



Office of Inspector General | United States Postal Service

## Audit Report

# Air Transportation Distribution and Routing Relabeling Process

Report Number 22-082-R22 | September 12, 2022



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# Highlights

## Background

A distribution and routing (D&R) tag is a self-adhesive barcoded label attached to a handling unit, which is a piece of mail or a sack that contains multiple mail pieces. Proper preparation of handling units includes removing old tags before applying new ones and verifying that tags are accurately formatted and legible.

The U.S. Postal Service is contractually required to pay an additional relabeling fee of [REDACTED] per handling unit for [REDACTED] to replace D&R tags when units arrive at a [REDACTED] facility and tags are missing or illegible. Handling units with unreadable or missing D&R tags are redirected to a designated area where [REDACTED] employees conduct the relabeling process. From fiscal year 2019 to 2021, [REDACTED] created about [REDACTED] D&R tags, and the number of relabeled tags has steadily increased year over year since 2019.

## What We Did

Our objective was to assess the Postal Service's distribution and routing relabeling process at [REDACTED] facilities. To assess the process, we conducted observations and collected D&R tag samples at the [REDACTED], interviewed and solicited information from Postal Service officials, and analyzed D&R tag payment data.

## What We Found

The Postal Service has opportunities to improve D&R tag labeling operations. Mail processing personnel did

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***“Mail processing personnel did not always properly prepare mail for transport on the air transportation network.”***

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not always properly prepare mail for transport on the air transportation network. During site observations at the [REDACTED] the week of May 9, 2022, we collected 520 samples of handling units that required D&R tag relabeling by [REDACTED] due to missing, illegible, or improperly placed tags. Specifically, 42.7 percent of handling units did not have affixed D&R tags, 41.3 percent had multiple D&R tags affixed to the same handling unit, and 16 percent had illegible D&R tags. As a result of improper D&R tag labeling operations, the Postal Service incurred an additional [REDACTED] in fees annually associated with the relabeling of handling units.

## Recommendations

We recommend management develop a plan to reinforce policy requiring employees to detach old D&R tags from handling units, remove sacks without a white landing strip from circulation, identify faulty printed D&R tags, and issue supplemental guidance to reinforce daily functionality checks and routine maintenance for D&R tag printers.

# Transmittal Letter



OFFICE OF INSPECTOR GENERAL  
UNITED STATES POSTAL SERVICE

September 12, 2022

**MEMORANDUM FOR:** MIKE BARBER  
VICE PRESIDENT, PROCESSING AND  
MAINTENANCE OPERATIONS

*Mary K. Lloyd*

**FROM:** Mary Lloyd  
Acting Deputy Assistant Inspector General  
for Mission Operations

**SUBJECT:** Audit Report – Air Transportation Distribution and Routing  
Relabeling Process (Report Number 22-082-R22)

This report presents the results of our audit of Air Transportation Distribution and Routing Relabeling Process.

We appreciate the cooperation and courtesies provided by your staff. If you have any questions or need additional information, please contact Adam Bieda, Director, Transportation, or me at 703-248-2100.

Attachment

cc: Postmaster General  
Corporate Audit Response Management  
Vice President, Logistics

# Results

## Introduction/Objective

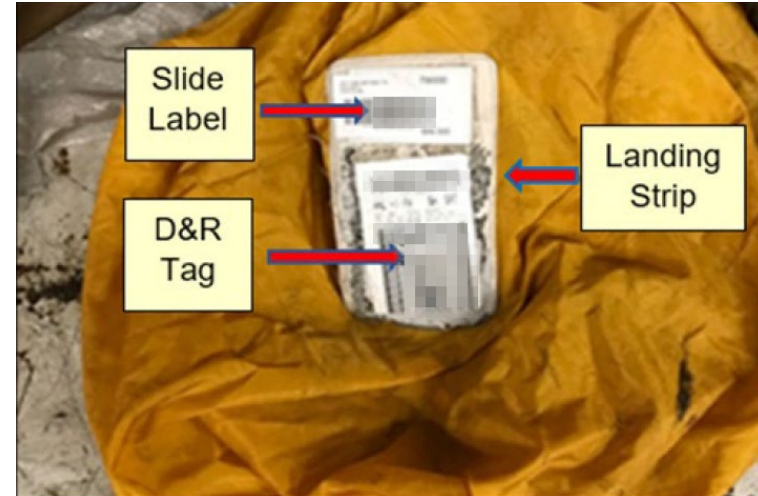
This report presents the results of our self-initiated audit of the U.S. Postal Service's Air Transportation Distribution and Routing (D&R) Relabeling process (Project Number 22-082). Our objective was to assess the Postal Service's D&R relabeling process at [REDACTED] facilities. See [Appendix A](#) for additional information about this audit.

## Background

The Postal Service air transportation network consists of contracted services from [REDACTED] commercial airlines, [REDACTED], supplemental charters, and terminal handling services operations. [REDACTED] performs sorting and scanning mail services, including application of D&R tags, as necessary. A D&R tag is a self-adhesive barcoded label used to dispatch parcels and mail inside containers on air transportation.<sup>1</sup>

The Postal Service generates D&R tags using Transportation SweepSide Assignment<sup>2</sup> and Scan Where You Band<sup>3</sup> printers for assigning handling units.<sup>4</sup> Proper preparation of handling units includes removing all old tags before applying a new D&R tag and the verification of accurately formatted D&R tag barcode labels. In addition, processing plants must ensure that D&R tags are securely placed on a landing strip<sup>5</sup> with a slide label<sup>6</sup> attached, not adhered directly on sacks. Figure 1 illustrates proper application of a D&R tag on a landing strip.

Figure 1. D&R Tag on Landing Strip



Source: USPS HERO training: Tag It Right, Move It Right.

Once at the [REDACTED], handling units are sorted and scanned for proper routing. Handling units with unreadable or missing D&R tags are redirected to a designated area where [REDACTED] personnel conduct the relabeling process. If a D&R tag is not affixed to the handling unit, personnel at the [REDACTED] must rely on the slide label to determine the destination. If a slide label is not present, the handling unit is opened by Postal Service officials onsite to determine the correct destination based on the contents. Handling units with multiple D&R tags are redirected to a designated area where [REDACTED] personnel remove or cover the incorrect tag without relabeling. However, if the tag is not readable, a new D&R tag is created.

<sup>1</sup> Each D&R tag has a unique identification code comprised of the destination ZIP code, mail class, day of the week, and weight.

<sup>2</sup> A device that prints D&R tags immediately where mail is processed.

<sup>3</sup> A device that places a ten-character machine readable D&R tag on a handling unit.

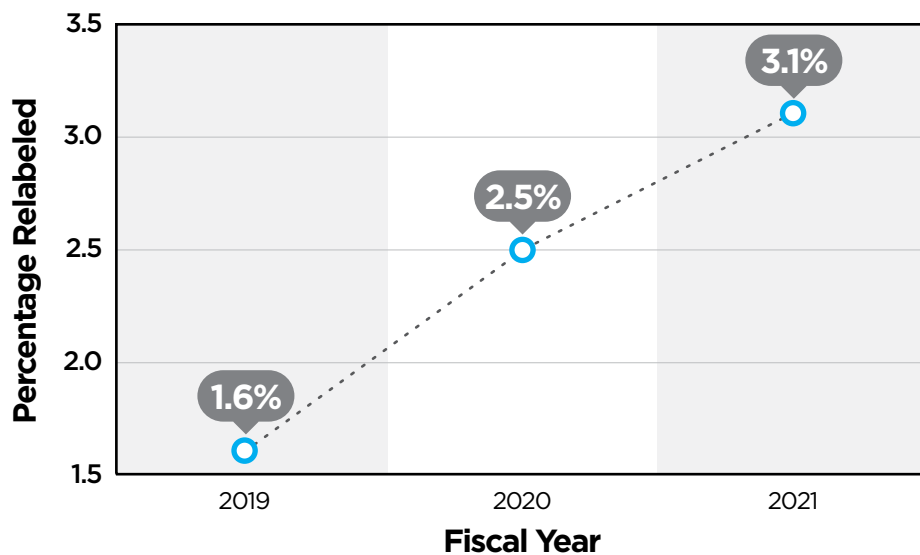
<sup>4</sup> A mailpiece or a receptacle (such as loose sacks, pouches, trays, flat tubs) that contains multiple mailpieces that are individually processed.

<sup>5</sup> A plastic landing patch sown or otherwise attached to the body of the pouch (sack) to accept D&R tags.

<sup>6</sup> Nationally standardized labels provide unique identification of a handling unit using a unique 24-digit barcode and identifies the origin in addition to the destination of each tray, tub, and sack, providing the ability to track the mail throughout the Postal Service network.

The Postal Service is contractually required to pay an additional relabeling fee of [REDACTED] per handling unit to replace D&R tags when they are missing or illegible. From fiscal year (FY) 2019 to 2021, the Postal Service created about [REDACTED] D&R tags, [REDACTED] of which [REDACTED] relabeled. This represents about 2.4 percent of all D&R tags generated. Since FY 2019, the number of relabeled tags has steadily increased (see Figure 2).

**Figure 2. Percentage of D&R Tags Relabeled**



Source: Enterprise Data Warehouse (EDW) - Financial Performance Reporting and Air Network Performance Dashboard in Informed Visibility.

### Finding Summary

The Postal Service has opportunities to improve D&R tag labeling operations. Specifically, mail processing personnel responsible for printing and applying D&R tags did not always ensure that tags were printed correctly, legible, and properly placed on handling units in accordance with policy.

### Finding #1: Improperly Prepared Handling Units

Mail processing personnel did not always properly prepare mail for transport on the air transportation network. During site observations at the [REDACTED] the week of May 9, 2022, we collected 520 samples of handling units that required D&R relabeling by [REDACTED]. We found the handling units had to be relabeled because D&R tags were missing, illegible, or improperly placed on the handling unit.

### Missing Distribution and Routing Tags and Landing Strips

During our observations, we found that 222 of the 520 (42.7 percent) handling units were missing D&R tags or landing strips. Specifically:

- Ninety-one sacks were missing a landing strip;
- Forty-six sacks did not have a D&R tag but had a landing strip; and
- Eighty-five nonmachinable outside pieces<sup>7</sup> were missing a D&R tag.

In Figure 3, the picture on the left is an example of a sack without a D&R tag and the picture on the right shows a sack missing both a D&R tag and landing strip.

**Figure 3. Sacks with Missing D&R Tags**



Source: U.S. Postal Service Office of Inspector General (OIG) photos taken the week of May 9, 2022.

<sup>7</sup> A category of mail that cannot be processed on present mechanization due to physical characteristics not compatible with respective machine design capabilities.

According to Postal Service policy, D&R tags need to be securely placed on the landing strip and not directly on the sack. The policy states not to use sacks missing the landing strip, and old D&R tags must be removed before affixing a new one.<sup>8</sup> Further, a nonmachinable outside piece is required to have an active D&R tag.

### Multiple Distribution and Routing Tags

We observed that 215 of the 520 (41.3 percent) handling units had multiple D&R tags affixed (see Figure 4). Postal Service policy requires employees to remove or completely cover all old D&R tags before attaching a new D&R tag. If a tag cannot be removed, the employee should make a vertical line using a black magic marker from top to bottom or cover the old tag with a blank tag.<sup>9</sup>

**Figure 4. Overlapping Multiple D&R Tags**



Source: OIG photos taken the week of May 9, 2022.

### Illegible Distribution and Routing Tags

We also observed that 83 of 520 (16 percent) handling units had illegible D&R tags. Specifically:

- Twenty-nine were unreadable because tags were creased, wrinkled, or applied on an area of the handling unit that did not allow for proper scanning;

- Eighteen had barcodes with missing lines or were out of alignment; and
- Thirty-six were ripped, torn, or damaged.

In Figure 5, the picture on the left illustrates a D&R tag with white lines through the barcode and the picture on the right shows a misaligned D&R tag barcode.

**Figure 5. Illegible D&R Tags**



Source: OIG photos taken the week of May 9, 2022.

Postal Service policy states that the originating processing facility should not dispatch mail without properly formatted and barcoded labels.<sup>10</sup> Additionally, the Postal Service policy regarding the Scan Where You Band printer provides guidance on daily functionality checks,<sup>11</sup> maintenance instructions to ensure the printer is ready to process mail after a maintenance window,<sup>12</sup> and corrective actions for the most common printing issues and examples of acceptable and faulty D&R tags.<sup>13</sup>

These handling units had to be relabeled because Postal Service employees were not sufficiently trained on the proper placement of D&R tags, removal of old tags, identification of faulty printed tags, and discontinuation of sacks without landing strips that prevent D&R tags from detaching. Based on the sample of handling units we collected, we identified the top 10 origin processing and

<sup>8</sup> Processing Operations Management Order Number POMO-016-17, dated November 29, 2017.

<sup>9</sup> Processing Operations Management Order Number POMO-006-19, dated August 8, 2019.

<sup>10</sup> *Postal Operations Manual*, Section 45 – 451, dated April 30, 2022.

<sup>11</sup> Manual Scan Where You Band – Daily Functionality Verification from Blue Pages, National Operations Control Center, section Machines and Maintenance.

<sup>12</sup> Maintenance Management Order: MMO-041-20 Manual Scan Where You Band Ready to Process Checklist, Section 2.0, dated April 7, 2020.

<sup>13</sup> Maintenance Management Order: MMO-012-09 Dispatch and Routing Labels (D&R Labels) for Scan Where You Band system, dated January 12, 2009.

distribution centers (P&DC) with the highest number of improperly prepared handling units. Postal Service management at those facilities stated they provide on-the-job training on applying D&R tags. However, management at only four of the 10 facilities stated that they provide information service talks<sup>14</sup> and none of the facility managers provide formal training (see Table 1).

**Table 1. Training for Employees at the Originating Processing Facilities**

Origin Processing Facility	Service Talks	Formal Training
[REDACTED]		
[REDACTED]		
[REDACTED]		
[REDACTED]	X	
[REDACTED]		
[REDACTED]	X	
[REDACTED]	X	
[REDACTED]		
[REDACTED]	X	
[REDACTED]		
<b>Total</b>	<b>4</b>	<b>0</b>

Source: OIG analysis of Postal Service's Transportation Optimization Planning and Scheduling data and discussions with Postal Service management at specific facilities.

<sup>14</sup> Service talks are conducted to inform employees on how to perform routine tasks in compliance with Postal Service policies.

<sup>15</sup> Electronic Maintenance Activity Reporting and Scheduling system reports preventative maintenance using a red, yellow, and green status alert. Completion percentages 95 percent or above are indicated as green, 90 to 95 percent as yellow, and 90 percent and below as red.

In addition, Postal Service management did not ensure that daily functionality verifications and routine maintenance were conducted on Scan Where You Band printers to confirm tags were printed correctly. Preventative maintenance should be performed daily to keep machine error rates low. From FYs 2019 to 2021, the national average for preventative maintenance was 86.4 percent, with 76 of 238 (31.9 percent) mail processing facilities falling below the national average. Based on the Postal Service's preventive maintenance completion rate range, we found that 118 of 238 (49.6 percent) mail processing facilities nationwide were above 95 percent.<sup>15</sup> However, 86 of the 238 (36.1 percent) facilities were below the 90 percent completion rate (see Table 2).

**Table 2. Preventative Maintenance from FY 2019 to 2021**

Completion Rate	Number of Sites	Completion Percentage
>95%	118	49.6%
90% to 95%	34	14.3%
<90%	86	36.1%
<b>Total</b>	<b>238</b>	

Source: OIG analysis of Electronic Maintenance Activity Reporting and Scheduling.

As a result of improper D&R tag labeling operations, the Postal Service incurred an additional [REDACTED] in fees associated with the relabeling of handling units during FYs 2020 to 2021. Additionally, relabeling D&R tags increases the risk of mail being delayed, which could harm the Postal Service's brand and public image.



### Recommendation #1

We recommend the **Vice President, Processing and Maintenance Operations**, develop a plan to increase service talks or formal training that reinforces policy requiring employees to detach old Distribution and Routing tags from handling units, remove sacks without a white landing strip from circulation, and identify faulty printed Distribution and Routing tags.

### Recommendation #2

We recommend the **Vice President, Processing and Maintenance Operations**, identify facilities that are not consistently completing preventative maintenance and issue supplemental guidance to reinforce daily functionality checks and routine maintenance for Scan Where You Band printers to minimize legibility issues with Distribution and Routing tags.

## Management's Comments

Management did not fully agree with the finding but agreed with the recommendations and monetary impact. See [Appendix B](#) for management's comments in their entirety.

Management disagreed that handling units had to be relabeled because employees were not sufficiently trained. Regarding training, management stated it was unclear which facility managers were interviewed and disagreed formal training wasn't provided since the report noted there was on-the-job training and service talks on the D&R tag process.

Additionally, management stated tags are applied in a fast-paced environment and the human eye cannot always discern if the barcode is readable. Further, management stated the audit did not report that maintenance completion rates were generally favorable during the COVID pandemic even though there were staffing shortages. Management also disagreed that relabeling handling units increases the risk of mail being delayed.

Regarding recommendation 1, management stated even though the percentage of D&R tags relabeled was small, improvements can be made to reduce handling costs. Management stated it will reissue the existing Stand-Up talks to reinforce policy. The target implementation date is November 30, 2022.

Regarding recommendation 2, management stated they will identify and monitor for three months sites where routine maintenance was conducted less than 90

percent of the time in FY 2022 for Scan Where You Band printers. The target implementation date is January 31, 2023.

## Evaluation of Management's Comments

The OIG considers management's comments responsive to the recommendations in the report.

Regarding management's disagreement with employees not sufficiently trained, the Plant Managers, Manager In-Plant Support, and Maintenance Operations managers at 10 facilities we interviewed said they provided on-the-job training but did not provide formal training related to the D&R tag process. In addition, management at four of the 10 facilities stated they provided service talks on the D&R tag process. However, during our observations, we found 42.7 percent of the sampled handling units were missing D&R tags or landing strips and 41.3 percent of the handling units had multiple D&R tags. Postal Service policy states D&R tags need to be securely placed on the landing strip and employees must remove or completely cover all old D&R tags before attaching a new one. While the human eye cannot always discern if the barcode is readable, employees are required to frequently check to ensure quality D&R tags are being produced.

Regarding management's disagreement with routine maintenance on Scan Where You Band printers, we did not review impacts of staffing shortages due to the COVID pandemic. However, preventative maintenance should be performed daily to keep machine error rates low. From FYs 2019 to 2021, 31.9 percent of the mail processing facilities fell below the national average of 86.4 percent.

Regarding management's disagreement that relabeling D&R tags increases the risk of delays, when handling units are relabeled, the mail must be handled more and by multiple people, which could increase the risk that the mail will not be delivered timely.

All recommendations require OIG concurrence before closure. Consequently, the OIG requests written confirmation when corrective actions are completed. All recommendations should not be closed in the Postal Service's follow-up tracking system until the OIG provides written confirmation that the recommendations can be closed.

# Appendices

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# Appendix A: Additional Information

## Scope and Methodology

The scope of this audit was the Postal Service's D&R relabeling process at [REDACTED] facilities from FY 2019 to 2021. To accomplish our objective, we:

- Identified and reviewed the [REDACTED] air contract to determine D&R requirements and contractual obligations.
- Interviewed relevant postal Air Transportation Operations officials to gain an understanding of the relabeling process and requirements.
- Reviewed and analyzed FY 2019 through 2021 air network cost data, including cost data associated with [REDACTED].
- Reviewed Postal Service's and [REDACTED] reconciliation of relabel costs and payment.
- Determined whether service performance was affected as a result of D&R relabeling.
- Conducted onsite observations at the [REDACTED] to observe the relabeling process and determine the reasons for relabeling.
- Analyzed the top origin processing plants with the most handling units that required relabeling.
- Obtained, analyzed, and trended FY 2019 through 2021 D&R tag creation data to identify [REDACTED] with the highest number of relabeling handling units.
- Evaluated the impact of the COVID-19 pandemic on relabeling.

We conducted this performance audit from March through September 2022 in accordance with generally accepted government auditing standards and included such tests of internal controls as we considered necessary under the circumstances. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objective. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objective. We discussed our observations and conclusions with management on August 16, 2022, and included their comments where appropriate.

We assessed the reliability of data in the EDW, Air Network Performance Dashboard in Informed Visibility, Electronic Maintenance Activity Reporting, and Scheduling and the Transportation Optimization Planning and Scheduling system by interviewing knowledgeable agency officials; reviewing related documentation; testing for completeness by recalculating the data; and comparing it to other related data. We determined that the data were sufficiently reliable for the purposes of this report.

## Prior Audit Coverage

The OIG did not identify prior audits or reviews related to the objective of this audit within the last five years.

# Appendix B: Management's Comments

MARIE L. BARDER  
VICE PRESIDENT  
PROCESSING AND MAINTENANCE OPERATIONS



September 1, 2022

JOHN CIHOTA  
DIRECTOR, AUDIT SERVICES

SUBJECT: Management Response: Air Transportation Distribution and Routing  
Relabeling Process (Report Number 22-082-DRAFT)

Thank you for providing the Postal Service an opportunity to review and comment on the findings and recommendations contained in the draft audit report, *Air Transportation Distribution and Routing Relabeling Process*.

Management disagrees with the finding that handling units had to be relabeled because Postal Service employees were not sufficiently trained. A small percentage of the total number of Distribution and Routing (D&R) tags applied are improperly applied or unreadable. The tags are applied in a fast-paced environment to meet dispatches and ensure timely delivery of the mail. The human eye cannot always discern the difference between a tag that is readable and one that is not. The audit states that not all "management" questioned stated that they provide "information service talks", but it is unclear which managers were questioned and in what operations. The audit also reported that none of the facility managers "provide formal training" but reports on-the-job training and informational service talks.

The audit states that management did not ensure that daily functionality verifications and routine maintenance were conducted on Scan Where You Band printers to confirm tags were printed correctly, but fails to report that the maintenance completion rates were generally favorable given the staffing shortages caused by the COVID pandemic during much of the sampling period. Management also disagrees with the statement that relabeling D&R tags increases the risk of mail being delayed. There is no causal evidence in the audit that supports this statement. The relabeling procedures are designed to mitigate the risk of delays.

Management agrees with the factual statements in the monetary impact document.

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**Recommendation [1]:**

We recommend the **Vice President, Processing and Maintenance Operations**, develop a plan to increase service talks or formal training that reinforces policy requiring employees to detach old Distribution and Routing tags from handling units, remove sacks without a white landing strip from circulation, and identify faulty printed Distribution and Routing tags.

**Management Response/Action Plan:**

Management agrees that, even though the "Percentage of D&R Tags Relabeled" only averaged about 2.4 percent of all D&R tags generated from 2019 - 2021, improvements can reduce handling costs. USPS will reissue the existing Stand-Up Talks that reinforce policy.

**Target Implementation Date:** 11/30/22

**Responsible Official:** Sr. Director, Strategic Planning & Implementation

**Recommendation [2]:**

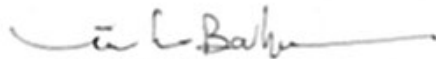
We recommend the **Vice President, Processing and Maintenance Operations**, identify facilities that are not consistently completing preventative maintenance and issue supplemental guidance to reinforce daily functionality checks and routine maintenance for Scan Where You Band printers to minimize legibility issues with Distribution and Routing tags.

**Management Response/Action Plan:**

Management agrees with this recommendation. Sites with a Scan Where You Band printer maintenance completion rate of less than 90% in Fiscal Year 2022 will be identified and reminders will be issued. The identified sites will be monitored for three months to ensure compliance.

**Target Implementation Date:** 01/31/23

**Responsible Official:** Sr. Director, Maintenance Operations



Mike L. Barber

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