to left when sweeping the Item 80 case, and left to right when sweeping the Item 78 case; this minimizes the amount of turning. However, when two or more sweepers are used, it may be more efficient to have only right to left travel, for a better flow and minimal congestion.

### 216.3 Closed-back Sweeping

For closed-back sweeping (in cases where space limitations prevent open-back sweeping) the recommended technique is:
a. To sweep one of the separations in the left four columns of the main case, the sweeper stands on the distributor's left and sweeps with his right hand. The sweeper moves from one case to the next by traveling from right to left.
b. To sweep one of the separations in the right three columns of the main case, or in the wing case (to the right of the main case), the sweeper stands on the distributor's right and sweeps with his left hand. The sweeper moves from one case to the next by traveling from left to right.

However, when there are two or more sweepers, it may be more efficient to have only left to right travel, to make a better flow and to minimize congestion. These techniques minimize bodily contact and reduce interference with distributors.

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Exhiblt 215.2-Core; ZIP Code Sequence

### 216.4 Traying

If the mail is dispatched in trays, put it into the dispatching trays as it is swept.

## 217 CLOSEOUT

217.1 After distribution has been completed, sweep the cases quickly and move the mail and personnel to subsequent operations. Close out the cases as described in 214.3. The preferred method is increasing the number of sweepers by assigning distributors to sweeping and directing this crew in a continuous circling sweeping line-with a supervisor assigning a specific separation to each sweeper as each sweep cycle begins.
217.2 Because of the blocking cord at the backs of the operation\& it is slightly more difficult to sweep from the back side even during closeout when there is no distributor interference. Therefore, unless the number of sweepers assigned is large enough to cause queuing, the sweepers should work only from the front side of the cases during closeout.
217.3 After closeout sweeping has been completed, a supervisor should visually check the cases to assure that no mail has been overlooked.

## 218 DISPOSITION OF SWEPT MAIL

218.1 Swept mail which requires no additional distribution (directs) must be placed into containers for dispatch. The mail is prepared for dispatch by:
a. Loading trays full of mail into GPMCs, tray carts, or hampers. This method is usually used between a main office and its stations/branches, between a main office and associated SC/MPC offices, and between large offices that are relatively close to each other.
b. Loading machinable mail into labeled MM Trays. MM trays readily identify mail as machinable and keep the letters in a condition suitable for machine processing. Note: If this method is used, dedicate certain cases to be used only for machinable mail.
c. Loading non-machinable mail from high density separations into loose-pack sacks. (Consideration should
be given to the use of auxiliary pouch racks for high density separations, where warranted.)
d. Preparing bundles of mail (normally from the less dense separations) and loading the bundles into pouches.
218.2 In smaller offices, sweepers generally bundle and pouch or loose-pack the mail at the end of each sweep cycle. In larger offices, these operations may be performed by designated personnel in centralized pouching and loose-pack areas to which the swept mail is delivered by the sweeper.
218.3 To minimize walking and trucking distances, the pouching and loose-pack operations should be located as close as possible to the case area.
218.4 Mail swept from the 030 Operation which requires further distribution may be divided into two portions:
a. mail which must be processed quickly to meet impending dispatches, i.e., outgoing mail, which must be moved into Operation 040 (outgoing secondary) after each sweep cycle; and
b. mail which may be accumulated for later processing (incoming primary, incoming secondary, and box section), i.e., localdestinating mail for next day delivery. Accumulate the mail in trays on tray carts and transport to subsequent distribution areas when the carts are full or after the closeout sweep of the 030 cases.
218.5 Normally, Operation 044/134 (SC distribution) mail has the same processing priority as city mail. However, if early dispatches to associate offices are necessary in order to meet service standards, it must be processed before city mail.

## 219 EQUIPMENT LAYOUTS

219.1 There are two basic layouts for a combination outgoing-incoming primary operation: the first (diagrammed in Exhibit 219.1a) is preferred because it facilitates open-back sweeping; the second (diagrammed in Exhibit 219.1b requires less space but prevents openback sweeping, and therefore should be used only where there is insufficient space for the first layout.
219.2 The support area(s) for disposal of mail as described in 218 should be as close as possible to the


Exhibit 219.1a
distribution area, preferably at either end of the cross aisle. To prevent crowding in the aisles, the supervisor's standup desk should be kept just outside the distribution area. The support area should contain any loosepacking and bundling equipment required, plus equipment for staging worked mail. Any additional material handling equipment required, such as platform trucks, should also be kept in this area. As with unworked mail staging areas, support areas should be clearly identified by marking boundaries on the floor with either aisle market tape or paint.
219.3 There is no one number of distribution cases per row that can be said to be the most efficient in all instances. The most efficient number depends on the location of support columns, traffic with adjacent operations, volumes processed, and travel distances involved. Exhibits 219.1a and 219.1 b show a 48 case layout. Each section has two rows of six cases.

## 220 OUTGOING SECONDARY

## 221 TYPICAL MAIL FLOW

Exhibit 221 illustrates the flow of letter mail through an outgoing secondary operation. The source operations are on the left and the subsequent operations are on the right. Some mail (presort) bypasses primary operations and receives first-piece handling in the secondary. Mail arriving from Operation 030 or from letter sorting machines receives a second sortation in the secondary. At Area Distribution Centers (ADCs), there is an 043 Operation for manually processed managed mail. The ADC distribution operation can direct mail into Operations 150,160 , and 168 (city mail) and Operations $044 / 134$, as well as other designated state destinations.

## 222 TYPE OF MAIL DISTRIBUTED

222.1 The case diagrams in an outgoing secondary (Operation 040) are based on various categories of distribution, distinguished by the destination of the mail. Individual offices may have some or all of these categories. Cases with the same case diagram should be grouped together to form individual secondary units. The categories of distribution are:
a. Mixed States. Separations for states that do not receive enough mail to have unique separations in the outgoing primary.
b. Individual State Distribution. Separations that are all in one state: either the sorting office's state or another state (contiguous or noncontiguous) that receives enough mail or has service commitments that warrant a secondary distribution.
c. Managed Mail Distribution. (Used at Area Distribution Centers.) Separations within the ADC area.
d. Sectional Center Distribution. Separations within the sectional center, ordinarily to a five-digit level, and including firm holdouts when warranted. Typically, a distributions unit is established for each three-digit grouping of associate offices.

Note: The operation number for sectional center distribution of all types is 134 . However, this number is optional, and, for letter mail, an office may choose to use Operation 044.
e. Combination States. Separations in two or more states. Normally, states that are grouped together on a case diagram are geographically near each other and/or are pouched at the same pouch rack.
f. Foreign Mail. (Generally used only at designated regional concentration centers) separations for foreign countries.
222.2 Offices that perform outgoing secondary distribution (e.g., managed mail, states, MSC) on LSMs should process only non-machinable and uncoded mail on the 040/043 cases, except when case distribution is required to supplement LSMs in order to meet service requirements.

## 223 STAGING UNWORKED MAIL

The outgoing secondary operation runs concurrently with the operations which supply most of its mail. Consequently, a minimal amount of staging capacity is required. Mail should be staged separately for each secondary unit. The type of staging device used depends on the size of the unit: small units may use utility carts or hampers; larger units may do better with tray carts or GPMCs. The staging device(s) should be kept close to the cases to minimize the time spent carrying unworked mail to each case. Ready access from the main aisles to each staging device is required in order to facilitate the transport of mail to and from each secondary unit.


In staging unworked mail, care must be taken to observe processing priorities. Mail must be processed in proper sequence to meet service commitments. The staging should be consistent with that shown in equipment layout diagrams.

## 224 STARTUP OF THE OPERATION

224.1 The criteria for starting up the outgoing secondary operation are basically the same as those for the outgoing primary operation (see 214).
224.2 In secondary units where most of the 040 mail comes from the 030 or mechanized primary units, the 040 operation startup normally follows the startup of primary operations by about a half-hour to an hour. This is usually enough lag time for the primary operations to produce enough mail to sustain the secondary operation.
224.3 Secondary units receiving transit or bypass outgoing mail can start up whenever sufficient mail has arrived to sustain operations.

## 225 CASE AND CASE DIAGRAMS

225.1 To determine the case size ( 49 or 77 holes) needed, conduct a test as outlined in Chapter 6. Either closed-back or open-back cases may be used.
225.2 Case diagrams for the 043 state distribution units should be arranged in ZIP Code sequence, with a central core if warranted (refer to Exhibit 225.2). Use the procedure in Chapter 7 to determine if a central core is warranted.

## 226 SWEEPING CASES

### 226.1 General

.11 The outgoing secondary operation (040) is divided into units of one or more cases each. Each unit distributes mail for a specific geographic area; e.g., a state or combination of states.
. 12 To a considerable extent, dispatch schedules govern sweeping requirements. Depending upon the type of distribution and the routing involved, some dispatches
require concurrent sweeping in several secondary units. Typically, a number of separations must be swept for a dispatch. The resultant sweeping workload tends to be irregular.
. 13 Normally, a considerable portion of the mail swept from secondary units requires bundling. This is most efficiently performed by the distributors, who sweep each separation as it becomes full (maximizing the number of letters per sweep), and then bundle and dispose of the mail without leaving their work stations (see 226.2a. This procedure can reduce or even eliminate any need for sequential sweeping. Sequential sweeping is the sweeping of a particular separation from all the cases in a unit by one person at the same time. In general, the great variations in sweeping requirements make it inefficient to use allied labor in outgoing secondary operations; it is generally more efficient for distributors to sweep the cases in their own units as required.

### 226.2 Full Case Separations

When a case separation becomes full, the mail should be swept as follows:
a. If the mail is to be bundled, the distributor sweeps, bundles, labels, and tosses the bundle into a utility cart, for subsequent sorting to pouches. Under certain conditions it is advantageous to pouch directly, by locating pouch racks in the distribution aisles, since such a method eliminates the subsequent bundle sorting step. In general, such a pouching arrangement may be warranted when:
(1) The volumes generated justify pouching as opposed to traying or loose-packing;
(2) Adequate floor space is available for pouch racks without causing operational congestion;
(3) It is possible to arrange the equipment in a manner such that distributors can dispose of bundles without leaving their work stations; and
(4) The cost of pouching other mail going to the same destinations (e.g., flats, transit bundles) is not increased so as to offset the savings gained in the 040 operation. The economic and service considerations of such a method must be evaluated locally. Distribu-


tion units which sort mail for nearby SCs are good candidates for such a method, since mail is normally bundled to a five-digit level, and bundles are pouched together in an SCF pouch.
b. If the mail is to be loose-packed or trayed, the distributor sweeps his case plus the other cases in the unit. If the unit is small, he may sweep the mail and accumulate it on his forearm. If the unit is larger, a letter tray may be required. Upon completion of the sweep, the mail is disposed of as required.

### 226.3 Sweeping for Dispatches

. 31 Mail for dispatch which requires bundling should be swept by each distributor from his case and deposited directly into the appropriate container (utility cart, pouch).
. 32 Mail for dispatch which is trayed or loosepacked, should be swept by distributors, each of whom sequentially sweeps one or more separations from all the cases in the unit, and disposes of the mail.

## 227 CLOSEOUT

At the closeout of an outgoing secondary unit, cases should be swept in the manner described in 217 .

## 228 DISPOSITION OF SWEPT MAIL

228.1 Except for home state mail (such as managed mail), nixies, and missent or missorted mail, no further piece distribution is normally required beyond the secondary operation. Nixies and missent and missorted mail must be reprocessed on a current basis. Sufficient case separations must be used in order to ensure proper distribution and dispatch of this type mail.
228.2 Mail available for dispatch is swept, and that portion going to destinations which receive relatively low volumes is bundled. Bundles are disposed of as described in 226.2. The mail from high volume separations is loose-packed or trayed immediately after sweeping. Support equipment should be positioned in the distribution aisles of each unit (see 229).
228.3 Mail requiring further processing should be transported to subsequent operations in letter trays positioned in utility carts, or on tray carts, or in GPMCs.

## 229 EQUIPMENT LAYOUTS

229.1 Exhibits 229.1a and 229.1b show typical layouts for outgoing secondary operations. The layouts are modular so that any number of back-to-back or end-to-end modules can be used to meet individual office needs. Exhibit 229. lb shows a typical arrangement. Individual office needs determine the actual equipment required. The three different secondary units contained in the module are also representative. The actual size of each unit depends upon the volume of mail generated for it, and upon the time available for processing.
229.2 Mail is delivered frequently into the operation, so that ready access and egress as outlined in 219.4 are important factors.

## 230 INCOMING PRIMARY

## 231 Typical Mail Flow

231.1 The purpose of the incoming primary operation is to make as complete a distribution of city mail as is practicable in one pass. Smaller offices can normally sort to delivery routes in this operation; larger offices normally sort to stations and branches, with sortation to delivery routes being performed in the incoming secondary operation.
231.2 Exhibit 231.2 illustrates the flow of mail through an incoming primary operation. Source operations are shown on the left and subsequent operations are on the right.
231.3 Riffled or presorted originating mail destined for city delivery bypasses the outgoing operations and enters the incoming primary directly from the acceptance unit, mail preparation operations 010,020 , and 020 bypass. Other mail can arrive from the operations as shown on Exhibit 231.2

## 232 TYPE OF MAIL DISTRIBUTED

232.1 At offices where incoming primary mail is processed on LSMs, operation 150 processes only that incoming mail which cannot or should not be run on machines, e.g., LSM overflow (mail which cannot be machine-processed in time to meet service standards),

## Typical Outgoing Secondary Case Layout Open-Back 77 Hole Cases



Note: 1. Distribution Equipment $=$ Open Back Letter Case. Item 80
Open Back Wing Case. Item 78 Rest Bar. Item 53
2. Dimension "A" $=0$ " 0 " at a dedicated aisle.
" $A$ " $=3$ ' 6 " when not dedicated and used only for personnel and small equipment.
" $A$ " $=5$ " 0 " when not dedicated and used for personnel and equipment such as Items 1046 , 1056. 1070, 1226-B. -C, or -D, or GPMC's.

## Typical Outgoing Secondary Case Layout - Closed Back 12 77-Hole Cases with Allied Equipment



> A - 2 Case Secondary Unit
> B -4 Case Secondary Unit
> C -6 Case Secondary Unit

1 - Unworked Mail in Utility Cart for Unit A
2 - Bundles in Utility Cart from Unit A
3 - Bundles in Utility Cart from Unit C
4- Item \#61 Loose Pack Rack for Unit C
5 - Bundles in Utility Cart from Unit C
6 - Bundles in Utility Cart from Unit B
7 - Unworked Mail on \# 1226A Tray Cart for Unit C
8 - Bundles in Utility Cart from Unit C
9- Unworked Mail on \# 1226A Tray Cart for Unit B
10 - Bundles in Utility Cart from Unit B

Note: 1. Number of cases is variable and may be more or less than illustrated
2. Dimension same as Exhibit 229.1a.
non-machinable mail; and uncoded city mail from Operation 030 and LSMs (when LSM operators are not scheme-qualified).
232.2 The mail processed is basically non-originating incoming mail, and originating mail presorted to the "city" level. Distribution is made to delivery routes (at smaller offices), delivery units, high volume boxes and/or box sections, and to firm/address holdouts.
232.3 Originating non-presorted mail should receive, as a first-piece handling, an initial sort in Operation 030 (combination outgoing-incoming primary) or in LSM operations. Originating city mail then bypasses Operation 150 and proceeds to the next operational step.

## 233 STAGING UNWORKED MAIL

Unworked mail for the incoming primary should be staged in the same basic manner as described in 213.

## 234 STARTUP OF THE OPERATION

The criteria and requirements for starting up the incoming operation are basically the same as those described for the outgoing primary operation (reference 214. The largest portion of incoming primary mail is normally sorted by Tour I personnel. As the amount of mail available for processing in the incoming primary diminishes, personnel are transferred to the incoming secondary.

## 235 CASE AND CASE DiAGRAMS

235.1 For an incoming primary operation, a 77-hole case is recommended as standard practice. However, if the number of separations are 49 or less, a standard 49-hole case may be used.
235.2 The case diagram contains all of the five-digit ZIP Code separations for a particular office, including unique ZIP Codes. It also contains those firms and office buildings not assigned unique ZIP Codes, which receive large mail volumes and other miscellaneous separations (nixies, missents, etc.). The five-digit ZIP Code may represent branches, stations, box mail groupings, business sections, or organizations which receive very large mail volume.
235.3 A double-core concept is recommended for incoming primary case diagrams. Generally, delivery units and five-digit box sections account for 70 to $85 \%$ of the mail. The outer core should consist of (a) all delivery units and box sections-ZIP sequenced, plus (b) any holdouts having densities equal to or greater than any of the delivery unit or box section separations. These dense holdouts may be grouped together in a "block," or may be interspersed with the other core separations in ZIP Code sequence. This core should be located centrally in the case, with the remaining holdouts located on the outer edges and on the wing, if used. Within this outer core, an inner core-consisting of the highest density separations-is recommended. Exhibit 235.3 shows an example of such a case diagram. This system locates the high density separations in the most accessible portion of the case.

## 236 SWEEPING CASES

236.1 The incoming primary operation is similar to the combination outgoing/incoming operation (030) except that intermittent sweeps for dispatches are not required. Sweeping should be performed by designated sweepers, and cases should be swept as infrequently as possible, without permitting case holes to become overfilled, and without causing the incoming secondary and box section units to run out of mail.
236.2 For the reasons discussed in 172.6. open back sweeping is preferred if space is available. See 216 for details concerning the sweeping procedure.

## 237 CLOSEOUT

237.1 Closeout is not as straightforward in this operation as in others because backflows from secondary units and mail arriving after cutoff require primary handling, in most cases, until the final station dispatch.
237.2 Distributors will ordinarily be reassigned to secondary units as dictated by declining primary volumes, secondary volume buildup, and qualified personnel available.
237.3 Sweeping for closeout may be accomplished as indicated below:

## Example of an Incoming Primary Case Diagram with an Outer Core of 35 Separations and an Inner Core of 9 Separations


a. As personnel are reassigned to secondary units, they may be instructed to sweep mail for that secondary assignment.
b. Dedicated sweeping assignments are continued until all primary distribution cases are vacated. Care must be taken to reduce allied labor commensurate with the reduction in distribution personnel.
c. Personnel from secondary units sweep vacated primary cases preparatory to closing out secondary distribution.
237.4 In order to identify committed mail as opposed to mail arriving after cutoff, specific cases on the primary should be designated to reprocess missent secondary volumes. In the event that secondary processing continues until dispatch time, limited amounts of reprocessed mail may be swept from primary separations and dispatched unworked for subsequent processing at stations and branches.

## 238 DISPOSITION OF SWEPT MAIL

### 238.1 Dispatch (Directs)

Firm directs or other holdouts which require no further distribution should be swept into trays for disposition. Depending upon the mail volume of each holdout and the arrangements with individual customers, holdout mail may be either transported to the appropriate carrier section, held in a designated area for customer pickup, or-in the case of box mail-transferred to the appropriate box section.

### 238.2 Other Mail

Mail that requires further processing should be swept into trays and moved to the appropriate incoming secondary unit (for distribution to carrier routes), or to the appropriate box section (for distribution to boxes).

## 239 EQUIPMENT LAYOUTS

239.1 The incoming primary operation should be as close as possible to the incoming secondary operation to facilitate the flow of mail between the two.
239.2 The procedures described in 219 and the associated layouts, Exhibits 219.1a and 219.1b, also apply to the incoming primary. In addition, a 49-hole case may be applicable to the incoming primary. For such cases, the layout is basically the same except for the absence of the wings.
239.3 Staging equipment representing each subsequent handling operation may be useful within the distribution area, especially in those offices that do not use dedicated sweepers, or for bulk business mail processing on Tour II.

## 240 INCOMING SECONDARY

## 241 TYPICAL MAIL FLOW

241.1 An incoming secondary unit receives mail which has been presorted to the delivery unit level, bypasses both the outgoing operations and the incoming primary operation, and receives a first sort in the incoming secondary. Riffle mail separated to the delivery unit level is received from Operation 029. Originating mail without customer presort is received from the LSMs and/or Operation 030. Managed mail is received from the LSMs and/or operation 043. Operation 150 and 044/134 also supply mail.
241.2 The processed mail is either dispatched to delivery units or is directed to the main office carrier and box sections.
241.3 Exhibit 241.3 illustrates the flow of mail through an incoming secondary operation. Source operations are shown on the left, with subsequent operations on the right.

## 242 TYPE OF MAIL DISTRIBUTED

242.1 At offices where incoming secondary mail is processed on LSMs, the manual incoming secondary (Operation 160) processes mail which the machines cannot accommodate. This includes non-machinable mail, and machinable mail which cannot be machine-processed in time to meet service standards, such as LSM overflow and letters with incorrect ZIP Codes.

242.2 The incoming secondary (Operation 160) is used for sorting First-Class letters and letter-size bulk business mail to carrier delivery routes, lock box sections, and firms.

## 243 STAGING UNWORKED MAIL

In an incoming secondary operation, tray carts of unworked mail should be positioned in the space available in the distributor aisles, after the necessary tray carts for worked mail have been positioned. For each distribution unit, tray carts of both worked and unworked mail should be as near as possible to that unit's cases in order to minimize walking distances. When moving and positioning tray carts in distribution aisles, normal safety practices should be observed.

## 244 STARTUP OF OPERATION

244.1 The startup of the incoming-secondary operation normally takes place concurrently with the "winddown" of earlier operations $(030,040,060)$ in order to use available personnel. See 234.
244.2 There can be an adverse impact on productivity when mail volumes are allowed to become either too large or too small; therefore, supervisors must take care to balance accumulating volumes against total anticipated volumes, manpower, and equipment available.

## 245 CASE AND CASE DIAGRAMS

245.1 For the incoming secondary operation, a 49 -hole case is used, and a wing case ( 28 holes) is added if more than 49 separations are required (see 245.2). When sweeping is performed from the front, Item 79 case and Item 77 wing are used. Open-back equipment (Item 80 case and Item 78 wing) is recommended for secondary units which distribute mail for main office carrier sections, where distribution is performed concurrently with carrier route preparation (this permits carriers to make final sweeps of their mail before leaving the office, without interfering with the distributors).
245.2 Normally, the case diagram of a particular delivery unit contains separations for each of the car-
rier routes in the unit, for firm and/or building holdouts which are separated out because of high volume (50 pieces or more per carrier per day), for lobby box sections, and for miscellaneous separations (nixies, missents, main office boxes, postage due, etc.).
245.3 Several suggestions for developing incoming secondary case diagrams are listed below:
a. A uniform system should be established in which carrier route numbers are assigned sequentially to case separations in all secondary units.
b. The numbering system for carrier routes should (1) allow for the addition of new carrier routes without disrupting the case diagram and (2) use the same route number assignment method on both 49- and 77-hole cases.
c. Exhibit 245.3c illustrates a suggested pattern for locating numbered carrier routes. The numbers shown represent carrier route numbers. Normally the top row will not be used for carrier routes in order to provide uniformity in letter and flat case diagrams insofar as possible. After all carrier routes are sequentially assigned to case holes, the remaining holes, including those in the top row, are designated for holdouts, lobby box sections, and miscellaneous separations. On a 49-hole case, holdouts, lobby box sections, etc., will be located on the right side of the case and/or along the top row. On a 77-hole case, these separations will be located on the wing case and/or along the top row.

## 246 SWEEPING CASES

246.1 The incoming secondary operation is subdivided into units similar to those in the outgoing secondary (040). In this operation, each of the units represents a specific delivery unit of the main post office.
246.2 There are normally two dispatches to delivery units each morning, with $80 \%$ of the same day delivery mail forwarded on the first dispatch. For each dispatch, the cases in each unit should be swept clean. In order to maximize the amount of mail available for dispatch, distributors should concurrently sweep the cases in their respective units. Sequential sweeping should be employed; i.e., a given separation is swept from all cases in the unit by a person moving from case to case, and then disposing of the swept mail.


Exhibit 245.3c-Incoming Secondary Case Diagrams
246.3 The only sweeping required prior to the sweeps for dispatch is that required to clear full case separations. As a case separation becomes full, the distributor should sweep that separation and the same separation from the remaining cases in the unit.

## 247 CLOSEOUT

247.1 The final station dispatch sweep, as described above, constitutes the closeout sweep of incoming secondary units. Secondary units that do not generate enough mail between dispatches to justify dedicated trays to individual carriers may be swept, in carrier sequence, as described below:
a. The number of sweepers should be determined as described in 217.2
b. Sweeping is sequential, as described in 246.2, in carrier order, and letters are placed in trays with the last letter for a route, box section, etc., placed in an up-ended position. The next separation is placed against the upended letter of the preceding separation and so on until the entire unit is closed out.
247.2 The unit designated to sort the mail for the main office carriers should be deployed adjacent to or as close as possible to the carrier cases. This arrangement facilitates late and final sweeps by carriers prior to departure from the office.

## 248 DISPOSITION OF SWEPT MAIL

248.1 Except for missents, nixies, and mail directed to the main office box section, all of the processed incoming secondary mail is dispatched to city delivery units.
248.2 Mail should be swept from the cases into trays, and the trays stored on tray carts positioned in the distribution aisles. Tray carts of swept mail should be dispatched directly to delivery units in order to minimize handling.
248.3 Except for missents, nixies and main office box section mail, no further processing is normally required for the mail leaving the incoming secondary operation, other than that performed at delivery units (delivery sequencing, lobby box distribution).

## 249 EQUIPMENT LAYOUTS

249.1 Exhibits 249.1a and 249.1b show typical layouts for an incoming secondary operation. Generally, short rows, as indicated on the layouts, allow a smooth flow of mail in and out of the distribution aisles. The length of case rows may be varied to accommodate the number of cases required for each unit and to conform to available space.
249.2 When distribution is performed at a facility also housing carriers, the incoming secondary unit serving the carriers should be located adjacent and perpendicular to the carrier cases so that carriers may readily sweep their own routes. In some instances locating incoming secondary units adjacent to 086 , LSM Operation, could provide an opportunity to combine secondaried machinable and non-machinable mail prior to dispatching tray carts on the Final dispatch.
249.3 The arrangements shown in Exhibits 249.1a and 249.1 b facilitate the dispatching of worked mail in trays on tray carts to detached delivery units.

Typical Incoming Secondary Layouts
Closed Back Type


Note: 1. All tray cants for worked mail (one per secondary unit) are positioned in the distribution aisle close to the respective units.
2. Tray cants of unorked mail are placed in the remaining distribution aisle space

## Typical Incoming Secondary Layouts Open-Back Type



Note: 1. All tray carts for worked mail (one per secondary unit) are in the distribution aisle close to the respectwe units.
2. Tray carts of unworked mail are placed in the remaining distribution aisle space.

## CHAPTER 3 FLAT MAIL OPERATIONS

## 310 OUTGOING PRIMARY

## 311 TYPICAL MAIL FLOW

311.1 Exhibit 311.1 illustrates the flow of mail through the Outgoing Flat Primary Operation. The source operations are shown on the left and subsequent operations on the right. Separations on the case receive both outgoing and local destinating mail. Directs (mail requiring no further sortation prior to dispatch) are pouched immediately after sweeping. The balance of mail receives, further distribution in the operations shown.
311.2 If an office has flat sorting machines (FSMs), the mail processed in this operation will consist of volumes in excess of FSM capacity and nonmachinable mail.

## 312 TYPE OF MAIL DISTRIBUTED

Mail distributed in the Outgoing Primary (Operation 060) comes from collection (originating) mail. In offices with flat sorting machines the mail can be described in the following additional categories:
a. Nonmachinable mail. Refer to 132
b. Flat Sorting Machine Overflow. Machinable volumes in excess of FSM capacity.
c. Cull Gate. Machine inducted flats that are automatically rejected by thickness or flexibility detectors (this gate may also be accessed by depressing the cull button on the keyboard).
d. Reject Bin. Flats are keyed to this bin when the address is illegible or when the operator is unable to relate the address to a code.
e. Malfunction Bin. This bin automatically accepts all flats that, for any reason, have not entered the cull gate or another bin on the FSM.

## 313 STAGING UNWORKED MAIL

313.1 Unworked mail should be staged at a central point in the distribution aisles in order to minimize travel distances required to get mail from staging equipment to the cases.
313.2 Mail should be staged utilizing material handling equipment which minimizes costly rehandling. Where possible, mail should be staged in the same equipment in which it is received. Such equipment normally consists of utility carts, portable paper tables, hampers, or platform trucks.
313.3 The mail for Operation 060 should also be staged so that it is worked in the order received. Care must be taken to ensure that all PM collection mail receives processing priority over minus PM collection mail.
313.4 Staging areas should be identified by defining boundaries on the floor with adhesive aisle marker tape, or by painting. This provides for uniformity of operation, and serves as a reminder against leaving spare and stray equipment in the aisles.

## 314 STARTUP OF THE OPERATION

314.1 The 060 operation should be started when the flow of working mail into the unit will be maintained at a level required to sustain the crew. Good judgment must be exercised, based upon knowledge of mail volume arrival, personnel and equipment available, and dispatch commitments.
314.2 The startup of this operation at the beginning of the high volume period (Tour III) requires that personnel be assigned to match the arrival of unworked mail.
314.3 This operation should be started by manning the cases closest to the mail preparation and opening

units, This minimizes distances involved in supply and staging. Assign additional distributors to contiguous cases as required. Closeout should be performed in reverse.

## 315 CASE AND CASE DIAGRAMS

315.1 Case requirements will vary according to the number of separations required. Density analysis is, therefore, requisite to a good outgoing flat primary operation.

Note: Incoming and home state SC density and volume separations should be analyzed in order to incorporate justified separations on the 060 case.
315.2 City Delivery Case Items 134-A (24 separations) and 134-D (42 separations) are recommended as standard outgoing flat primary cases. Using cases with fewer separations reduces the depth of sort, causing an increase in the number of subsequent total piece handlings.
315.3 Case diagrams should conform to the outgoingincoming letter case (qualified by unique density requirements) and should incorporate a central core as described in 160. Also refer to Chapter 7.

## 316 SWEEPING CASES

316.1 The use of dedicated sweepers is most effective at those offices with sufficient volume to loose pack one or more No. $3 \operatorname{sack}(\mathrm{~s})$ for subsequent dispatch during a sweep cycle. Volumes destined for second handling operations may be swept into either utility carts, portable paper tables, hampers with tray inserts, or other appropriate equipment as required, and transported to respective staging areas. Appropriate containers for low density separations that require bundling must be considered also.
316.2 A modified pouch rack(s) (Item 30) containing three or more separations and mounted on casters is recommended for this type of operation in conjunction with open back cases.
316.3 Where space limitations or low volumes dictate the use of closed-back cases, loose-pack racks should be provided as necessary.

## 317 CLOSEOUT

The operation should be closed out in the same manner as the combined outgoing-incoming letter primary (refer to 217) as applicable to flats.

## 318 DISPOSITION OF SWEPT MAIL

Refer to 218 for procedures in outgoing-incoming letter primary as applicable to flats.

## 319 EQUIPMENT LAYOUTS

319.1 Two basic layouts can be used for the outgoing flat primary operation, depending on whether sweeping is done from the front or back. For specific case deployment and space requirements, refer to Publication 37.
319.2 Access and egress should be provided as previously presented in 219.4
319.3 The support area required for disposal of mail should be as close as possible to the actual distribution area, preferably at either end of the outgoing unit. The support area should contain loose pack racks as required, tying machines, utility carts for disposal of bundled mail, plus equipment for staging mail. Any additional material handling equipment items required, such as platform trucks, hampers, etc., should also be kept in this area.

## 320 OUTGOING SECONDARY

## 321 TYPICAL MAIL FLOW

Exhibit 321 shows the flow of flat mail through an outgoing secondary operation. The source operations are shown on the left and subsequent operations on the right. Some mail by virtue of presort or prior distribution at another office bypasses the primary and receives first piece handling in the secondary. Mail arriving from 060 cases and FSMs also receive a secondary handling in this operation. At offices serving as Area Distribution


Exhibit 321

Centers operation 073 is established for manually processing managed mail. This operation can direct mail into operations $170,175,168$, and $074 / 134$ as well as to other home state destinations.

## 322 TYPE OF MAIL DISTRIBUTED

Refer to 222 as applicable to flats.

## 323 STAGING UNWORKED MAIL

Procedures in this section are parallel to the outgoing letter operation described in 223 .

Note: The arrival pattern of non-preferential flat mail (at ADCs in particular) will require larger staging areas and may require dedicated cases. Space and equipment requirements at these offices may dictate the use of Item 1070, 1074, or 1074 modified, platform trucks as staging devices for unworked flats in Operation 075.

## 324 STARTUP OF THE OPERATION

324.1 The criteria and requirements for startup are basically the same as described for the outgoing flat primary (see 314.
324.2 The 070 Operation normally follows the startup of flat primary operations by approximately one half to one hour. This lag time is required since the main supply for this operation is generated by primary distribution.
324.3 Startup of Operation 075 at ADCs is basically a Tour II operation, and personnel assignments are generally determined as outlined below:
a. Personnel assignments are made as needed to ensure distribution and dispatch within 24 hours of receipt.
b. Personnel normally required in other work centers are assigned as they become available.

## 325 CASE AND CASE DIAGRAMS

325.1 Choice of case size is dependent upon the number of separations required. Either open or closed-
back cases may be used; however, dedicated sweeper assignments are normally not justifiable in 070 units and closed-back cases are generally preferred.
325.2 Flat cases in this operation should conform to corresponding outgoing letter case diagrams (qualified by unique density requirements) and should incorporate a central core as described in 160

## 326 SWEEPING CASES

Refer to 226 (outgoing letter secondary) as applicable to flats.

## 327 CLOSEOUT

Closeout procedures for outgoing secondaries are the same as procedures described for outgoing-incoming letter primary operations (see 217).

## 328 DISPOSITION OF SWEPT MAIL

Refer to 228 (outgoing letter secondary) for disposition of swept mail as applicable to flat distribution.

## 329 EQUIPMENT LAYOUTS

Outgoing secondary flat cases should be located near the outgoing primary flat cases and the pouching area. Refer to Publication 37 for typical arrangements for closedback cases and open-back cases. Case deployment and space requirements are also shown in Publication 37. Access and egress should be provided as described in 319.2

## 330 INCOMING PRIMARY

## 331 TYPICAL MAIL FLOW

331.1 Exhibit 331.1 illustrates the flow of mail through an incoming primary operation. Source operations are shown on the left and subsequent operations are on the right.

Flat Mail Flow Chart (Typical) Incoming Primary


Exhiblt 331.1
331.2 Mail presorted to the 3-digit city delivery level as a result of customer presort requirements or prior distribution at another office will receive first handling distribution in this unit.

## 332 TYPE OF MAIL DISTRIBUTED

332.1 At offices with FSMs, mail processed in Operation 170 will consist of volumes in excess of machine capacity, nonmachinable mail as described in 312
332.2 The mail processed is basically non-originating incoming mail, and originating mail presorted to the "City" level. Distribution is made to delivery routes (at smaller offices), delivery units, high-volume boxes and/or box sections, and to firm/address holdouts:
332.3 Originating non-presorted mail should receive an initial sort in either FSMs or 060 operations.

## 333 STAGING UNWORKED MAIL

Mail should be staged utilizing material handling equipment which minimizes costly rehandling. Where possible, mail should be staged in the same equipment in which it is received. Such equipment normally consists of utility carts and Item 138 (portable paper tables), hampers or platform trucks.

Note: The arrival pattern of non-preferential flat mail may require larger staging areas. Space and equipment requirements may dictate the use of platform trucks as staging devices.

## 334 STARTUP OF THE OPERATION

334.1 First-Class flats and newspapers are processed on a current basis and since each is assigned a different priority of distribution, dedicated cases for each are required during any one tour.
334.2 Startup of bulk business mail distribution requires the procedures outlined in 324.3 for Operation 075 (outgoing bulk business mail flat secondary).

## 335 CASE AND CASE DIAGRAMS

Case diagrams should conform to the Incoming Primary letter case design as far as practicable. A central core should be established if warranted.

## 336 SWEEPING CASES

336.1 Sweeping may be performed by dedicated sweepers, distributors may sweep their own cases, or separations may be swept by personnel from secondary units.
336.2 Open-back sweeping is' preferred if volumes are sufficient to justify dedicated sweeping assignments, and space is available.

## 337 CLOSEOUT

337.1 Closeout of preferential flats and newspapers is accomplished as described in 217 for letter mail.
337.2 Closeout sweeping is not critical on Tour II due to the predominance of bulk business mail and less frequent dispatch schedules.
337.3 When necessary, distributors should be reassigned promptly as dictated by preferential processing distribution requirements and closeout accomplished as indicated below:
a. Vacated distribution cases are closed out in the course of normal sweeping duties.
b. Personnel from secondary units sweep vacated cases preparatory to closing out bulk business maii secondary distribution.

Note: If the procedure in 337.3a is selected, care should be taken to reduce allied labor commensurate with the reduction of distribution personnel.

## 338 DISTRIBUTION OF SWEPT MAIL

338.1 Refer to procedures described in 238.1 Incoming Letter Distribution as applicable to flats.
338.2 Mail which requires further processing should be swept to appropriate secondary staging equipment, and moved to respective secondary distribution units.

## 339 EQUIPMENT LAYOUTS

339.1 The location for incoming primary operations should be located as close as possible to the incoming secondary operation in order to facilitate the flow of mail between the two.
339.2 Double depth, open back cases without ledges may be used to full advantage in this operation in conjunction with portable paper tables (used in lieu of ledges). This procedure as described in 173.2 eliminates both unnecessary handling and additional staging equipment. Excessive distance involved in the inhouse transportation of mail as well as heavy volumes may require other material handling equipment as described in 333
339.3 In addition to case requirements, staging equipment representing each subsequent handling separation on the primary may be required within the distribution area, especially in those offices which do not use dedicated sweepers. If staging equipment is used, it should be centrally located within easy access of distribution personnel. Dedicated floor space should be identified and marked for each separation needed.
339.4 The use of Item 138, Portable Paper Table, is recommended for staging within the distribution area.

## 340 INCOMING SECONDARY

## 341 TYPICAL MAIL FLOW

341.1 Mail flow for this operation is basically as described in 241 (incoming letter secondary) qualified to the extent that MOD System Operation description numbers are different for letters and flats and, of course. to the extent that the machine low is from FSMs rather than from LSMs.
341.2 Exhibit 341.2 illustrates the flow of mail through an incoming secondary operation. Source operations are shown on the left and subsequent operations on the right.

## 342 TYPE OF MAIL DISTRIBUTED

Refer to 242 as applicable to flats.

## 343 STAGING UNWORKED MAIL

Appropriate containers of unworked mail should be staged adjacent to respective secondary cases, if there is sufficient space available. If sufficient space is not available to accommodate separate staging, a common staging area may be required.

## 344 STARTUP OF THE OPERATION

344.1 Incoming secondary operations for first-class flats and newspapers normally are performed on Tour I and bulk business mail flats are processed on Tour II. Refer to 234 as applicable to flats.
344.2 First-class flats and newspapers should be dispatched on scheduled station runs for subsequent processing and box mail delivery by station personnel.
344.3 After the last dispatch of value to the stations, this mail should be allowed to accumulate at the processing facility (with the exception of main office box mail), and processing should not be resumed until it becomes necessary to distribute $80 \%$ for the first station dispatch the next morning.
344.4 Startup of bulk business mail distribution follows the procedures outlined in 324.3 (outgoing secondary, flats).

## 345 CASE AND CASE DIAGRAMS

345.1 Case diagrams should conform to the incoming letter secondary case design if warranted.
345.2 The use of General Purpose Mail Containers (GPMC) with fiberboard fiats sorting trays should be considered for this operation in lieu of standard cases. Where GPMCs are not available, use of tray carts Item 1226B or C should be considered. Containerization benefits are listed below:


Exhibit 341.2
a. In addition to the elimination of sweeping, the need for equipment normally associated with this operation such as sacks, sack racks, labels, hampers, machines, etc., and their attendant handling and storage requirements are eliminated.
b. Containers will improve cube utilization of vehicles where current dispatch procedures require the use of Item 1046 hampers.
345.3 Dedicated separations in the GPMC should ordinarily be confined to the six top shelves with the two bottom shelves reserved for overflow volume from the top six shelves.

## 346 SWEEPING CASES

346.1 Refer to 345.2 for a containerization method that eliminates sweeping.
346.2 The incoming flat secondary is composed of different units representing specific delivery areas throughout the city.
346.3 There are normally two dispatches to delivery units each morning. Eighty percent of the mail should be forwarded on the first dispatch. The first dispatch generally represents the major portion of bulk business mail processed the preceding day and other mail available for dispatch. The second dispatch normally consists of First-Class flats and newspapers that have been processed subsequent to the first dispatch.
346.4 The only sweeping required prior to the closeout of bulk business mail distribution is that required to clear full case separations. This may be accomplished by assigning sweepers to sweep full case separations within the unit or each distributor may sweep his own case.

## 347 CLOSEOUT

347.1 Closeout may be accomplished in a variety of ways as listed below:
a. Refer to 345.2 for distribution procedures that eliminate closeout sweeping.
b. Sack racks are set up for each secondary unit with separations that correspond to those on the distribution case. Flats are withdrawn from case separations and placed loosely in corresponding sacks. Sacks are pulled and placed on platform trucks or other container for subsequent dispatch.
c. A single sack rack designed for \#3 sacks may be utilized for an entire case by withdrawing, sacking and labeling each separation individually.
d. Individual separations are tied out in bundles and placed in Item 1046 hampers for subsequent dispatch to respective delivery units.
347.2 The unit(s) designated to sort mail for carriers domiciled in the same building should be located as close as possible to the carrier cases to facilitate late and final sweeps by carriers prior to departure from the office.

## 348 DISPOSITION OF SWEPT MAIL

348.1 Except for missents, nixies, and mail directed to main office boxes, all of the processed incoming secondary mail is dispatched to city delivery units.
348.2 Depending upon the particular physical constraints such as incompatible dock heights, etc., and volumes involved, dispatch may be made bed loaded or in containers; i.e., Post Con, General Purpose Mail Containers, Hampers or Items 1226, B, and C.

## 349 EQUIPMENT LAYOUTS

349.1 Utilization of distribution equipment, e.g., cases, etc., and flow arrangements at individual offices is determined by volumes normally processed, surge requirements and other related factors.
349.2 The incoming flat secondary should be located as closely as possible to the city dock to avoid unnecessary travel for dispatch, but the volume and travel distance of mail being received from other operations must also be considered.

# CHAPTER 4 OPENING/DISPATCH OPERATIONS 

## 410 OUTGOING OPENING

## 411 TYPICAL MAIL FLOW

### 411.1 Preferential Mail

This operation receives mail from arriving surface and air transportation for subsequent processing and dispatch as well as destinating mail for distribution and delivery within the home MSC.

### 411.2 Second-Class and Bulk Business Mail

The primary source of both newspapers and circulars is inbound surface transportation. The processing of originating mail in these mail categories should be limited to residue, local SCF and, if the origin office is an SDC, required state distribution (due to presort requirements).

### 411.3 Special Delivery Parcel Post

Outgoing processing of Special Delivery Parcel Post will basically consist of parcels extracted from originating mail preparation units.

## 412 TYPE OF MAIL DISTRIBUTED

412.1 Basic mail items handled in this unit are individual letters, flats, irregular parcels, etc., with physical characteristics unsuited to mechanical or manual case distribution, bundled letters and flats as described in 173.2, and mail in trays, pouches and sacks.
412.2 Mail from arriving transportation described in 411 should receive a minimum of three basic separations in order to avoid unnecessary handlings as listed below:
a. Mail that requires transfer to connecting transportation.
b. Mail for local delivery processing.
c. Mail that requires further processing in the outgoing opening unit: this mail will consist of pouches labeled DIS or SCF with the contents described below:
(1) DIS (open and distribute) pouches and containers contain low volume state directs for consolidation and onward dispatch or SDC and mixed states for subsequent distribution and delivery/dispatch.
(2) SCF (Sectional Center Facility) pouches and containers contain mail for processing and delivery within the designated SCF.

## 413 STAGING AND SEQUENCING UNWORKED MAIL

413.1 Mail from arriving transportation identified in 412.2 c is generally staged in hampers, platform trucks or other general purpose type containers adjacent to outgoing opening units.
413.2 Sequencing mail is not generally required other than to insure distribution and dispatches that will meet service standards. Supervisors must be aware of anticipated volumes and reassign personnel as required.

## 414 STARTUP OF THE OPERATION

414.1 Staffing requirements on Tour 11 are generally flexible. Personnel are normally interchangeable between the outgoing opening unit and other pouch rack processing as well as newspaper and case assignments. Processing activities are more pronounced at offices with designated SDC responsibilities. Staging mail during Tour II may be accomplished to a greater extent since dispatch and volume requirements are considerably less than those of the succeeding tour.
414.2 Tour III processing normally begins with a minimum assignment of personnel to hang and label racks, and to stage sacks, containers and empty platform trucks for temporary storage of processed mail. The peak volumes encountered on Tour III may require the assignment of Rack Distribution and Dispatch Expediters to specific rack groupings. These employees are responsible for completion of distribution and subsequent timely dispatch of mail within the scope of their assignment. Additional personnel should be assigned as necessary to maintain a minimum inventory of unworked mail.
414.3 Tour I startup should be similar to Tour II except that processing activities are mainly directed toward the distribution and dispatch of associate office mail.

## 415 EQUIPMENT AND EQUIPMENT LAYOUTS

415.1 Processing equipment generally consists of a unit(s) composed of Model 89A or B portable conveys or belts with separations consisting of hampers, pouches, utility carts, tray carts and other rack groupings representative of the outgoing secondary distribution required.
415.2 Basic separations for opening units ordinarily consist of appropriate containers for bulk business mail, newspapers, priority mail, and unworked letters and flats. Additional separations are comprised of stated working letters, bundled letter directs, working flats, bundled flat directs, city letters, and city flats. Some duplications of separations may be necessary to make machinable/non-machinable separations commensurate with distribution requirements and mechanization capacity. In addition to Model 89A or B Portable Conveyors. Special Delivery Parcel Post distribution units must be physically set up to eliminate tossing/throwing.
415.3 Layouts must be determined at the individual office level depending upon the number of separations required. Typical opening unit arrangements are shown in Publication 37.
415.4 Surface mail dispatch requires brown nylon sacks, canvas sacks or pouches and plastic trays. Airlift separations are enclosed in green sacks or pouches or

MM Trays. Priority mail requires the use of orange equipment.

## 416 CLOSEOUT

416.1 Preferential operations may not be closed out but would be characterized by varying periods of diminished or intensified activity in conjunction with dispatch of limited separations.
416.2 Bulk business mail opening units are ordinarily closed out at least once each 24 hours concurrent with respective critical dispatch schedules.

## 417 DISPOSITION OF MAIL

### 417.1 Limited Separations

Limited separations (generally high volume pouches for specific destinations) are closed out as required by dispatch schedules and delivered to the outbound dock.

### 417.2 Preferential Mail

Preferential mail, with the exception of locally identified destinating directs and the mail identified in 417.1, the remaining separations representing virtually all processing operations (as described in 415.2 are to be delivered to respective units as required by staffing and/or distribution schedules.

### 417.3 Newspapers

With the exception of locally identified directs, local city, local SC and required state(s) distribution (which are delivered to subsequent handling units) additional handling is confined to loading outbound transportation. Newspapers must be segregated along with other preferential mail generally on the tailgate of departing Highway Contract Routes (HCRs).

### 417.4 Circulars

Procedures outlined in 417.3 are applicable to circular mails, except that circulars are normally loaded into outbound HCRs positioned forward of preferential mail or are sent to parent BMCs for further handling.

## 420 OUTGOING DISPATCH

## 421 TYPICAL MAIL FLOW

Outgoing opening and outgoing Dispatch Pouch Racks are oftentimes one and the same. That is, the preferential and bulk business mail IPPs, newspaper rolls, letter and flat bundles form transit sources to cities, sectional centers, states, and countries. When centralized, this operation may include the opening and traying of loose-packed mail and the distribution of letter and flat tie-outs generated within the office.

## 422 STAGING AND SEQUENCING UNWORKED MAIL

422.1 Unworked mail should be staged at racks representative of the distribution required.
422.2 Mail should be staged in the same equipment in which received to avoid unnecessary handling. The preferred equipment for mail identified in 422.1 is Item 1075 Utility carts.
422.3 As in 413.2 sequencing is required to insure that dispatches are made to meet service standards.

## 423 STARTUP OF THE OPERATION

Refer to 414 as applicable.

## 424 EQUIPMENT DIAGRAMS AND SEPARATION REQUIREMENTS

424.1 In addition to specified separations within the Opening Unit, other rack groupings representative of outgoing secondary distribution are required as listed below:
a. Associate office directs
b. Home state SCFs and directs
c. Contiguous state(s), SCFs and directs
d. Second and third day states and designated mixed city directs and ADC's
$e$. Priority mail racks (at facilities where volume justifies separate makeup and dispatch)
424.2 Rack requirements, other than the basic group ings described above, are usually dictated by handling and volumes processed at individual mail processing facilities. These requirements may entail the use of additional racks, tray carts, etc., dedicated to flats, letters, and priority mail. Smaller processing units may enclose letters, flats, and IPPs in the same equipment as authorized by the Regional General Manager, Logistics Division. Units without sufficient volume to make up priority mail separations must segregate this mail and forward to the designated concentration points.
424.3 Specific rack diagrams and groupings should be subdivided into segments representative of delivery requirements; i.e., pouches for next day delivery should be physically separated from pouches with second day delivery standards, etc. When this subdivision has been accomplished, pouches may then be arranged by density (as described in 163) within each subgrouping. This procedure, in conjunction with sequenced label sets, provides for a rapid verification of color codes and reduces the chance of mislabeling.
424.4 In addition to processing equipment described in 415, subsequent handling rack layouts as described in 142.3 may be required for circular and newspaper processing.
424.5 Subsequent handling Special Delivery Parcel Post processing will also require "no toss" layouts as described in this section.

## 425 CLOSEOUT

425.1 Dispatch unit closeout is predetermined when (a) originating and outgoing opening distribution is current, with no additional receipts scheduled prior to dispatch, or (b) pouches must be pulled to make scheduled transportation connections.
425.2 Individuals from each source operation may be designated to sweep, bundle, and deliver the various separations to the appropriate rack or container. Rack Distribution Clerks or Distribution and Dispatch Expeditors may be assigned this duty as determined by this unit supervisor.
425.3 Following closeout distribution, pouches are pulled, closed, locked and placed upon material handling equipment (usually GPMCs or platform trucks) for subsequent delivery to outbound docks.
425.4 When Special Delivery Parcel Post operations are closed out, distributors should verify that copies of Tag 3, Parcel Post Special Delivery are attached to the hasp of each sack subsequently dispatched.

## 426 DISPOSITION OF MAIL

426.1 Additional handling for this mail is confined to loading outbound transportation.
426.2 General Purpose Mail Containers should be employed to reduce dock handling at both dispatching and receiving facilities where practicable. Container movements must be closely coordinated between exchanging facilities to ensure that containers are not diverted for other purposes and to ensure that their use does not cause extra trips due to loss of vehicle cube.

## 427 EQUIPMENT LAYOUT

427.1 Layouts must be determined at the individual office level as described in 142.3; however, typical pouch rack arrangements are illustrated in Publication 37.
427.2 Sacking requirements are the same as previously described in 418.2.
427.3 In addition to the necessary pouch racks, a pouch rack layout should generally require the staging of one or more platform trucks or other containers for storing processed mail preparatory to dispatch.

## 430 INCOMING OPENING UNIT

## 431 TYPICAL MAIL FLOW

This operation receives mail from arriving surface and air transportation and from the Outgoing Opening Unit for subsequent processing and dispatch primarily for local city delivery.

## 432 TYPE OF MAIL DISTRIBUTED

432.1 Basic mail items handled-in this unit are individual letters, flats, irregular parcels with physical characteristics unsuited to mechanical or manual case distribution, bundled letters and flats as described in 173.2 and mail in trays, pouches and sacks. Also letters and flats may be trayed or otherwise prepared for distribution.
432.2 Mail from arriving transportation will receive separations as outlined in Exhibit 432.1.

## 433 STAGING AND SEQUENCING UNWORKED MAIL

433.1 Mail from arriving transportation is generally staged in general purpose containers, platform trucks or other types of containers adjacent to incoming opening units.
433.2 Sequencing of mail by color code label is required in order to give priority to same day delivery mails. Care must be taken when opening next day delivery color coded pouches that distribution units are not overloaded to the point that same day delivery mail arriving on subsequent receipts are delayed. Bulk business mail should be identified by date and time of arrival.

## 434 STARTUP OF THE OPERATION

434.1 Staffing requirements on Tour II are generally minimal due to typically small volumes arriving. Priority must be given to opening pouches containing Speedy


Exhlbit 432.1

Bags and processing Special Delivery mail. Any nonpreferential mail not processed on Tour I should be processed on Tour II. Depending on machine capacity and MPLSM personnel available, letter mail should be separated to machinable/non-machinable.
434.2 Tour III should be similar to Tour II, except the emphasis will be on preferential mail. Machinable mail should be suggested from non-machinable so that upon completion of Originating mail distribution, a smooth changeover of MPLSMs to Incoming mail can be made.
434.3 The peak volumes arriving on Tour I may require assignment of rack distribution personnel to specific rack groupings. These employees are responsible for completion of preferential opening and timely dispatch to distribution operations. Bulk business mail should be as current as possible so that distribution operations can determine and schedule manpower needed to meet service standards.

## 435 EQUIPMENT AND EQUIPMENT LAYOUTS

Equipment layout must be determined at the individual office level depending upon the number of separations required. Typical incoming opening unit arrangements are identified in Publication 37.

## 436 CLOSEOUT

436.1 Preferential operations closeout is determined by incoming mail receipts and service standards.

Volumes must be kept current in order for all distribution to be performed to meet delivery standards.
436.2 Bulk business mail operations are continuous, however, care must be taken that all mail is worked in proper sequence and distribution completed in time for delivery in accordance with non-preferential delivery standards.

## 437 DISPOSITION OF MAIL

437.1 With the exception of Direct Firm mail, all mail will be transported to a distribution unit for distribution. To the maximum extent possible, the opening unit processing should be limited to only one handling, adding more separations as required. When it is impractical to make all separations at one unit first consideration should be given to isolating unique types of mail such as Special Delivery newspapers, etc., before adding a second handling unit.
437.2 Machinable/non-machinable letter mail bundles should be separated to the extent that MPLSM manpower and machine capability is available to process the machinable mail. Bundled letter mail may be taken directly to MPLSMs after weighing and loaded directly on console ledges. Additional opening unit manhours used to cull and tray bundled mail for MPLSMs should be justified by comparing extra manhours used by MPLSM ledge loaders to opening unit manhours used for culling and traying.

## CHAPTER 5 PERFORMANCE ANALYSIS

## 510 PRODUCTIVITY IMPROVEMENT

## 511 SCHEDULING AND STAFFING

511.1 Scheduling and staffing for mail processing operations at MOD-I and II post offices are covered in the following Management Instructions:
a. AS-620-81-8. Mail Processing Scheduling and Staffing Program-Administrative Responsibility, dated 3-16-81.
b. AS-620-81-2. Mail Processing Scheduling and Staffing Rate Determination, dated 1-16-81.
511.2 Management Instruction AS62D-81-8 outlines uniform policy and procedures for implementing the Scheduling and Staffing (Mail Processing) element of the Manpower Scheduling and Staffing Program (formerly Productivity Improvement Program). These procedures designate program administrative responsibility and define national program standards for configuration control, training, and reporting.
511.3 Management Instruction AS-620-81-2 outlines procedures for establishing productivity rates for all scheduling and staffing of mail processing operations. These procedures will be used by all post offices in which the development of productivity rates for scheduling and staffing studies is required, and in the implementation of all scheduling and staffing changes. They do not apply to productivity increases derived from methods, mechanization, or technological changes within the post offices.
511.4 Manhour requirements should be assigned for each day by dividing anticipated volume by the productivity goal desired. The productivity goal should be divided into segments of achievement so that unit supervisors can recognize productivity improvements. Establishing such benchmarks (intermediate goals) also dispels the illusion that the ultimate goal is unattainable.

Use of procedures indicated in the referenced instruction above is emphasized.
511.5 Unit supervisors should be encouraged to monitor volume against workhour allocations. MOD I offices should require the periodic use of Form 2345, Personnel Manpower, MOD, in operations not meeting required productivity goals and on a random basis in all other processing operations. A 7-6 PSDS transaction at MOD I offices concurrent with the use of Forms 2345 will verify the manhour usage.

## 512 MONITORING PROFICIENCY

512.1 Error checks are required as listed below:
a. Form 3966, Verification of Distribution Performed
b. Form 1617, Missent Mail Notice
c. Form 1639, Carriers Report of Recurring Missorted Mail
512.2 Form 3966 should be used by unit supervisors to make spot checks of distribution on a daily basis in order to guarantee accuracy of distribution. These checks are an essential discipline to mail processing since the interest and motivation of unit supervisors in invariably reflected in the attitude of distribution personnel. These checks should not be limited only to distribution cases. Other areas of distribution such as pouch racks, container loading, highway contract vehicles loaded by postal employees should also be checked daily for distribution accuracy. At an installation where the positions of general expediter and review clerk are authorized, they may be assigned to assist in the verification. Refer to Handbook M-5, Schemes: Construction, Assignment, Training, and Proficiency, and Interim Publication 118 Fair Labor Standards Policy and Instructions, for required procedures of monitoring proficiency.
512.3 Forms 1617 are completed by receiving facilities and returned to the dispatching office. The quality control unit should work together with unit supervisors in analyzing causes for errors.
512.4 Forms 1639 should be separated by secondary units and given to the secondary unit supervisor. The unit supervisor must sort Form 1639 daily by the route number reporting error.
512.5 Repeated errors identified by Forms 1617, 1639,3966 or by any other means should be followed up by standup talks notifying employees of problem area(s) and intensified utilization of Form 3966 by the unit supervisor with emphasis on the problem area(s).

## 513 QUALITY CONTROL

### 513.1 Manual Distribution Quality

. 11 General. A mishandling is defined as any piece of mail NOT handled in accordance with the authorized written instructions given to the distributors. A mishandling usually requires one or more extra handlings to effect its correct distribution. One of the following specific conditions must exist before a sampled piece is considered mishandled.

## . 12 Specific Conditions

## .121 Basic Distribution Mishandlings

a. The Official Distribution Plan requires the piece to be sorted to a specific separation, but it is found in other than the designated separation for that piece.
b. Distribution instructions require coded mail not to be sorted to an uncoded separation, but it is found in one.
c. A piece of mail found in the nixie separation contrary to the instructions for that separation.
d. A piece of mail found misoriented in any separation except a firm direct.
e. A piece of mail found to have uncanceled stamps when instructions require the distributor to "daub" the stamps in order to cancel them.

## . 122 Unzipped Mail

a. Distribution instructions for sorting unzipped mail require the piece to be distributed by state. but it is found in other than the designated ADC separation for uncoded or the proper separation for the address on the mail piece.
b. Distribution instructions for sorting uncoded mail require the piece to be distributed by city, but it is found in other than the designated separation for that city or the proper separation for the address on the mail piece.
c. Distribution instructions for sorting uncoded mail require the piece to be distributed to an uncoded separation and it is found in other than that uncoded separation or the proper separation for the address on the mail piece.

## .123 Miszipped Mail

a. Distribution instructions require miszipped mail to be sorted according to the ZIP Code, but the piece is found in a separation other than the one for its ZIP Code.
b. Distribution instructions require the mail piece to be sorted as unzipped mail and it is found in other than the correct separation for the piece had it been unzipped. (See 222.3.)
c. Distribution instructions require the mail piece to be sorted by the address on the piece and it is found in other than the correct separation for address on the piece.
d. Distribution instructions require the ZIP code on the miszipped piece to be struck out, and it is found in a separation without the ZIP Code instructions.
e. The ZIP Code on a correctly zipped mail piece has been struck out (special miszipped cases only).

## . 124 Nixie Mail

a. A piece found in the nixie separation contrary to distribution instructions.
b. In general, a nixie is placed with an illegible or incomplete address, or one that requires special processing for a particular reason as defined by scheme instructions. Examples of nixies include:
(1) An illegible or incomplete address format
(2) A non-standard markup or address format
(3) Extra or confusing numbers in the vicinity of the address.

## .125 Other

a. Memory Items. Sortation is made using a memory item, but the piece does not belong to the special grouping for that memory item; e.g., special delivery.
b. Doubles. If a double is found in the correct separation for the top letter, but the bottom letter is wrong, the bottom piece is a mishandling.
c. Misoriented. A sample piece to be improperly oriented in the case separation is considered mishandled. If, in addition to being improperly oriented, the piece was also found in an incorrect separation, it is counted as only one mishandling. In no instance is one sample piece counted as two errors. A sample piece is considered misoriented if:
(1) It is found in the case separation upside down (address on bottom).
(2) It is properly addressed and the address is in any position other than that orientation facing the left hand side of the case. The stamp on a properly addressed and oriented sample piece would normally be oriented on the right hand side of the case on the outside, toward the distributor.
(3) It is addressed with the height of the sample piece being greater than the width, and it is oriented in any position other than that orientation where the address is legible to the distributor. The stamp on a properly oriented sample piece with this type of address is normally on the right side of the case on the inside, away from the distributor.

### 513.2 Quality Monitoring

. 21 The quality of manual distribution is monitored by Quality Control (QC) in three national quality control programs:
a. Manual Distribution System Quality Sort (MDSQS) Program.
b. Container Quality (CQ) Program
c. National Letter Mail Index (NLMI) Program
. 22 These programs are used to manage the quality of distribution and containerization. They provide statistical estimates of the quantity of mail that is mishandled and the cost/service impacts of these mishandlings.

### 513.3 Quality Performance Feedback

QC analyzes the above mentioned measurements evaluating progress toward local quality goals, identifying significant quality problems; and evaluating potential for quality improvement. Quality performance data is reported to the workroom floors, the facility manager, and his management staff, and to the National Quality Control Information System.

### 513.4 Follow-up

Local short term, midterm (1 year) and long term (2 years) quality performance goals in each manual distribution operation are set jointly by the facility manager, operations managers, and QC. When quality performance levels are unacceptable, QC works with the facility manager to establish a Quality Improvement Team composed of operations and support personnel to formally address quality problems.

### 513.5 Manual Distribution QC Programs

. 51 Manual Distribution SQS program. The Manual Distribution SQS Test is used to monitor the quality of manual letter and flat distribution. The test is performed separately for each level distribution: OGP, QGS, MMP, SC, INP, INS, BX. Policy relating to the MDSQS Program is documented in the National Quality Control Program. Procedures related to the program are documented in the following handbooks:
a. Manual Distribution System Quality Sort TestSample Design, Data Reduction, and Analysis.
b. Manual Distribution System Quality sort Tes:Data Collection.
c. Manual Distribution Separation Diagnostic Test-Data Collection and Analysis.

## . 52 Container Quality Program

. 521 The CQ Test is used to monitor quality of distribution and containerization. This test provides both an intermediate and final in-house measurement of the quality of processing that takes place in a facility. The mishandling estimates generated by the test represent the quality of the mail as it moves between distribution operations in-house and as it leaves the facility. Separate tests are performed for each mail class and mail type (letters, flats, irregular parcel post and parcels) at the following levels of distribution:
a. Outgoing
b. Managed Mail
c. Sectional Center
d. Incoming Primary
$e$. Incoming Secondary
f. Box
. 522 Policy relating to the CQ Program is documented in the National Quality Control Program. Procedures related to the program are documented in the following handbooks:
a. Container Quality Test-Sample Design, Data Reduction, and Analysis.
b. Container Quality Test-Data Collection.

## . 53 National Letter Mail Index Program (NLMI)

. 531 The NLMI Program is used to monitor mishandlings that were dispatched from the facility. Sampling ties place at 60 selected destination facilities. Observed mishandling are scaled up to represent all destination facilities.
. 532 The NLMI samples all worked first-class incoming/transit letter-sized mail. Foreign mail, mail from local SC associate offices, stations and branches, unworked mail from other facilities and mail which receives dock transfer only are not included in the NLMI.
. 533 NLMI Program policy is documented in the National Quality Control Program. Procedures related to the program are documented in the following handbooks:
a. PO-869-1, National Letter Mail Index-Sample Design.
b. PO-869-2, National Letter Mail Index-Data Collection.
c. PO-869-3, National Letter Mail Index-Users Guide.

## 514 TRAINING

Training distribution personnel is basically the responsibility of line supervisors. In addition to correcting improper work habits such as unnecessary case motions, etc., the distribution techniques outlined in 171.5 should be stressed to the new employee.

## 515 PERSONNEL MOVEMENT CONTROL

Unit supervisors should control the movement of personnel in their units by the use of assignment cards. Each employee is provided an assignment card (Employee Badge Card in PSDS offices). This card must accompany employees from the time they begin their work assignment until they complete their tour of duty. At the time employees report to a work unit, the supervisor will receive their assignment cards and direct employees to a specific work location; i.e., case \#l, case \#2, Outgoing Primary, Incoming Primary, etc. The employees’ assignment cards are then placed into an assignment card rack with slots corresponding to the work locations within the unit. This system provides the supervisor with a quick reference in regard to workhour expenditure and excessive employee absence from work stations.

## 520 COST REDUCTION

## 521 GENERAL

Costs may be reduced through changes in the way we structure the mail processing system. This includes containerization, methods improvements, analysis of case diagrams to reduce piece handlings at other offices as well as the home office, etc.

## 522 CONTAINERIZATION

The effects of containerization are dramatic when applied to incoming secondary flat distribution as described in 345.2; however, additional potential application for GPMC are listed below:
a. Containerizing originating airlift dispatches from general mail facilities (GMFs) for direct delivery to air carrier personnel.
b. Containerizing destinating airlift dispatches from AMFs to GMFs by processing function; e.g., 043 letters, 073 flats, machinable letters, etc.
c. Application of distribution techniques described in 345.2 for distribution of associate office mail.
d. Use of GPMC equipment for designated nonmachinable outside (NMO) distribution at GMFs.
e. Where distribution of machinable letters in manual units is necessary, machinable letters should be isolated, if practicable, and dispatched in managed mail (MM) trays and sleeves in order to retain the machinable identity for receiving offices.

## 523 Separations

523.1 Basic mail processing techniques described in 160 may be expanded to include separations for required outgoing state(s) secondary distribution on both outgoing primary letter and flat cases:
523.2 Separations for home state SCFs should be provided on outgoing primary cases, if density analysis indicates such separations are economically justified.

However, implementation is subject to regional approval since the effect of massing on destination SCFs could be detrimental to overall cost reduction programs and/or service requirements.
523.3 SDC pouch receipts in outgoing preferential opening units will probably justify moving Managed Mail pouch racks to the opening unit belt. Bundles may then be thrown off in one handling during Tour II operations.
523.4 Next day service commitments for contiguous state SCFs may be assured while retaining the distribution techniques described in 160 by providing separations on outgoing primary cases listed below:
a. Each SCF in conjunction with the respective state residue separation.
b. Each SCF with the respective state residue directed to a mixed states case.
c. One common separation for committed SCFs directed to a subsequent handling case with respective state residue directed to a mixed states case.

Note: Separations for committed SCFs may be located on the mixed states case or on a case dedicated for contiguous SCF service distribution.
d. Where only one contiguous state SCF is involved and density does not justify a dedicated separation, the cost of providing a dedicated separation relative to reprocessing the entire state should be evaluated.
523.5 Case densities and diagrams should be analyzed to assure that the highest density separations are made along with other required separations, and that the central core is in accordance with 215.2

# CHAPTER 6 DETERMINATION PROCEDURES 

## 610 RECOMMENDATION

It is recommended that major processing centers make density determinations using computer-assisted procedures; i.e., CASEDEN, CAS, etc. Information about these procedures can be obtained from MSCs, District Offices, or Regional Headquarters. Smaller offices with access to computers should also consider use of computer-assisted procedures.

## 620 CASE DIAGRAMS

621 Case diagrams are graphic representations of a case, indicating the physical arrangement of the separations. Each separation is normally identified by the ZIP Code and possibly the name of the destination. Form 1620, Arrangement of Separations on Distribution Cares, is designed for use in documenting case diagrams.

622 Time values vary for each type of distribution due to differing reading requirements. Time values increase as distance to cells located farther from the center of the case increases. This is an important consideration in developing case diagrams, especially the core.

## 630 CASE DENSITIES

## 631 GENERAL

The portion of total mail distributed to any given case separation, expressed as a percentage of the total mail, is known as the density of that separation. By definition, the total of all densities on a case equals 100.0 percent. Densities will naturally vary for each separation in a case. In order to develop an effective case diagram, it is important to use current, accurate density data.

## 632 DEVELOPING CASE DIAGRAM

The lowest overall distribution time for a case is obtained by progressively assigning the separations with the highest densities to the holes having the lowest distribution time. However, it is impractical to arrange the entire case in this manner, since such a diagram would be quite difficult to learn. It should have a recognizably logical pattern to help distributors learn the case. Furthermore, most separations in a case have densities low enough that the relative positions on the case do not appreciably affect the distribution time for the overall case. Generally, for types of distribution based upon ZIP Code, the most effective case diagram is obtained by arranging the case according to ZIP Code sequence while utilizing a central core containing separations with the greatest volume. Case densities and the backup data for the densities are very useful to Quality Control and Industrial Engineering personnel. Accordingly, copies of the densities, with backup, should be maintained in a file that is easily accessible.

## 633 UPDATING DENSITY VALUES

To provide assurance that density values represent current conditions, update the values:
a. At least once every six months, consistent with MOD requirements, and
b. Any time there is known to be an appreciable shift in the pattern of distribution.

## 640 PRIMARY LETTER OPERATIONS

## 641 COMBINATION OUTGOING/INCOMING

For combination outgoing/incoming primary operations, major offices generally use 77 -separation cases with a
central core. The case diagram should ordinarily be based on numerical ZIP Code sequence, except for the central core of high density separations.

## 642 INCOMING

For an incoming primary operation, a 77 -cell case is recommended as standard practice. However, if the number of separations are 49 or less, a standard 49-cell case may be used. A double core concept is recommended for incoming primary case diagrams. Generally, delivery units and five-digit box sections account for $70-85 \%$ of the mail. The outer core should consist of:
a. All delivery units and box sections, ZIP sequenced, plus
b. Any holdouts having densities equal to or greater than any of the delivery units or box section separations.

## 643 HOLDOUTS

These dense holdouts may be grouped together in a "block," or may be interspersed with the outer core separations in ZIP Code sequence. This core should be located centrally in the case, with the remaining holdouts located on the outer edges and on the wing, if used. Within this outer core, an inner core consisting of the highest density separations is recommended. Exhibit 235.3 shows an example of such a case diagram.

## 650 SECONDARY LETTER OPERATIONS

## 651 OUTGOING

Outgoing secondary operations have several categories of distribution based upon destination of the mailResidue States, State Scheme Case, Managed Mail, SCF, Foreign Letter. A core should be provided on outgoing secondary cases when density determination procedures indicate a core is warranted.

## 652 INCOMING

652.1 The case diagrams of a particular delivery unit contains separations for each of the carrier routes in the unit, for firm and/or building holdouts which are separated because of high volumes, for lobby box sections, and for miscellaneous separations (nixies, missents, main office boxes, postage due, etc.).
662.2 Case diagrams for incoming secondary units should be developed using several considerations:
a. Establish a uniform system in which carrier route numbers are assigned sequentially to case holes in all secondary units. This reduces both the mental adjustment required and the possibility of missorts when distributors work in more than one secondary unit. Also, the initial learning of the case diagram by new distributors is simplified. (See Exhibit 652.2a.)
b. Make the diagrams for letter mail cases compatible, insofar as possible, with those for incoming secondary flat mail cases (normally six rows high). This can eliminate confusion when distributors are transferred between letter and flats units. This can best be accomplished by placing separations for firms across the top row of letter cases. (See Exhibit 652.2b.)
c. The numbering system for carrier routes should allow for the addition of new carrier routes without disrupting the case diagram. The top-to-bottom, left-toright arrangement is recommended.

## 660 FLAT MAIL OPERATIONS

661 The configuration of flats cases is not as standardized as that for letter cases. Most flat cases are only six rows high and include a range of from 24 to 42 separations.

662 Because of the wide variation in the size and weight of individual flats, densities should always be predicated on actual count. Take extreme care to assure that separations with the highest volume are included on the primary flats cases.


Exhibit 652.2a

## Comparison Between Incoming Secondary Letter and Flats Case Letter Case - ZIP Code Area 94579

| Singer <br> Mach. | Roos <br> Bros. | Mack <br> Truck | McNalley <br> Foods | Peterson <br> Tractor | City <br> Hall | Oscar <br> Meyer |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Carrier <br> 1 | Carrier <br> 7 | Carrier <br> 13 | Carrier <br> 19 | Carrier <br> 25 | Carrier <br> 31 |  |
| Carrier <br> 2 | Carrier <br> 8 | Carrier <br> 14 | Carrier <br> 20 | Carrier <br> 26 |  |  |
| Carrier <br> 3 | Carrier <br> 9 | Carrier <br> 15 | Carrier <br> 21 |  |  |  |
| Carrier <br> 4 | Carrier <br> 10 | Carrier <br> 16 |  |  |  |  |
| Carrier <br> 5 | Carrier <br> 11 | Carrier <br> 17 |  |  |  |  |
| Carrier <br> 6 | Carrier <br> 12 |  |  |  |  |  |

Flat Case - ZIP Code Area 94579

| Carrier <br> 1 | Carrier <br> 7 | Carrier <br> 13 | Carrier <br> 19 | Carrier <br> 25 |
| :---: | :---: | :---: | :---: | :---: |
| Carrier <br> 2 | Carrier <br> 8 | Carrier <br> 14 | Carrier <br> 20 |  |
| Carrier <br> 3 | Carrier <br> 9 | Carrier <br> 15 |  |  |
| Carrier <br> 4 | Carrier <br> 10 | Carrier <br> 16 |  |  |
| Carrier <br> 5 | Carrier <br> 11 |  |  |  |
| Carrier <br> 6 |  |  |  |  |

Exhiblt 852.2b

663 On outgoing flats primary cases, include separations for zones of the local city and for major direct cities and states. Generally, secondary state flats cases include the same states separations as the residue state letter cases.

## 670 DENSITY DETERMINATION

## 671 FIRST PIECE HANDLING

Finalizing as much mail as practicable on the first piece handling requires a careful and thorough evaluation of the assignment of the distribution case separations. The key to this evaluation is determining the frequency (or density) of distribution to each separation in terms of a percentage of the total mail distributed to the case. The following procedure is an accurate and reliable method of determining the density of each separation of a case for any type of mail.

## 672 DISTRIBUTION ANALYSIS PROCEDURE-OVERVIEW

Distribution systems analysis consists of the study of current case diagrams in terms of separation density and average daily volume, and the development of new diagrams. Various steps in the procedure are:
a. Base data is obtained regarding the average daily volume, and the mail mix ratio; e.g., \% of stamped, $\%$ of metered, $\%$ of originating, $\%$ of transit.
b. A five-day density test is conducted which encompasses the existing primary and secondary cases. The density data is then analyzed to determine which holdouts qualify for primary and secondary separation.
c. New primary and secondary case arrangements are designed.

## 673 DISTRIBUTION ANALYSIS PROCEDURE-DETAILED

### 673.1 Pre-Density Test Procedures

. 11 Make a written plan for conducting the test. e.g., operations(s), dates and hour spans of tests;
equipment and personnel requirements; test procedures, responsibilities of involved personnel; number of scales, and any other pertinent information. The plan should be informative, but not lengthy.
. 12 For ease in recording, prepare a numbered listing of the existing separations of the case to be tested. See Exhibit 673.12a Include the separation titles or ZIP Codes. Make a separate listing for each day of the test. Each day calculate the sum of each separation and enter it in the appropriate column on Form 4217, Density Test Calculation Worksheet. See Exhibit 673.12b. Once the information is recorded on the Form 4217, it is not necessary to retain the listings.
. 13 Establish the test dates and the mail mix ratio that will be used. Caution--'unusual mail, i.e., mail that is not representative of the normal flow-should be withdrawn from the test.
. 14 Identify and label, as necessary, the cases that will be used in the test. Precautions should be taken to assure that test mail is not withdrawn before being counted.

### 673.2 Conducting the Density Test

. 21 Schedule the test for the tour(s) having the peak or normal working period for the operation(s) being tested.
. 22 Conduct the test over a period of at least 5 consecutive workdays, not subject to unusual or nonrepresentative mails, such as holidays, month ends, elections, etc. The sample size chosen must meet the following criteria:
a. equal to or greater than 10 times the number of scheme items*. and
b. equal to or greater than (1) $10 \%$ of the total expected mail volume for the 5 -day test period, 0 : (2) 14,000 pieces, whichever is less.
*The number of scheme items are determined by your local schemes office.

Example:
A. 1,000 scheme items x 10 \# 10,000
B. 250,000 Expected Volume x $10 \%$ \# 25,000 )
C. The greater of A or B not to exceed 14,000 ) pieces

In this example, the sample size would be 14,000 pieces.


Exhibit 673.12a-Density Test Count Sheet


Exhibit 673.12b
. 23 The test should coincide with the normal starting time of the operation and conclude prior to the cutoff time of the operation. Conduct the test on a few selected cases labeled TEST CASE. Each daily test should cover the entire normal working period to assure a true representative mix of mail.
. 24 Closely supervise the sampling, distribution, counting, and calculation tasks to assure that the samples are truly representative and that accuracy is maintained throughout the procedure.
. 25 In order to obtain each day's sample, the sample must be withdrawn at random from the trays of mail entering the operation for distribution. Once the sample size has been determined, $10 \%$ of the trays flowing into the operation should be withdrawn at random. For example, if 1000 trays enter the operation, 100 should be withdrawn. Every 10th tray should be pulled in order to obtain the 100 .
. 26 Take the total sample from those trays. For example, if there are 100 trays to be sampled and the sample size is 2800 pieces ( 14,000 piece sample for 5-days), take 28 letters at random from each tray.
. 27 Have the distribution of the sampled letters done at the same time as the regular distribution in order to avoid delaying mail in any way. An empty distribtuion case in line with the regular operation should be isolated for this purpose. When separations are pulled for dispatch purposes, count and record the letters in each separation.
. 28 If time limitations preclude counting each piece, weigh each separation as it is removed from the case and record it in ounces. Each entry must be separate from the next; i.e.. 16-84-8 equals 36 ounces. Separate sheets shouid be used each day of the test.
. 29 Record weights of a half ounce to a full ounce as full ounces. Take extreme care not to record any piece counts as ounces.

### 673.3 Calculations

. 31 After the 5-day testing has been completed and entries have been made in columns $\mathrm{C}, \mathrm{D}, \mathrm{E}, \mathrm{F}$, and G , of Form 4217, add those 5-day counts and enter the total counts for each separation in Column H.
. 32 To obtain the percentage density for each separation, add the numbers in Column H for all the separations listed to develop a grand total for all 5 days. Divide this total into each separation total listed in Column H and multiply by 100 . List this density percentage in Column J.
. 33 If the optional weighing method is used, the same calculation method can be used to determine percentage densities.
. 34 After the percentage densities have been made for all of the separations, use Column L to list the 24 highest densities in ranking order.

### 673.4 Form 1620.

. 41 Form 1620, Arrangement of Separation on Distribution Care, is a graphic representation of a case indicating the physical arrangement of the separations. A current Form 1620 must be kept on file for each manual distribution operation.
. 42 After completion of the density percentage calculations on Form 4217, a new Form 1620 must be made up with the following information:
a. The heading and ZIP Code(s) of each separation in its proper location.
b. The current density percentage in the lower right corner of each separation.
c. The above must be done whether or not a decision to change the core arrangement has been made. If it is decided to establish or change any separations, then another Form 1620 must be made reflecting the proposed change.

## CHAPTER 7 CORE CONSTRUCTION

## 710 LETTER CASE CORE SIZE

## 711 GENERAL

Normally, cores are formed in rectangular blocks to differentiate the core area from the non-core area. These blocks should be comprised of $3,6,9,12,16,20$, or 24 separations for letter cases. Determine the size of the core by starting with the smallest core and determining if the additional separations required for the next larger sized core significantly increase productivity. A particular core size is determined when the next sized core no longer significantly increases productivity.

## 712 CORE DENSITY

Exhibit 712 indicates the minimum core density required to justify the smallest core ( 3 holes). Exhibit 712 also shows the minimum density that the additional separations must contain in order to improve productivity sufficiently to justify an increase in the core size.

## 713 DETERMINING CORE SIZE

Following is an example of how to determine the core size of a 77-bin letter case:
a. Obtain a reliable density for each separation. Number the top densities in sequence from 1 to 24 ; e.g.:

| No. | Density (\%) |  |
| :---: | :---: | :---: |
| 1 |  | 6.99 |
| 2 | 6.13 |  |
| 3 | 5.64 |  |
| 4 | 4.29 |  |
| 5 | 4.00 |  |
| 6 |  | 3.61 |
| 7 | 2.90 |  |
| 24 | 1.23 |  |

b. Add the densities of Nos. 1, 2, and 3. $(6.99+$ $6.13+5.64)=18.76 \%$. Since this is larger than $8 \%$ (from Figure B-1), a central core of at least 3 bins is justified.
c. Now add the densities of Nos. 4, 5, and 6. (4.29 $+4.00+3.61)=11.90 \%$. Since this is larger than $5.5 \%$, a minimum central core size of at least six bins is justified.
$d$. If the densities of Nos. 7,8 , and 9 add to $5.5 \%$, a nine bin core is justified. Then add densities of Nos. 10,11 , and 12. A total of $5.0 \%$ justifies a 12-bin core.
$e$. Continue with the testing using the criteria on Exhibit B-2 until the test fails or a core size of 24 is reached. The last successful test is the recommended size of the central core.

Note: The procedure for a 49-hole case is the same, using the table values shown for a 49-hole case.

## 714 BIN ASSIGNMENTS

### 714.1 Assignments In Care by Density

Once the size of the central core has been determined, outline the determined central core in its proper location on a working copy of Form 1620. Enter the name, ZIP Code and density of each of the involved separations in a bin whose accessibility had been proven for that particular density. For example, on the 49, 77, and 98 separation cases (refer to Exhibits 714.1a and 714.1 b .), place densities 1, 2, and 3 in bins \#19, 26, and 33; densities 4, 5 and 6 in bins \#20, 27, and 34; densities 7, 8, and 9 in bins \#18, 25, and 32. Continue until the central core has been filled with the densities which were successful in determining the core size. Now complete the working copy by entering the name, ZIP Code, and densities of the remaining separations on Form 1620 in ZIP Code sequence from top to bottom and left to right.


|  |  | Increase core size as follows if core density Increases by at least the percentage shown: |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Core Size (No. of Separations) |  | From: | To: | From: | To: | From: | To: | From: |  | From: | To: | From: | To: |
|  |  | 3 | 6 | 6 | 9 | 9 | 12 | 12 | 16 | 16 | 20 | 20 | 24 |
| Minimum Core | 77.Hole Case | 5.5\% |  | 5.5\% |  | 5.0\% |  | 5.5\% |  | 7.5\% |  | 6.5\% |  |
| Increments | 49.Hole Case | 7.5\% |  | 7.5\% |  | 6.0\% |  | 8.5\% |  | 9.0\% |  | 8.0\% |  |



Recomended locations of various core sizes on basic letter case 79 or 80. Numbers shown in large blocks indicate applicable core size. Numbers inside the small blocks indicate hole numbers (standard numbering system for identifying case holes).

Exhibit 714.1a-Lattor Case (49 Holes)
ع8-เع-8 'レ-7


Exhlblt 714.1b-Lettor Case (77 Holes)

### 714.2 Assignment in Cure by ZIP Code Sequence

The central core can be arranged in ZIP Code sequence, stating at the upper-left of the core with the lowest ZIP code and proceeding in ZIP code sequence top to bottom, left to right. The advantage of this method is easier learning of the case; however, the highest density bin may not be in the most accessible position.

### 714.3 Adjustments

Review the preliminary design relating the central core to the rest of the case and keeping in mind the following items:

## a. required separations

b. logic of the bin assignments and their relationship to each other for ease of learning.

## 720 FLAT CASE CORE SIZE

## 721 GENERAL

As in letter cores, the cores are formed in rectangular blocks to easily differentiate the core area from the noncore area. The blocks, unlike the letter cores, vary because of the many flat case variations. For instance there are three variations of the 72 separation flat cases, each depending upon the components used. The core blocks are comprised of $2,3,4,6,8,9,12,16$, and 20 separations depending on the flat case configuration. The size of the core should be determined as mentioned in 711 .

## 722 CORE DENSITY

Exhibits 722 (pp,1, 2, and 3) indicate the minimum core densities required to justify the smallest core (either 2 or 3 holes). The exhibits also show the minimum density that the additional separations must contain in order to improve the productivity sufficiently to justify an increase in the core size.

## 723 DETERMINING CORE SIZE

The same methodology presented in Exhibit 673.12a should he applied to determine the core sizes of the various flat case configurations. Each configuration shown in Exhibits 722 (pp. 1. 2 and 3 ) has maximum core sizes. Depending upon the configuration used, find the maximum core size, take the highest densities for the separations up to that maximum core size and list in descending order. From the densities determine that minimum requirements are met and increase the core accordingly, if additional separations are justified.

## 724 BIN ASSIGNMENTS

### 724.1 Completing Form 1620

Once the size of the central core has been determined outline the determined central core in its proper location on a working copy of Form 1620. Enter the name, ZIP Code, and density of each of the involved separations in a bin whose accessibility had been proven for that particular density. Continue until the central core has been filled with the densities which were successful in determining the core size. Now complete the working copy by entering the name, ZIP code, and densities of the remaining separations on Form 1620 in ZIP Code sequence from top to bottom and left to right.

### 724.2 Assignment In Core by ZIP Code Sequence

The central core as mentioned in 714.1 can be arranged in ZIP Code sequence, starting at the upper left of the core with the lowest ZIP Code and proceeding in ZIP Code sequence top to bottom, left to right.

### 724.3 Adjustments

Review the preliminary design relating the central core to the rest of the case and keeping in mind the following items:
a. Required separations
b. Logic of the bin assignments and their relationship to each other for ease of learning.

## Criteria for Flat Case Core

|  | Percentage <br> sum of 3 <br> highest <br> densities is: |
| :--- | :---: |
| Provide case core if: | $12 \%$ |
| 24 Separation Case | $5 \%$ |
| 72 Separation Case |  |

- Case setup has more than one configuration. Refer to Identification Number and Figure for proper density

| No. of Separations | Identification Number | Increase core size as follows if core density increases by at least the percentage shown: |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Core Size (No. of Separations) |  |  |  |  |
|  |  | 2-4 | 4 -6 | 6-8 | 8-16 | 16-20 |
| 24 | Item 134 A <br> (Figure B-9) | 11\% | 10\% | 12\% | - | - |
| 72 | Item 22 <br> (Figure B-10) | 6\% | 5\% | 5\% | 14\% | 9\% |

Exhlblt 722 (p. 1)

## Criteria for Flat Case Core

| No. of Separations | Identification Number | Increase core size as follows if core density increases by at least the percentage shown: |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Core Size (No. of Separations) |  |  |  |
|  |  | 2.4 | 4-6 | 6-12 | $12 \cdot 16$ |
| 28 | Item 21 A <br> (Figure B-11) | 10\% | 9\% | 25\% | 14\% |
| 36 | Item 134 C <br> (Figure B-12) | 7\% | 9\% | 20\% | 15\% |
| 42 | Item 21 B (Figure B-13) | 7\% | 7\% | 17\% | 13\% |
| 56 | Item 21 C <br> (Figure B-14) | 6\% | 6\% | 14\% | 9\% |
| 70 | M21BR21L (Figure B-15) | 6\% | 5\% | 14\% | 9\% |
| 72 | M4ARL4A (Figure B-16) | 5\% | 5\% | 12\% | 8\% |
| 84 | M4CRL4A <br> (Figure B-17) | 4\% | 4\% | 10\% | 8\% |



- Case setup has more than one configuration Refer to Identification Number and Figure for proper density.

Exhibit 722 (p. 2)

## Criteria for Flat Case Core

| Criteria for Flat Case Core |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. of Separations | Identification Number | incre incre | $\begin{aligned} & \text { e size } \\ & \text { at le } \end{aligned}$ | percen | density shown: | Provide case core if: | Percentage sum of 3 highest densities is: |
|  |  | Core Size (No. of Separations) |  |  |  | 30 Separation Case- 42 Separation Case54 Separation Case60 Separation Case• 72 Separation Case78 Separation Case84 Separation Case | 15\% |
|  |  | $3 \cdot 6$ | 6.9 | 9-12 | $12 \cdot 20$ |  | 10\% |
| 30 | Item 134 B (Figure B-18) | 12\% | 12\% | 13\% | - |  | 7\% |
| 42 | Item 134 D <br> (Figure B-19) | 10\% | 9\% | 10\% | 24\% |  | $\begin{aligned} & 6 \% \\ & 6 \% \end{aligned}$ |
| 54 | Item 134 BA (Figure B-20) | 9\% | 6\% | 10\% | - | - Case setup has more than one configuration. Reler to Identification Number and Figure for proper density. |  |
| 60 | Item 134 BB (Figure B-21) | 8\% | 7\% | 8\% | - |  |  |
| 72 | New 40R4B <br> (Figure B-22) | 6\% | 6\% | 8\% | 15\% |  |  |
| 78 | M4BRL4A <br> (Figure B 23) | 6\% | 6\% | 7\% | - |  |  |
| 84 | New 4DR4D (Figure B-24) | 6\% | 5\% | 6\% | 13\% |  |  |

Exhlbtt 722 (p. 3)

## APPENDIX A <br> ABBREVIATIONS AND ACRONYMS

## ABBREVIATIONS AND ACRONYMS

| ADC | Area Distribution Center |
| :--- | :--- |
| AMF | Airport Mail Facility |
| AO | Associate Office |
| BBM | Bulk Business Mail |
| BMC | Bulk Mail Center |
| BX | Box |
| CAS | Case Analysis System |
| CASEDEN | Case Density |
| CQ | Container Quality |
| DIS | Distribution |
| FCM | Firt-Class Mail |
| FSM | Flat Sorting Machine |
| GMF | General Mail Facility |
| GPMC | General Purpose Mail Containers |
| HCR | Highway Contract Route |
| INP | Incoming Primary |
| INS | Incoming Secondary |
| LSM | Letter Sorting Machine |
| MDSQS | Manual Distribution Quality Sort |
| MMP | Managed Mail Program |
| MODS | Management Operating Data System |
| MPC | Mail Processing Center |
| MSC | Management Sectional Center |
| NLMI | National Letter Mail Index |
| NMO | Non-Machinable Outside |
| OGP | Outgoing Primary |
| OGS | Outgoing Secondary |
| PSDS | Postal Source Data System |
| SC | Sectional Center |
| SCF | Sectional Center Facility |
| SDC | State Distribution Center |
| SPFSM | Single Position Flat Sorting Machine |
| USPS | United States Postal Service |
|  |  |

## APPENDIX B GLOSSARY

## GLOSSARY

Accountable. Mail requiring the signature of the addressee upon receipt (certified or registered).

Area Distribution Center (ADC). A mail processing facility that receives and distributes mail under the Managed Mail Program (MMP) destined for specific ZIP Code areas. One of the points within the National MMP distribution network.

Area Distribution Center Area. The area associated with an ADC for which that ADC receives and distributes mail under the managed Mail Program.

Associate Office (AO). An office located within the boundary of its management sectional center area that usually receives and dispatches all classes of mail from and to the MSC post office.

Bulk Business Mail (BBM). That portion of secondclass mail not defined as Preferential Mail and all thirdclass mail.

Bundle (noun). A package. Several pieces of mail tied or bundled together and handled as a single piece.

Bundle (verb). To package or form a bundle by either tying or banding.

Bypass. Metered, permit, and official penalty mail that arrives at the post office faced in trays etc., and does not require preparation before outgoing distribution.

Canceling Machine. Machine that processes mail by canceling stamps and placing postmarks on letters.

Case (noun). Piece of equipment containing boxes (pigeonholes) into which letters, flats, or irregular parcels, are sorted (Also Flat or Letter Case.)

Case (verb). To sort pieces of mail or practice cards into a case.

Case Analysis System (CAS). A computer system used to analyze mail volumes and densities to determine the separation to be made on manual letter and flat cases
and the best arrangement of the separations to ensure maximum productivity.

Case Label. A tag made of heavy paper or cardboard showing post office, state, or ZIP code. It is placed above the case separation or box as a distribution guide. On carrier cases, labels are placed below rather than above the separations. (Also Header)

Check Errors. To note, record, and report errors in mail distribution and dispatch made by other clerks.

City Delivery. Carrier delivery of mail addressed to residences and businesses within an area having a population of 2,500 or more, or more than 750 possible deliveries.

Container. Any shipping or transport item that includes more than one piece of mail in a unit for movement. Includes sacks, pouches, trays, hampers, nutting trucks, a variety of boxes, carts, and aircraft units.

Container Cart. A small 4 -wheeled cart used by city carriers to transport delivery mail, including small parcel post packages, usually on postal property.

Container Pouch. A mail pouch containing several small or lightly loaded pouches and dispatched to the same downstream point for delivery to individual destinations.

Cull. To mechanically or manually remove nonletter mail (small parcels, rolls, odd-shaped material) from letter mail. At the same time the mail may be separated into airmail, special deliveries, small parcels, and flats.

Culling and Facing Conveyor. A mechanized letter-facing conveyor with collection sack shakeout hop per and conveyor belt top for culling, combined with a 2 -channel edger-conveyor feeding to dual stackers.

Cutoff Time. A time set by the unit manager when carriers make a final withdrawal of mail from distribution cases.

Dead Letter. A letter that is or becomes undeliverable, or unmailable, and cannot be returned to the sender.

Dead Letter Branch. Geographically located postal facilities to which undeliverable and unforwardable First-Class mail of obvious value is sent. Unpaid mail without a return address is also sent to these branches.

Diagram. Official plan for labeling letter cases and racks or loading mail in a vehicle, air or rail container.

Direct. A package, pouch, sack, or other container of mail with all pieces addressed to the same delivery unit or post office.

Dis. Short for "distribution at." Used in labeling mail for two or more post offices that receive mail through the office of address.

Dispatch. Mail readied and loaded for transportation.
Dispatch of Value. Day's final outgoing dispatch or dispatch that makes a transportation schedule that meets service standards.

Distributing Unit. The space in airport mail facilities, post offices, stations, and branches where distribution clerks sort mail.

Distribution. Mail sorted by address into machine bins, pigeonbole cases, trays, sacks, or pouches to group pieces with a common destination for transportation to the post office of address.

Dual Address. Addressing using both a street address and post office box number. Place of delivery is address on line immediately above city, state, ZIP Code line.

Dump Up. To empty mail sacks and pouches on a work table or other sorting surface.

Edger-Feeder. A machine receiving called mail that extracts thicks and flats, edges, and automatically feeds letter mail into a facer-canceler.

Edger-Stacker. A machine receiving culled letter mail for edging and stacking, usually for manual feeding into a facer-canceler.

Empty Equipment. All empty sacks, pouches, and other mail holding equipment-

Error. Piece or unit of mail that must be rehandled, as opposed to missent mail actually transported to another office.

Examined Equipment. Empty sacks and pouches that were examined for serviceability and to see that no mail was left in them.

Facer-Canceler (Mark II and M-36). Machines that automatically face letter size mail in the same orientations and cancel stamps. The M-36 processing rate is greater than the Mark II.

Facing Slip. A paper label attached to a package of mail showing the postal unit where the mail is due to be distributed, the class and type of mail, and the country or military APO or FPO.

Firm Direct. Mail to a single addressee that, because of volume justifies a separation on the incoming primary or secondary sortation.

Firm Holdout Service. Customers receiving S0 or more letters per day may pick up their mail at the post office once a day. There is no charge for this service.

First-Class Mail (FM). Letters, post and postal cards, all matter wholly or partially in writing or typewriting, and all matter sealed or otherwise closed against inspection. First-Class Mail is a registered USPS trademark.

Fixed Conveyor. A lift for moving mail from floor to floor or a system of conveyors for an entire post office or parcel post annex.

Flat. A piece of First-or thirdclass mail too large to be distributed in a regular letter case.

General Delivery. Mail to be picked up at post offices. Intended primarily for transients and customers who are not permanently located or who prefer not to use lockboxes. Identification is required.

General Scheme. Pattern of distribution of mail for a state or selection of a state, showing the route or supply by which each post office receives mail.

Holdout. Mail held for special handling and dispatch, and heavy volume businesses.

Incoming. Mail received as opposed to sent out. Processed in one sectional center after partial processing and sorting at another sectional Center. Usually refers to mail for delivery within a city.

Indicia. Imprinted designation used on mail to denote payment of postage.

Killer Bars. Parallel lines extending to the right of the circular postmark that cancel the stamp so it cannot be reused. Killer bars can be part of most standard machine and hand cancellations.

Label (noun). A plated strip of paper placed in label holders (cases) of pouches or sacks showing destination, class or type of mail, office of distribution and routing instructions. Printed singly or in multiples.

Label (verb). To imprint destination, routing, or other information on a label or facing slip. Also to insert labels in the holders of pouches and sacks before dispatch.

Letter Trays. Variety of trays used at letter sorting machines, over conveyor systems, and in place of mail pouches. Used for transporting mail between major mechanized facilities and for originating customer mail. Holds several hundred per tray.

Local. Mail addressed for delivery within the postal area of the office where mailed. Used in customer separation to distinguish between immediate area and out-of-town mail.

Loose Pack Sack. A No. 2 sack for flats, or a No. 3 sack for letters or flats containing untied, faced, and stacked mail for dispatch.

Mail Count. Amount of mail in pieces or pounds that has been sorted or handled.

Mail Handler. An employee who loads, unloads and moves mail, cancels stamps, and performs other duties related to the moving and processing of mail.

Mail Pouch. Bag used for First-Class, registered, and airmail. Also, a special blue and orange pouch used for Express Mail Service.

Mail Sack. Bag used for nonpreferential second-third-, and fourth-class mail, air parcel post, and loose pack mail.

Make Up. To separate and group mail for dispatch.
Managed Mall Tray (MM Tray). Sleeve tray, container that can be stacked. Used to carry letter mail between selected post offices or between a customer's mail room and a designated post office.

Markup. Piece of mail undeliverable as originally addressed. Must be endorsed to show the next address where delivery is to be attempted or other disposition to be made (return to sender, etc.) (Also Central Markup System and Computerized Markup.)

Massing. Combining mail in various separations because of insufficient quantity, time, or space for proper separations.

Metered Mail. Any class of mail with postage printed by a USPS approved meter. The same privileges and conditions apply as to material mailed with stamps.

Miscoded/Miszipped. Mail with an incorrect ZIP Code as part of the delivery address.

Mishandle. To handle mail improperly, causing delay or damage.

Missend. To send or dispatch a piece of mail improperly.

Missent. Mail that has not been dispatched according to official schemes, schedules, or special orders. (Also misdirected).

Mixed City. A dispatch of mail for more than one zone in a city;.

Mixed States. A dispatch of mail for several states.
Mixie. Letter or package not easily deliverable because of incorrect, illegible, or insufficient address. A nixie clerk is one who specializes in handling this mail.

Nonlocal. Outgoing mail.
Nutting Truck. Small wheeled hand truck to move or store small quantities of mail within a postal facility. Named for designer of truck. (Also Platform Truck).

Obvious Value. Third and fourth-class mail undeliverable as addressed, but should not be discarded if it can be forwarded or returned to sender.

Official Mail. Penalty and franked mail authorized by law to be transmitted without prepayment of postage.

Opening Unit. Operational area within a processing facility where pouches, sacks, and containers of mail are opened and prepared for distribution.

Operating Plan. A structured documentation of the processes to be performed, target times to be met, and supervisory responsibilities to be exercised for an office to achieve its processing and service standards.

Originating. Outgoing and local mail.
Outgoing. Mail processed within a sectional center that was not previously processed or sorted. Originating Mail.

Package (noun). The basic unit of bulk mail for mail processing purposes. Usually six or more copies of a second-class publication or 10 or more pieces of thirdclass matter.

Package (verb). To bundle. Also the requirements for preparation of parcels by customers.

Penalty. Official mail of officers of the U.S. Government (except members of Congress) and other specifically authorized officials. The envelope or wrapper bears the words Official Business, mailing agency's name, and statement of fine for unlawful use.

Permit. Mail with printed indicia in lieu of a stamp, showing that postage was prepaid by the sender.

Pigeonhole. Opening in a distribution case.
Postal Card. Blank Card sold by the USPS with a printed or impressed postage stamp.

Post Office (PO). The basic organizational unit of the USPS. Generally, each PO has a specific geographic area for which it has primary responsibility for collection, delivery, and retail operations.

Post Office Branch. Unit of a main post office located outside the corporate limits of the city or town.

Post Office Station. Unit of a main post office located within the corporate limits of the city or town.

Postmark. A cancellation imprint on letters and packages showing the time, date, and post office or sectional center of origin.

Pouch (noun). Mailbag identified by its leather strap locking device. Generally used to transmit mail given First-Class handling.

Pouch (verb). To place letter mail in pouches. Also used to indicate one unit making up a direct pouch labeled to another unit.

Preferential Mail. All mail receiving preferential handling, including Express Mail, airmail, First-Class (includes priority mail), newspapers, time value magazines, and special deliveries. (ALSO HOT MAIL.)

Presort. Preparation by the mailer by grouping pieces in a mailing by ZIP Code or other separation recommended by the USPS to bypass certain postal operations. A USPS trademark.

Presort First-Class Mail (Presort FCM). A subclass of First-Class Mail. Mailers who sort FCM by 5- and 3-digit ZIP Codes earn a discount off the regular rate. To qualify, mailers must have 500 pieces in the mailing and must sort the mail to any 5 -digit ZIP Code when there are 10 or more pieces and then to any 3 -digit ZIP Code when there are 50 or more pieces. Pieces that cannot be sorted by 5 or 3 digit ZIP codes do not qualify for the lower rate but can count toward the 500 -piece requirement.

Primary. The first sorting operation for outgoing or incoming mail.

Primary Case. Case used for the initial sorting of letter mail.

Priority Mail. First-Class Mail weighing more than 12 ounces; principally flats and parcels. Provides faster delivery than parcel post.

Processing. Canceling and sorting mail so it can be sent from a post office. ALL subfunctions that accommodate these two basic steps, including in/offmovement, are part of the processing activity.

PS Label. An identification sticker printed in various sizes, shapes, and colors. In mail processing, labels are applied on all classes of mail, specifying a particular type of handling.

PS Tag. A heavy cardboard printed in various colors attached to a pouch, sack, or tray that provides information on contents, mail makeup, and routing instructions. Provides specific handling information.

Pull. To remove sorted mail from cases (boxes, etc.) and transport to next point of handling. (Also sweep.)

Qualifying Pieces. Pieces which meet all requirements for a presort reduced rate. All pieces must bear the proper presort endorsement.

Quality Control (QC). The control of various mail processing factors to produce a consistent, uniform distribution that conforms to specific standards.

Registered. Added protection for valuable and important mail. Gives evidence of mailing, delivery, and indemnity in case of loss or damage.

Residue. Mail for small offices that have no direct separation space in case or rack.

Residue Case. Case for distributing mail for small offices that are not included in the primary or secondary case.

Rest Bar. A stool with a heavy base, adjustable as to height and angle of seat.

Return. Mail that must be sent in the opposite direction to be dispatched properly. (Also Turnback.)

Return Receipt Card. Card signed by the addressee of a registered, certified, or insured article and returned to the sender.

Revenue Protection. A national program to stop the loss of revenue by identifying and collecting short or unpaid postage and fees, uncancelled stamps, and misclassified mail.

Rewrap Area. The area in which damaged or broken parcels are endorsed and repaired.

Riffle. To quickly thumb through the top of a tray of mail or the side of a bundle of mail by sliding the thumb along the edge.

Sack (noun). A bag with a draw cord and fastener issued by the USPS to transport mail other than FirstClass.

Sack (verb). To place mail in sacks.
Scheme. A systematic plan to guide the effective distribution of mail to destination.

Scheme Knowledge. Proved by testing of an incoming, outgoing, or standpoint scheme.

Secondary. A second mail sorting operation.
Secondary Case. Case used for making separations that cannot be included in the primary case, such as second handling.

Second-Class Mail. Newspapers, magazines, and other periodicals used at stated intervals, and not entered as controlled circulation mail.

Sectional Center (SC). A designated geographic area defined by ZIP Codes. The SC office is used for presort and makeup of certain classes of mails, computation of certain postal charges, distribution and dispatch.

Set Up. To face letters, packages and papers the same direction on the work table to ease sorting into sacks and pouches.

Shakeout. Emptying mail from sacks and pouches.
Shift. Employee's assigned workhours. (also Tour of Duty or Trick.)

Slugs. First- or third-class mail too large to be distributed in a case. Thick pieces manually called from the facing and canceling operation.

Stamp, Postmarking. Device for imprinting city and date on mail and canceling postage.

Strap Out. To place straps or rubber bands around letters and flats, keeping them in delivery sequence.

Third-Class Mail. Usually circulars, printed matter, pamphlets and merchandise weighing less than 16 ounces.

Throwback. Miscased mail that must be returned for distribution.

Throwback Case. A separation case in delivery units for deposit of undeliverable and forwardable letters and flats.

Tieout. To stop sorting letters and flats and tie or band the separations made.

Tracer. Form used to locate delayed or undelivered mail.

Tray CM 4 -wheel cart, sizes 1 and 2 , to transport loaded or empty letter trays.

Tray, Flats. 4 -sided tray, 24-, 21-, and 18 -inch inside lengths, for both mechanized and nonmechanized offices.

Tray, Letter. 3-sided tray, 24-inch inside length, for nonmechanized office; 4 -sided for mechanized office inside size, $24 \times 11 \times 31 / 4$ inches.

Uncoded. Mail on which the sender did not include the correct ZIP Code as part of the delivery address. (Also Unzipped.)

Undeliverable as Addressed (UAA). Mail that cannot be delivered as addressed and must be forwarded, returned to sender, or referred to the dead letter office.

Unique ZIP Code. A ZIP Code assigned to a company, based on the average daily volume of letter-size pieces received, availability of ZIP Code numbers in the postal area, and relative USPS Cost benefits.

Unzipped. Uncoded mail.
Wing case. An extension of the carrier's case protruding at an angle on either side.

Working Pouch. Pouch of First-Class Mail for distribution in the unit of address.

Workroom. The part of an installation where the mail is actually handled, separated, and dispatched.


[^0]:    ${ }^{1}$ Not standard procurement items-referenced in Publication 37, Postal Facilities Planning Data and Equipment Layouts.
    ${ }^{2}$ Local funding, Headquarters procuremet only.

[^1]:    1 Mall from Orig. Mail Prep. is not weighed when processed
    2 Acceptance unit mail can be recorded in PSDS using the plece count from the mailers statement

