## MASS Technical Guide



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## Purpose

MASS ${ }^{\text {TM }}$ certification is a process designed for certification for Multiline Optical Character Readers (MLOCRs), Remote Video Encoding (RVE), Local Video Encoding (LVE), and encoding stations.

MASS is an extension of the CASS ${ }^{\text {TM }}$ system. The MASS certification cycle is designed to evaluate the ability of MLOCRs and encoding stations to process address information and apply an accurate Intelligent Mail Barcode ${ }^{\circledR}$ to a mailpiece. The MASS certification cycle is compromised of the following phases:

1. Software manufacturer certification
2. Hardware manufacturer certification
3. User certification

## Overview

All MASS tests are like CASS Stage II tests in that the performance of address matching software and barcode application hardware is evaluated after it has processed a test file. If the required accuracy is achieved, MASS certification is issued.

MASS certification qualifies mailers using MLOCRs and encoding stations to print ZIP+4/DPV confirmed address barcodes on mailpieces submitted for mailing at automation rates. Each required certification period, customers must apply for MASS certification and meet the accuracy requirement to remain certified and avoid interrupted service to their customers.

## Certification of CASS Cycle O

Cycle O testing will only be required for MASS Manufacturers for the certification requirement cycle. Manufacturers will be required to test all models and configurations of the machines that they will support for Cycle O.

## Certification Requirements

The Licensing and Certification Department understands that waiting for MASS ${ }^{\text {TM }}$ certification is often impractical and costly for customers who purchase new systems and have legitimate reasons for wanting to operate them immediately. New systems and systems that are moved to a different address, relocated within the facility, upgraded, or reassembled also require certification. Recertification is required when a system was previously certified within the current cycle.

The Licensing and Certification Department provides a 45-day courtesy period for new, moved or relocated, upgraded, and reassembled systems. The 45-day courtesy is granted when
written notification is received within seven days of the installation date. The MASS Order form is the preferred method of notification. Test decks should be ordered in a timely manner. The installation date must be included on the MASS Order Form because the date is used to calculate the courtesy period. The Licensing and Certification Department will provide an email after the MASS Order Form has been processed. The email will include the status of the courtesy period for each system.

Customers may then use the system to produce and submit mail and qualify for automation rates. If a problem with the newly installed system occurs, customers must notify the Licensing and Licensing and Certification Department in writing so the courtesy period can be adjusted.

Certification must be achieved by the 45-day courtesy expiration date or adjusted courtesy date to avoid the system from becoming ineligible to submit mail at automation rates. If the system becomes ineligible for automation rates an email will be sent to the customer to verify the status of the machine.

Failure to notify the Licensing and Certification Department will result in notification to the Business Mail Entry manager that the machine is not certified and not eligible for automation discounts.

## Recertification

Recertification is required when a machine has been certified within the current certification cycle for the following reasons.

## Equipment Providers

- address matching software and operating system changes utilized by the MLOCR is changed or updated.
- Providers are required to certify the new software version or operating system on one of their machine models before the new software or operating system can be released to their customers.
- Customers will not be required to test the new address matching software updates or operating system changes.


## Customers

- New machines
- Camera changes (i.e., SBR to LMT, ESP to ESS)
- Model changes
- Hybrid system changes from one manufacturer to another
- Any movement to a different address, or relocation within the facility
- Reassembled machines


## Change of Ownership: End User

When an MLOCR or encoding station is sold or ownership is transferred, the new owner must notify the Licensing and Certification Department in writing via email to cassman.ncsc@usps.gov. The notification must include the following:

- Equipment model number, serial number, and MASS ID
- Previous owner's name and address
- New owner's name, address phone number, and FAX number

If the machine is not upgraded, physically moved to a new address, or relocated within the existing facility, the new owner may request a certification letter for the equipment in writing. Machines that are upgraded, physically moved to a new address, or relocated within the facility must be recertified by the new owner.

## Change of Ownership: Manufacturer

Manufacturers who enter into a purchase agreement with a customer to enhance or upgrade a machine that is currently supported by another manufacturer must provide a Letter of Agreement from both parties to the Licensing and Certification Department. This is known as a hybrid system.

The Licensing and Certification Department will not assign MASS IDs or process orders for any hybrid system requests for certification unless the Letter of Agreement is received from both parties.

## Hardware and Software Revisions, Upgrades, and Patches

When an MLOCR or encoding station software developer or manufacturer issues a revision, upgrade, or patch to existing address matching software or hardware, the manufacturer must submit written notification to the Licensing and Certification Department before distributing the software or hardware. The written notification must include a brief description of the changes being made and the expected results of those changes. The Licensing and Certification Department will evaluate the documentation and determine an appropriate course of action which may include recertification of the software or equipment by the manufacturer. It is possible that no action will be taken following notification.

## Fees

MASS Certification (initial test) No Charge

MASS Retesting - See Price List (Notice 123) the Address Management Systems (AMS) section.

Billing procedures are coordinated with our Accounts Receivable Department. All certification test fees are payable within 30 days of the billing date.

## The MASS Process

## Certification

A ZIP + 4 can only be assigned when the primary number $\mathrm{DPV®}$ confirms with a confirmation code of Y, S, or D. When an address does not DPV confirm (DPV confirmation code N ) software can only return the 5-digit ZIP Code.

## Manufacturers

Manufacturers must notify the Licensing and Certification Departments of their intent to become MASS certified by providing a list or matrix that includes machine models, configurations, software name, version number, and the manufacturer MASS identifier codes that will be certified during the current CASS cycle.

Manufacturers can test the highest speed of a specific model unless a new machine is being introduced. Each new model and individual configuration must be tested.

Manufacturers must provide detailed information when introducing a new machine. This will help the Licensing and Certification Department identify the classification of the machine (i.e., MLOCR or Encoder).

The following information should be provided along with a picture of the machine.

- Speed or throughput
- Flats, MLOCR, or encoder
- Software and software version number that will be used on the machine
- Configuration or camera type


## Hardware Manufacturers Certification

Requesting manufacturer certification ensures that the company will be listed as a hardware provider in USPS ${ }^{\circledR}$ documents and on PostalPro ${ }^{\text {TM }}$ in the Products Guide at https://postalpro.usps.com/cass/MLOCRHardwareManufacturers CurrentCycle. The CASS software that will be used on each representative machine must be CASS certified before a MASS test deck can be ordered.

1. Provide a matrix of all machines that will be used by your customers to the Licensing and Certification Department. Please include every machine that is sold or used by your
company, so we are aware of all machines your company supports. The matrix will include the CASS software and version numbers that is used on each machine model.
2. Complete an Electronic Product Fulfillment Web Access Request Form (PS Form 5116) if one is not on file. The form allows us to setup an internet account that will be used to return MASS test results and mail images. We will also provide customer reports via the EPF website.
3. Complete the Manufacturers Terms and Conditions Document (Terms and Conditions document for MASS ${ }^{\text {TM }}$ Manufacturers | PostalPro (usps.com) and a MASS order form MASS ${ }^{\text {TM }}$ Order Form | PostalPro (usps.com) for each machine that requires certification for the new certification requirement period.
4. Process the test deck with static data provided by your CASS software provider on a representative model of the MLOCR or encoding station and return the answer file, required imagine files that are flagged with asterisks and a copy of the CASS Summary Report (PS Form 3553) via EPF. All CASS developers, MASS ${ }^{\text {TM }}$ manufacturers and end users are required to provide a hardcopy of the PS Form 3553 for evaluation to ensure the facsimile meets USPS ${ }^{\circledR}$ standards.

The images that must be returned can be

- Uploaded to EPF
- Or mailed to:

MASS CERTIFICATION
ADDRESSING \& GEOSPATIAL TECHNOLOGY
UNITED STATES POSTAL SERVICE
225 N HUMPHREYS BLVD STE 501
MEMPHIS TN 38188-1001
Only the mail pieces that are flagged with asterisks and culled pieces* should be returned to Addressing \& Geospatial Technology (AGT).
*Machines that cannot spray a LACS ${ }^{\text {Link®, }}$, Suite ${ }^{\text {Link® }}$ or change of address must cull those mailpieces out of the test deck and return them to the NCSC.
5. When certification is achieved, the Licensing and Certification Department issues a certification letter.
6. When applicable, the Accounting Department at Addressing \& Geospatial Technology (AGT) will mail all invoices. All certification test fees are payable within 30 days of the billing date.

## Remote Video Encoding/Local Video Encoding

If an MLOCR is used to capture mailpiece images or to apply Intelligent Mail Barcodes (IMb ${ }^{\text {TM }}$ ), the MLOCR must be MASS certified before RVE and LVE system certification can be attempted.

## RVE System Certification with MLOCR

Deck 1 MLOCR should be tested and certified before attempting the RVE test. Deck 2 RVE test deck is processed entirely to the remote coding via Remote Characte Recognition (RCR) or RVE/LVE. The MLOCR coding must be deactivated durin this part of the test.

The MLOCR and RVE/LVE order forms are combined. Complete only those sections that apply to your certification.

1. The manufacturer must order a separate test deck for each MLOCR or encoding station via the MASS Order Form. Existing networked machines can be tested in groups of four. Any new encode must be tested as a standalone for the first certification.
2. The manufacturer processes the test deck and returns it to AGT for evaluation.
3. When the manufacturer passes certification, AGT issues a MASS Certification Letter.

## NCOALink® MPE

The MASS test decks will include mailpieces that will test MPE systems. A passing score of $95 \%$ must be achieved to pass the MPE or Cloud portion of the test. If the MPE audit fails, the MASS Department will inform the Licensing Department to put that MLOCR in recertification mode.

## Grading Scenarios

| MASS | MPE | Result |
| :---: | :---: | :--- |
| Pass | Pass | MASS Certified |
| Pass | Fail | Notification sent to Licensing Department to put machine in a <br> recertification mode. |
| Fail | Fail | Customer will be sent a new MASS test deck that includes <br> forwardable pieces. Notification sent to Licensing Department to <br> put machine in a recertification mode. |
| Fail | Pass | Customer will be sent a new MASS test deck that includes <br> forwardable pieces. |

## Intelligent Mail® Barcode

- Set Barcode ID to "00"
- Set Service Type to any valid 3-digit Service Type Identifier (STID)
- Mailer ID can be 6 or 9 digits but cannot be all zeroes. The same Mailer ID must be sprayed on all mailpieces.
- Serial number can be 6 or 9 digits, cannot be all zeroes. A unique serial number must be sprayed on each mailpiece.


## Note: Failure to adhere to these requirements will result in failure of the MASS test.

When an $\mathrm{IMb}^{\text {TM }}$ exists in the address block and a second IMb exists in the barcode clear zone, the IMb in the clear zone will be read as the barcode answer because it is physically lower on the mailpiece.

For flats testing, the barcode answer can be returned above the address block, within an area 4.75 inches from the right edge and 3.25 inches from the top of the mailpiece, or in the barcode clear zone.

## User Certification

Customers must provide correct machine models, serial numbers and configurations on the MASS Order Form and the PS Form 3553. If no changes have been made since the last certification, the information should be the same except for the software and version number which will be different for each required certification period. Contact the machine manufacturer if there is a question about the machine information.

Postal representatives are not required to witness a MASS test. Tests should be administered by the staff of the machine owner not the equipment manufacturer.

A checklist of items pertaining to the test and a MLOCR Customer Information sheet that lists the test deck number (Customer Number), model, serial number, software name, version number and the MASS ID for the machine will be included in the test deck. These forms are for the customers use and do not have to be returned with the test results.

1. Complete an Electronic Product Fulfillment Web Access Request Form (EPF001) if one is not on file for MASS File Upload. An internet account is setup that will be used to return MASS test results and mail images.

The EPF form is available online at Electronic Product Fulfillment Web Access Request Form (PS Form 5116).
2. A separate test deck must be ordered for each machine via the MASS Order Form that is available in this document and online at MASS ${ }^{\text {TM }}$ Order Form | PostalPro (usps.com).
3. A MASS End Users Terms and Conditions document is required for the first certification for each location for the required certification cycle. The document is located online at Terms and Conditions document for MASS ${ }^{\text {TM }}$ End-Users | PostalPro (usps.com).

Customers will not receive test decks until the machine manufacturer has completed certification and authorizes the USPS to release test decks for their machine types.
4. All tests must be processed with static data to avoid failure of the MASS test. The PS Form 3553 must reflect the correct software name and version number. It is the customers' responsibility to ensure the correct software is installed before testing.

Process the test deck with static data provided by your equipment provider on a representative model of the MLOCR or encoding station. When a machine identifier is sprayed, customers must spray an " $X$ " as the first character of the machine identifier. This identifies static data was used when the test deck was processed.
5. *Machines that cannot spray a LACS ${ }^{\text {Link® }}$, Suite ${ }^{\text {Link® }}$ or change of address must cull those mailpieces out of the test deck and return them to AGT.
6. Return the answer file, required imagine files that are flagged with asterisks and a copy of the CASS Summary Report (PS Form 3553) via EPF. All MASS ${ }^{\text {TM }}$ end users are required to provide a hardcopy of the PS Form 3553 for evaluation to ensure the facsimile meets USPS ${ }^{\circledR}$ standards.

The images that must be returned can be

- Uploaded to EPF
- Sent as an email attachment in a ZIPped file
- Or mailed to:

MASS CERTIFICATION
ADDRESSING \& GEOSPATIAL TECHNOLOGY
UNITED STATES POSTAL SERVICE
225 N HUMPHREYS BLVD STE 501
MEMPHIS TN 38188-1001
Only the mail pieces that are flagged with asterisks and culled pieces* should be returned to Addressing \& Geospatial Technology(AGT).
7. The USPS will make every attempt to return test results within ten business days. All tests are processed in the order they are received. We cannot complete the review of the test deck until all mailpiece images and culled mailpieces are received. This may delay test results.
8. The Licensing and Certification Department will provide test results via email notification. If a test fails, a report with the test score and errors will be sent and a new test deck will be shipped.
9. When certification is achieved, the Licensing and Certification Department issues a certification letter.
10. When applicable, the USPS Accounting Department at Addressing \& Geospatial Technology (AGT) will mail all invoices. All certification test fees are payable within 30 days of the billing date.

## Test Deck Specifications

MASS $^{\text {TM }}$ test decks are designed to exercise MLOCR and encoding station address-matching software look-up capabilities emulating the CASS ${ }^{\text {TM }}$ Stage files. The input addresses represent the same type and approximated mix of CASS Stage files.

All MLOCR test decks will contain 2,000 test mailpieces, while all encoding station test decks contain 350 mailpieces.

Each test mailpiece consists of one piece of $81 / 2$ inch white, 20-pound paper folded and inserted into a 24 -pound, white-woven, $53 / 4 \times 9$ inches window envelope. The envelope has two windows - one upper and one lower. The upper window measure $11 / 4 \times 4$ inches and is located $3 / 8$ inch from the left edge and $311 / 16$ inches from the bottom edge. The bottom window measure $13 / 8$ x $41 / 2$ inches and is located $21 / 6$ inches from the left edge and $11 / 16$ inch from the bottom edge.

Data elements internal to the Postal Service are printed on the insert and appear in the upper window. These elements identify the specific deck to which any test mailpiece belongs, the customer tracking number, and the exact question key number appearing on the mailpiece. The key number is also the file name that will be returned via the Electronic Product Fulfillment (EPF) answer file (i.e., A00421EH.DAT).

When the return address block contains asterisks and is shaded, these mailpieces must be returned as image files via EPF or mail (i.e., A00421EH_\#\#.TIF). The test address appears in the lower window. Inside the window is an Intelligent Mail Barcode which contains the NCSC IMb test key and when applicable an 11-digit routing code that indicates the mailpiece image that has to be returned to the NCSC as a .TIF file.

## Test Deck Processing Procedures

MASS test decks must be processed with static test data that is provided by the equipment manufacturer along with the cycle software. MLOCRs must print " $X$ " as the first character of the machine identifier. This indicates that static data was used to process the test deck.

Note: Failure to use static test data will result in test failure. Tests should be administered by the staff of the machine owner not the equipment manufacturer.

All MASS certification tests must be conducted in a "normal operations" state, meaning the systems must be configured as it would be when it is used to produce live mail for automation discounts with MPE or Cloud in the active mode.

If LACS ${ }^{\text {Link® }}$, or a change of address is not sprayed on the appropriate mailpieces, the grader will assume these interfaces were not operational and the records will be graded as incorrect unless the mailpieces are culled out and returned as a .TIF image file. The Suite ${ }^{\text {Link }}$ address is not required on the mailpieces but should be present in the IMB that sprayed.

For more information, contact the Licensing and Certification Department at 800-642-2914 or email cassman.ncsc@usps.gov.

## MASS Electronic File Layout

| Field <br> Sequence <br> Number | Field <br> Description | Length <br> Position From/ <br> Through |  |  |
| :---: | :--- | :---: | :---: | :---: |
| 1 | NCSC IMb |  |  |  |
| 2 | Filler | 31 | 001 | 031 |
| 3 | Customer Answer | 01 | 032 | 032 |
| 4 | Filler | 31 | 033 | 063 |
| 5 | MASS Identifier | 01 | 064 | 064 |
| 6 | Filler | 07 | 065 | 071 |
| 7 | $5-$ Digit ZIP Code | 01 | 072 | 072 |
| 8 | Filler | 05 | 073 | 077 |
| 9 | MASS Text Answer | 01 | 078 | 078 |
| 10 | Filler | 42 | 079 | 120 |

## Sample Test Mailpiece with Answer

A9800786 01962OEBQ
**********

#  

JOHN DOE
2111 REYNOLDS LN APT 1
LOUISVILLE KY 40218-2653

AXXXMP3 40218


## Test Element Definitions

## NCSC IMb ${ }^{\text {TM }}$

Located in the address block above the input address contains a Barcode ID, Service Type ID, Mailer ID, serial number, and 5-digit ZIP Code. If the mailpiece image should be returned an 11- digit routing code, 99999999999 will also be included in the IMb.

## Customer Answer

Customer answer to test address must contain all elements of IMb returned on the mailpiece. Customer may substitute their own Service Type ID, Mailer ID, and unique serial number for each mailpiece.

If the mailpiece is rejected, or the machine does not return a 5-digit ZIP Code, the Customer Answer field and 5-digit ZIP Code field can be blank. However, the NCSC IMb should be returned.

## MASS Identifier

Seven-character machine identifier. The first character should be an " $X$ " to indicate static test data was used to process the test deck.

## 5 Digit ZIP Code

The 5-digit ZIP Code sprayed on the mailpiece answer.

## MASS Text Answer

The address that matches the Intelligent Mail® Barcode that was sprayed for the LACS ${ }^{\text {Link } ® \text {, }}$ Suite ${ }^{\text {Link®, }}$, or change of address answer.

## Instructions to access the EPF website to upload files

To Upload MASS test files using the EPF application, go to https://epfup.usps.gov/up/upload.html.

Please check the following items before the files are uploaded.
The filenames must be correct for the grading system to be able to pick up the files. The grading system does not recognize any other naming convention.

- The answer filename is located on the mailpieces and ends with a DAT extension (i.e., A0123456.DAT). A record for every mailpiece in the test deck must be included in the answer file.
- The image files should include all of the shaded mailpieces and/or LACS ${ }^{\text {Link® }}$ and Suite ${ }^{\text {Link® }}$ mailpieces that you cannot spray the new or corrected address (i.e., A0123456EN_01.TIF, A0123456EN_02.TIF, etc.). If you choose to send one ZIPped file, the .ZIP extension should be renamed to .TIF (i.e., A0123456_01.TIF).
- The CASS Summary Report (PS Form 3553) should be returned with the extension PDF (i.e., A0123456.PDF). If you receive an error message, the PDF file can be attached to an email and sent to cassman.ncsc@usps.gov.

Login using the email address and password that was setup on the https://epf.usps.gov site.
Select File Type: MASS File Upload
Browse for test files on your system
It is recommended that you upload the files in the following order. If the filenames are not correct, we cannot pick up the files from the EPF website.

- Test answer file (i.e., A0123456.DAT).
- Images files for shaded mailpieces and/or LACS ${ }^{\text {Link® }}$ and Suite ${ }^{\text {Link® }}$ mailpieces (i.e., A0123456EN_01.TIF, A0123456EN_02.TIF, etc.).
- The CASS Summary Report (PS Form 3553) (i.e., A0123456.PDF).

Click on: Upload File to NCSC

## MASS Grading

A passing score of $98.5 \%$ must be achieved and the following requirements must be met on all test decks to attain MASS certification.

1. Cannot exceed the maximum allowed for incorrectly coded Perfect Address.
2. Cannot code to a Fatal Add-on (not allowed). Automatic test failure.
3. Cannot exceed the maximum allows for incorrectly coded DPBC.
4. Cannot exceed the $1 \%$ tolerance on the 3553 counts.
5. CASS Summary Report (PS Form 3553) must be signed, dated, complete and accurate.
6. DPV False Positive see records (if found), must be reported to

DSF2STOP@USPS.GOV. Separate emails must be sent for each test deck.
7. The Licensing and Certification Department will provide test results via email notification. If a test fails, a report with the test score and errors will be sent and a new test deck will be shipped
8. When certification is achieved, the Licensing and Certification Department issues a certification letter.
9. When applicable, the USPS Accounting Department at the National Customer Support Center (NCSC) will mail all invoices. All certification test fees are payable within 30 days of the billing date.

## MASS Order Form



I request that my certification be maintained in U.S. Postal Service ${ }^{\circledR}$ documents and records as:Service Bureau
$\square$ Mailer
ManufacturerI do not wish to be listed in U.S. Postal Service pubs.

## Equipment Information

All MLOCR machines connected to an MPE or Cloud MPE system MUST process the MASS test deck with MPE mode turned on.
Check here if this machine is connected to an MPE server.
Check here if this machine uses a Cloud-based solution.
$\square$ Cloud
Is this machine capable of reading an Address Block IMb? $\quad \square$ yes $\square$ no
Is this machine capable of printing a LACSLin®® converted address and Suite ${ }^{\text {Linke }}$ appended address? $\quad \square$ yes $\quad \square$ no

## User Acknowledgement Statement

I hereby certify that all information on this application is accurate and correct. I also certify that the responses provided on the MASS certification test deck will be obtained using the same configuration as used in the processing of customer/client address files and that any modification to the products used to process this test will require retesting and recertification prior to use or release. The MASS test deck will be processed in-house with company-owned or leased software/hardware. I further certify that this address-matching product contains technology that disables access to outdated U.S. Postal Service data as stated in the $D M M^{\circledR}$ 602.9.
CASS/MASS certification scores are confidential information and the applicant agrees not to disclose scores achieved on their passing test for the purpose of marketing their software or hardware product.

| Company Official Contact Signature Required Field |  | Date | Required Field |
| :---: | :---: | :---: | :---: |
| Return Order Form To | AGT Use Only |  |  |
| MASS DEPARTMENT ADDRESSING \& GEOSPATIAL TECHNOLOGY UNITED STATES POSTAL SERVICE 225 N HUMPHREYS BLVD STE 501 MEMPHIS TN 38188-1001 | Customer Number |  |  |
|  | Date |  |  |
|  | PRDT Code |  |  |
| Phone: 800-642-2914 Fax: 650-577-2509 |  |  |  |

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Note: This page may be copied for multiple MLOCR systems. A completed form must be submitted for each MLOCR system.

## Type of MASS ${ }^{\text {TM }}$ Test

Indicate the type of MASS test requested.
$\square$ MLOCREncoder
$\square$ Flats

Type of Certification
Indicate the type of certification requested.

Installation date (Not required for Renewal Certiication.)Renewal CertificationNew CertificationUpgraded $\square$ Reassembled — $\square$ Hybrid/Conversion (hybrid letters required)

If the new machine is replacing an existing machine, list the model and serial number of the old machine.

## Model

$\qquad$
$\qquad$
$\qquad$

| MLOCR |  |  |  |
| :---: | :---: | :---: | :---: |
| CASS Software Product | Version Number | Configuration | MASS/MPE ID |
| Equipment Manufacturer | Model Number | Serial Number |  |
| Encoding Stations |  |  |  |
| CASS Software Product | Version Number | Configuration | MASS/MPE ID |
| Equipment Manufacturer | Model Number | Serial Number |  |
| *List all serial numbers for networked systems and indicate which one is the server (4 stations for test deck). |  |  |  |
| Change of Ownership |  |  |  |
| Equipment Model Number |  | Serial Number | MASS ID |

Previous Owner's Name

Previous Owner's Address

If the machine is not physically relocated, a new MASS certiicate may be issued. If the machine is physically relocated, the customer must follow the machine relocation guidelines.

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This form is used to create a Web-based account with the Addressing \& Geospatial Technology (AGT) which will be used to download files electronically from the Electronic Product Fulfillment (EPF) website. Multiple users within a single organization can download the product(s), excluding AIS Viewer; however, each user must have a separate EPF account.
Please allow 24 hours from receipt of payment before notification of product availability.

\begin{tabular}{|c|c|c|}
\hline AIS Products \& BMA Products \& Licensing/Certification Products \\
\hline \begin{tabular}{ll}
\(\square\) Carrier Route national \& \(\square\) Z4Change \\
\(\square\) Carrier Route by state \& \(\square\) ZIP +4 national \\
\(\square\) City State \& \(\square\) ZIP +4 by state \\
\(\square\) Delivery Statistics \& \(\square\) ZIPMove \\
\(\square\) eLOT \({ }^{\text {® }}\) national \& \(\square\) AIS Viewer \\
\(\square\) eLOT by state \& \multicolumn{1}{c}{ CDS Products } \\
\(\square\) Five-Digit \& \(\square\) Bi-Monthly \\
\(\square\) RDI \({ }^{\text {TM }}\) \& \(\square\) Weekly \\
\(\quad\) AEC Products \& \multicolumn{1}{c}{ GIS } \\
\(\square\) AEC / AECII \& \(\square\) Post Office Location \\
\& \(\square\) Blue Collection Box Location
\end{tabular} \& \begin{tabular}{l}
MAC Batch
PAVE \\
Other Products
Labeling Lists
National Zone Charts
County Project

\end{tabular} \& ACS (acct. \# _)

$\qquad$
AMS API
CASS $^{\text {Tw }} /$ MASS $^{\text {TM }}$ (cust \# $\qquad$
DPV ${ }^{\text {® }}$
DSF ${ }^{\text {® }}$
NCOA ${ }^{\text {Linke }}$
LACSLinke
Suite ${ }^{\text {Link }}$ (
Other (Specify): <br>
\hline Customer Information \& \& <br>
\hline Name \& Email Address \& <br>
\hline Company Name \& Telephone Numb \& (include area code) <br>
\hline Business Address \& Corporate HQ Lo \& tion (if different from your Business Address) <br>
\hline \multicolumn{3}{|l|}{Customer Computer Access Authorization} <br>
\hline \multicolumn{3}{|l|}{User Responsibility Agreement Statement: I am responsible for Logon/Logoff, all actions pertaining to the use of my assigned logon ID, and will not provide my logon ID to another person. I agree that access to computer data or files not authorized to me is prohibited. I understand my logon ID may be suspended indefinitely if I violate security procedures or fail to provide updated information for the information listed above whenever I change job positions. I agree that misuse of a USPS ${ }^{\circledR}$ computer system may result in disciplinary action and/or criminal prosecution. I understand that any detected misuse of a computer system will be reported to the Inspection Service.} <br>
\hline
\end{tabular}

| Requester's Signature | Date |
| :--- | :--- |
| Manager Responsibility Agreement Statement: I agree that this logon ID will be used for authorized USPS work within the scope |  |
| of my organization. I also agree that upon termination or transfer of the user, I will advise the Computer Systems Security Officer in |  |
| writing as to the disposition of the computer files and/or data and logon ID. I will periodically review the use of the assigned logon ID |  |
| and computer files and/or data. |  |


| Name | Date |
| :--- | :--- |
| Signature | Telephone Number (include area code) |
| Support and Return Information | USPS Use Only |
| If you have any questions regarding this Web access request form, please contact <br> support at 800-331-5747 or devsupport.ncsc@usps.gov; otherwise, mail or fax this <br> completed form to: <br>  <br> ADDRESS QUALITY PROGRAMS <br> ADDRESSING \& GEOSPATIAL TECHNOLOGY <br> UNITED STATES POSTAL SERVICE |  |
| 225 N HUMPHREYS BLVD STE 501 |  |
| MEMPHIS TN 38188-1001 |  |
| FAX: 901-681-4582 |  |

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## Appendix 1: PS Form 3553 CASS-Summary Report

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This form may be generated as the output of address matching processing using CASS Certified ${ }^{T n}$ software in conjunction with current USPS ${ }^{\circledR}$ address database files. Any facsimile must contain the same information in the same format as the printed form.
See $D M^{\circledR}$ Section 602 for more information.


## D. Mailer

I certify that the mailing submitted with this form has been coded (as indicated above) using CASS Certified software meeting all of the requirements listed in the DMM Section 602.

1. Mailer's Signature $\quad$ 2. Date Signed
2. Name and Address of Mailer

## E. Qualitative Statistical Summary (QSS)

For informational Purposes Only: QSS is solely made available for the list processor's review and analysis. This information is not to be considered by the U.S. Postal Service ${ }^{\circledR}$ personnel in determining rate eligibility under any circumstances. See reverse for a detailed explanation.

| High Rise Default | High Rise Exact | RR Default | RR Exact | LACSLink® | EWS | SuiteLink® |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Privacy Notice: For information regarding our Privacy Policy, visit USPS.COM ${ }^{\circledR}$.

## Instructions

## Software

A1.1, 1.4, 1.7, \& A2.1 - Company Name: Enter the name for each kind of software as it appears on the CASS ${ }^{\text {TM } / M A S S ~}{ }^{\text {TM }}$ certificate.
A1.2, 1.5, 1.8, \& A2.2 - Software Name and Version: Enter name and version for each kind of software as it appears on the CASS/MASS certificate.
A1.3, 1.6, 1.9, \& A2.3 - Configuration: Enter the specific software configuration parameter settings as it appears on the CASS/MASS certificate.
A2.4-MLOCR: Enter the MLOCR Serial Number as it appears on the MASS Certificate.
NOTE: If information entered in this section represents the list processing of more than one certified company, attach a list of company names, software names and versions, as well as the configuration to code the address information used in the mailing.

## B. List

1. List Processor's Name: Enter the company name that coded the address list(s) and/or performed ZIP $+4^{\circledR} / \mathrm{DPV}^{\circledR}$ confirmation using CASS Certified ${ }^{\text {TM }}$ software. Attach a list if additional space is required.
2. Date List Processed: Enter the processing date for each list. If multiple lists, enter the oldest date from the list.
3. Date of Database Product Used: Enter the version date of each database package used for processing. If multiple lists, enter the oldest version date from the lists.
4. List Name or ID No.: Print the name or identification number of the address list. If more than one list is used, leave blank. If the identification number is used, the number MUST be preceded by "ID\#"
5. Number of Lists: Enter the number of lists used to produce the mailing.
6. Total Records Submitted for Processing: Enter the total number of address records (from all lists in item B5) submitted at the time the list(s) was coded.

## C. Output

1. Total Coded:

Enter the total number coded.
2. Validation Period: Coding must be done using a product release that is within the USPS Product Cycle, as provided in the table below:

| Product Name | From Date | To Date |
| :---: | :--- | :--- |
| ZIP + 4 / DPV Confirmed | The date the file was processed, which is 10-15 days before the <br> Product (Publish) Date and no later than the file Expiration Date (last <br> permissible use date). | Last day of the month following the Expiration Date (last <br> permissible use date) of the Date of Database Product used <br> (identified in Section B.3). |
|  | The date the file was processed, which is 10-15 days before the <br> ZIP + 4, Carrier Route Product Publish Date and no later than the | 180 days after the Expiration Date (last permissible use date) <br> of the Product Date used. NOTE: This is different than the <br> other dates. This one is calculated, not hard-coded. |
| Five-Digit Coded |  |  | ZIP + 4, Carrier Route Product Expiration Date (last permissible use date) or 180 days before the Five-Digit ZIP product file date.

The date the file was processed, which is 10-15 days before the Product (Publish) Date and no later than the file Expiration Date (last permissible use date).

The date the file was processed, which is 10-15 days before the Product (Publish) Date and no later than the file Expiration Date (last permissible use date).

| Release Date <br> (Posted) | Product Date | Required Use Date | Expiration Date <br> (Last permissible use date) | Last Permissible Mailing Date |
| :--- | :--- | :--- | :--- | :--- |

1. Signature: Signature of individual who processed the list, or the mailer's representative.
2. Date Signed: Enter the date this form is signed.
3. Name \& Address of Mailer: Enter the name and address of the individual whose signature appears in item D1.

## E. Qualitative Statistical Summary (QSS)

This information allows mailers and list processors to evaluate the quality of their address list processed through CASS software before its contents enter the mailstream. Although these addresses remain eligible for postal automation rate discounts, significant number of Highrise default/rural route default matches increases the costs and reduces the efficient delivery of this mail. Mailers should research to obtain secondary unit designator address information or highrise addresses and specific box number information for rural route addresses which are coded to default records on the National ZIP + 4 File.

## Highrise Default/RR Default

Entries in this box show the number of addresses that were default matched. Defaults are matches made to addresses that contain invalid/missing secondary address or box information. A highrise default contains the building street address in the primary range field and spaces in the secondary range field. A rural route default contains the route number in the primary name but also has spaces in the primary address range.

## LACS ${ }^{\text {Linke }}$ System

Entries in this box show the number of addresses which have been converted through the LACS ${ }^{\text {Link }}$ process. LACS ${ }^{\text {Link }}$ is a data product provided by the Postal Service to allow addresses that have been converted due to addresses that have been renamed or renumbered, or for 911 emergency systems to be linked with their new address.

## Early Warning System (EWS)

Entries in this box show the number of addresses on the processed address list that are new addresses not in the current U.S. Postal Service ${ }^{\circledR}$ ZIP +4 File. These addresses are however, valid addresses as formatted and should not be changed in any way since the U.S Postal Service will assign ZIP +4 's to these addresses on the next monthly ZIP +4 File.

## Suite ${ }^{\text {Link® }}$ System

Entries in this box show the number of ZIP+4/DPV confirmed addresses that matched to a highrise default, and the Suite ${ }^{\text {Link }}$ process returned the appropriate suite number. Only Suite ${ }^{\text {Link }}$ enabled software will return a value in this box (Check with your software vendor for obtaining this option). These address records are valid delivery points by the U.S. Postal Service. Addresses that are not confirmed by DPV are either new addresses not available on the current Delivery Sequence File, or are not valid and the list holder should further investigate to determine the accuracy of these addresses. Mailers should make every effort to ensure the quality of their address list(s).

## Appendix 2: Test-Mailpiece Examples

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Test Mailpiece Example


## Identifier/Rate Code

The Identifier/Rate code consist of seven characters representing the product month, system identifier, manufacturer code and rate markings. All MASS ${ }^{\top \mathrm{M}}$ certified equipment and systems must print the identifier together with the appropriate rate marking on each processed mailpiece bearing a ZIP + 4 Delivery Point Barcode. The NCOA ${ }^{\text {Link }^{\oplus}}$ MPE platform Identifier is printed in place of the MASS Identifier for MASS certified systems NCOA ${ }^{\text {Link }}$ MPE equipped and licensed. The MASS Identifier provides for an audit trail and combined with the NCOA ${ }^{\text {Link }}$ MPE platform, the Identifier signifies whether the mailpiece has met Move Update requirements.



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## Appendix 3:

Translation of Error Codes and Special Flags

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## Customer No Match Record Translation of Error Codes \& Special Flags

All categories except those with asterisks (*) are required. Address matching software must obtain a minimum accuracy rate of $98.5 \%$ in each required category to obtain CASS Certification

| Error Codes |  |
| :---: | :---: |
| 01 5-digit ZIP not match |  |
| 02 ZIP+4 not match |  |
| 03 Carrier ID not match |  |
| 04 City name not match |  |
| 05 State abbreviation not match |  |
| 06 Out of range |  |
| 07 Address is non-deliverable |  |
| 08 Unique ZIP Code not finest level of code |  |
| 09 LACS Indicator |  |
| 10 Perfect Address |  |
| 11 General standardization error |  |
| 12 eLOT sequence |  |
| 13 eLOT A/D code |  |
| 14 RDI |  |
| 15 Fatal Error |  |
| 16 LACSLink Indicator |  |
| 17 LACSLink Return Code |  |
| 18 SuiteLink Return Code |  |
| 19 Incorrect delivery point barcode (Non-Fatal) |  |
| 20 Incorrect delivery point barcode |  |
| 21 PMB |  |
| 22 Default flag error/Record type error |  |
| 30 History |  |
| ! Enhanced Confirm* | P PBSA* |
| A Confirm* | R No Stat RC (\#\#)* |
| B Business* | S Seasonal* |
| C CMRA* | T Throwback* |
| D Drop* | U No Secure Location* |
| E Educational* | V Vacant* |
| F False Positive* | X No Stats* |
| K Drop Count (\#\#\#)* | Y Non-Day Delivery* |
| L LACS* | Z Days (YYYYYYY)* |
| N No Door Delivery* | \# Delivery Type* |

FT Footnote Code

AD Firm Name - Swap firm name and Address field AE Normalized street name
AF Street Name - Spelling variation
AG Firm Name not present - Valid Z4 on input match to firm
A0 5-digit
A1 Dropped 5-digit
A4 5-digit with non-mailing name
A5 Dropped 5-digit with non-mailing name
A8 5-digit misspelled city
*A9 Dropped 5-digit with misspelled city

## Standard Address

(Includes reversed alphanumeric primary/secondary number, reversed pre/post directionals, and secondary number combined with primary

B0 5-Digit
B1 Dropped 5-digit

* B2 5-digit with misspelled street
*B3 Dropped 5-digit with misspelled street
B4 5-digit with non-mailing name
B5 Dropped 5-digit with non-mailing name
* B6 5-digit with misspelled street and non-mailing name
*B7 Dropped 5-digit with misspelled street and non-mailing name B8 5-digit with misspelled city
B9 Dropped 5-digit with misspelled city
BE Normalized street names


## Standard Address with Post-Directional Dropped or Incorrect

CC Post-directional changed to a non-cardinal directional - no match
C0 5-digit
C1 Dropped 5-digit

* C2 5-digit with misspelled street
* C3 Dropped 5-digit with misspelled street

C4 5-digit with non-mailing name
C5 Dropped 5-digit with non-mailing name

* C6 5-digit with misspelled street and non-mailing name
* C7 Dropped 5-digit with misspelled street and non-mailing name

C8 5-digit with misspelled city

* C9 Dropped 5-digit with misspelled city


## Standard Address with Pre-Directional Dropped or Incorrec

DC Pre-directional changed to a non-cardinal directional - no match
D0 5-digit
D1 Dropped 5-digit

* D2 5-digit with misspelled street

D3 Dropped 5-digit with misspelled street
D4 5-digit with non-mailing name
D5 Dropped 5-digit with non-mailing name

* 0 5-digit with misspelled street and non-mailing name
* D7 Dropped 5-digit with misspelled street and non-mailing name

D8 5-digit with misspelled city

* D9 Dropped 5-digit with misspelled city


## Standard Address with Suffix Dropped

E0 5-digit
E1 Dropped 5-digit
E2 5-digit with misspelled stree
E3 Dropped 5-digit with misspelled street
E4 5-digit with non-mailing name
E5 Dropped 5 -digit with non-mailing name

* E6 5-digit with misspelled street and non-mailing name
*E7 Dropped 5-digit with misspelled street \& non-mailing name
E8 5-digit with misspelled city
E9 Dropped 5-digit with misspelled city

F0 Street address
F1 Box record
F2 Dual Address on separate line
F4 Street address with non-mailing name
F8 Street address with misspelled city
F9 Box record with misspelled city

G0 5-digit - Base
G1 5-digit - Alias
G2 Dropped 5-digit - Base
G3 Dropped 5-digit - Alias
G4 5-digit - Out of range
G5 30 character abbreviation alias

## Alias/Multiple Response

**H0 5-digit - Base
**H1 5-digit - Alias

## Small Town Defaul

10 Exist in ZIP+4
**I1 No match in ZIP +4 P\&G records exist
**I2 General delivery match in ZIP+4/G rec only - no match
**13 No match in ZIP +4/City State

## Last Line

JA Input city/ZIP Code correspond; exact match in ZIP Code JB Input city/ZP Code correspond; input city is non-mailing name, exact match in ZIP Code
JC Input city/ZIP Code correspond; inexact match in ZIP Code
JD Input city/ZIP Code don't correspond; inexact match in city
JE Input city equals 5 -digit PLL, ZIP+4 PLL is different
JI Input city/ZIP Code don't' correspond; best candidate is inexact match in finance number, but not in either city or ZIP Code. No Match
JJ Cross State
J0 5-digit
J1 Dropped 5-digit
*J2 5-digit with misspelled street
*J3 Dropped 5-digit with misspelled street
J8 5-digit with misspelled city
J9 Dropped 5-digit with misspelled city
** K0 5-digit
** K1 Dropped 5-digit
** K2 5-digit with misspelled stree
** K3 Dropped 5-digit with misspelled stree
** K4 5-digit with dropped or incorrect component
** K5 Dropped 5-digit and/or incorrect component
** K6 5-digit with dropped/incorrect component \& misspelled street
** K7 Dropped 5-digit and/or incorrect component \& misspelled street
** K8 5-digit with misspelled city
** K9 Dropped 5-digit with misspelled city

## Inexact/Questionable Matching Logic

* L0 5-digit
* L1 Dropped 5-digit


## Key Elements Also Known As

****MA Out of range - no match
MO With 5-digit
M1 Dropped 5-digit
M8 5-digit with misspelled city
M9 Dropped 5-digit with misspelled city
***NDF Position Error
N0 5-digit
N1 Dropped 5-digit

## Extra Information

OA Input contains double secondary. One is valid and the other is a PMB
OB Input contains double "\#". One is valid sec the other is PMB
OC Input contains a sec and"\#". One is valid sec the other is PMB
OD "\#" or valid or invalid sec designator for PBSA
OO 5-digit
O1 Dropped 5-digit
O2 PMB on address line
O3 PMB on secondary address line
O4 Valid Secondary with
O5 PMB number is valid PO Box number - no match
O6 Invalid sec with "\#" sign - default match
O7 Double "\#" signs at the end of address line - invalid
O8 Double "\#" signs at the end of address line, one valid value the other is invalid

## Syndrome

P0 Seattle Syndrome with 5-digit on input
P1 Seattle Syndrome dropped 5-digit on inpu
*** P2 Salt Lake Syndrome with 5-digit on input
*** P3 Salt Lake Syndrome dropped 5-digit on input
P4 Flushing NY Syndrome with 5-digit on input
P5 Flushing NY Syndrome dropped 5-digit on input

## ZIP Correction

R0 Incorrect 5-digit within finance number
R1 Invalid 5-digit
R2 Incorrect 5-digit within finance number and incorrect +4 R4 Incorrect 5-digit within finance number and blank city/state
R5 Incorrect 5-digit not within finance number

## Highrise Default or Delivery Point Alternate

S0 With 5-digit
54 With 5-digit highrise
S5 "Chase the Base" - Delivery point alternate on input, return highrise exact
** S6 With 5-digit highrise multiple

## Hyphenated Ranges

T1 Numeric alpha no match to numeric/numeric alpha exists
T2 Alphanumeric/numeric alpha-transpose to make match
T3 Delete hyphen
T4 Add hyphen
T5 Sec alphanumeric insert hyphen and transpose - default
T6 Add alpha to match to numeric range only
T7 Add double alphas and validate no match to numeric
** T8 Transpose alpha to beginning/no match to numeric range
TA Recombine hyphenated trailing primary alpha with secondary number
TB Recombine non-hyphenated trailing primary alpha with secondary number
TC Recombine hyphenated trailing primary numeric with secondary number
TD Recombine hyphenated trailing alphanumeric/numeric alpha with secondary number
TE Recombine sec values into one - exact match only

## APO/DPO/FPO

UA Bad org info in address line without ZIP Code
UB Out of range records for PSC box numbers
U0 Clean military addresses with 5-digit
U1 Reversed box/PSC number with ZIP Code
U2 Reversed box/PSC number without ZIP Code
U3 Good address/ZIP Code with invalid city name
*** U4 PSC box turned into PO Box with ZIP Code
** U5 Missing PSC, CMR, unit number with good box number U6 Good military address with invalid ZIP Code
U7 Bad org info in Firm Name field with good ZIP Code
U8 Bad org info in Firm Name field without ZIP Code
U9 Bad org info in address line with ZIP Code

## Multiple Finance Number Matching

**W0 Multiple response within finance no. - dropped 5-digit
W1 Single response within finance no - dropped 5-digit W2 Altered street name
W3 No correlation between city and ZIP - Match in ZIP
**W4 City and ZIP Code from different finance numbers
W5 City and state does not agree with ZIP Code - match to ZIP Code
W6 City and ZIP Code agree, state from different finance number

X0 With a firm suite number
X2 With misspelled street
X8 With a firm suite number and misspelled city

## Split/Combined Elements

Y0 Combine pre-directional with street name
Y1 Split pre-directional works off street name
Y2 Drop suffix words off street name
Y3 Drop suffix words off multi-word street name
Y4 Combine suffix with street name
Y5 Combine suffix with street name
*Y6 Invalid street name
*Y7 Street name spelling variations

## ZIPMove

Z0 Valid match in new finance number - match
Z1 Invalid match in ZIPMove - match
Z2 Valid ZIPMove match; invalid in new finance number no match

## Out of Range/Overlapping

**10 Bad PO Box for finance no/ZP
11 Overlapping PO Box ranges/return lowest ZIP+4
**15 Bad rural route for finance no/ZIP
**20 Invalid primary number
21 Invalid secondary number
22 "EWS" no match; input is exact match to EWS record 23 LACSLink
*24 LACSLink no match
25 SuiteLink
26 SuiteLink no match
27 Match to R777 - do not count as valid ZIP+4 on 3553
28 Single Trailing Alpha - DPV w/o trailing alpha
29 Single Trailing Alpha -not allowed to drop trailing alpha because of address pattern
**V0 Contains firm nam
**V1 Contains highrise name

## Delivery Address Line

## Unique ZIP Codes

4A Valid city and ZIP Code
4B Valid city and ZIP Code with valid add-on - match
4C Valid city and ZIP Code - default match
4D Input Unique ZIP Code - can make an exact match in nonunique if no match found in Unique - match
4E No correlation between city and ZIP Code - match to city
**4F No correlation between city and ZIP Code - no match and delete ZIP Code
4G Input address line taken from unique ZIP+4 record, match into non-unique unless there is an exact match in a unique
4H No input ZIP can make exact match to unique - firm name only 4I Valid city and ZIP Code with invalid add-on - retain ZIP+4 4 J Input ZIP+4 with add-on "0000" or invalid "9999" do return the input +4 . If no match is found, delete the input +4 .

## Puerto Rico

**5A Missing noise URB - end address/multiple with valid or invalid URB
5B Drop or abbreviate leading suffix
5C Alpha or numeric - end address
5D Numeric house number - end address preceded by "\#", "No", or "Num"
5E Alphanumeric house number - end address preceded by "Blq
5F Alphanumeric house number - begin/end address space alphanumeric
5G Alphanumeric house number - begin/end address hyphen alphanumeric
5H Hyphen house number "Blq", "Casa" and "\#"
**5J Address contains standalone word "Buzon" - no normalization
5K No URB input - Match to address with blank URB
51 No URB input - single response
**52 No URB input - multiple response
53 Valid URB on input - single response with valid/invalid URB
**54 Valid URB on input - multiple response with valid/invalid URB
55 Missing noise URB - single response with valid/invalid URB
**56 Missing noise URB - multiple response with valid/invalid URB
57 Valid URB end address-single response with valid or invalid URB
*58 Valid URB end address - multiple response with valid or invalid URB
59 Missing URB noise end address - single valid/invalid URB

## Magnet Streets with Multiple Parse Variations

**6E Parsed street name or ZIP+4 street name contains directiona or suffix
6F Variation in directional or suffix presentation
6G Suffix or directional dropped
6H Street name incorrectly split into multiple words
6K Trailing numeric/alpha value following a valid suffix

## Multiple Address Lines and Perfect Addresses

7A Address line split between two lines
7B Multiple field addresses with split indicia
7C TDPS
*7D Informed Addressing
70 Perfect Address

* No answer will be bypassed
** Return input record unless using DPV to break a tie
*** No grading for standardization
**** Normalization required


## Appendix 4:

## Customer Statistics Report

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# This sample is for MASS only testing. 

```
SPS 7-2467
```

EPORT CI! 030P 1
U.S. POSTAL SERVICE - CODING ACCURACY SUPPORT SYSTEH NATIONAL CUSTOMER SUPPORT CENTER
EPORT CI! 030P 1
CUSTOMER STATISTICS

OATE, 11/05/2008
HHE, 20:24:27
PAGE: 1

CtJSTOHER f.AHE: USPS
FASTFORW GUST:

| ClJSTOHER ID: | oor,; noKAV |
| :--- | :--- |
| SERII $\backslash \mathrm{L}:$ | 1234567 |
| [P ASSIGNED: | $\mathbf{X X X}$ |
| IO RETURNED: | XXX |
| I11 llARCODE: | YES |



[^0]FINAL SCORE (HtNIHUH 98.SX):


## This sample includes MPE results.

DATE: OS/OU2010
rltli,: ;/0: ! l.CZ PAGE:

| CUS10MER NA11E. USPS | CUS10NER !D: | 004210AAX |
| :---: | :---: | :---: |
| l'AS1FOR\I CUST. F | S"E.RLfl\|. |  |
|  | tD A仓SIGNED: | -XX |
|  | tD RETURNED: | - XX |
|  | tH .ARtoo, | YES |
|  | LACZLIH ${ }^{\text {P }}$ •R | YES |
|  | )1tL! ${ }^{\text {( }}$ ( PR!M | YeS |



# This sample is the Intelligent Mail® Barcode result. 



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## Appendix 5:

No Match Report

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## Customer No Match Report Reference Numbers

The reference numbers below provide a brief description of fields on the CASS Customer No Match Report located on the next page.

1. CASS Record Given is the address as it appeared on the mailpiece.
2. CASS Key uniquely identifies each test record on the mailpiece.
3. Pre-Barcode indicates if address is pre-barcoded in the address block of the mailpiece.
$Y=Y e s$
$\mathrm{N}=\mathrm{No}$

* = Customer sprayed pre-barcode as the customer answer

4. Z9 indicates the presence of an invalid ZIP+4 Code on the mailpiece.
$Y=Y e s$
$N=$ No
5. CASS Standardization Answer is the expected return answer on the mailpiece.
6. Special Flag identifies the type of test address given.
7. Customer Record Return is the customer's answer with ZIP+4 and barcode. IMb tracking information: Barcode ID, Service Type Identifier (STID), Mailer ID, Serial Number.
8. \# Indicates fatal ZIP+4 add-on error (i.e. 0000 or 9999 ).
9. " $Y$ " indicates misread/miscoded error for character recognition in street address information.
10. ZIP+4 Odd/Even/Both indicate the ZIP+4 range. "Y" in this field indicates that the ZIP+4 codes had a transaction in the past 12 months in the past 12 months as identified by Z4Change.
$\mathrm{O}=$ Odd
$E=$ Even
$B=$ Both
$Y=$ Z4Change

USPS 47-2467
REPORT CI1030P2

US POSTAl SERVICE - CODING ACCURACY SUPPORT SYSTEM NATIONAL CUSTOMER SUPPORT CENTER
ADDRESSES HICH ARE GRADED AND SCORED

DAT!.: 11/07/2005
THIE, 20525146
PAGE: 15

CUSTOMER NAME: USPS
CUSTOHER ID: 000040DCF


US POSTAL SERVICE • CODING ACCURACY SUPPORT SYSTEM
NATIONAL CUSTOHER SUPPORT CENTER
CUSTONER NO MATCH REPORT
ADDRESSES WHICH ARE GRADED ANO SCORED
REPORT CIIO30P2

DATE: 07/16/2008
TIME: 201',2477
PAGE: 1

CUSTOMER NAME: USPS
CUSTOMER ID, 004210 TAA


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## Appendix 6:

Electronic Data File Description

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## Electronic Data File Description

The electronic error report for MASS is shown below in COBOL copybook format. The first seven lines are HEADER information.

Header Information:

USPS 47-2467

REPORT CII030P2
CUSTOMER NAME: ABC COMPANY
CUSTOMER ID: 05123OAAG
*******************************************

Header Record:

CIIO30P2-REPORT-HEADER.
05 P2-LINE 1. 10 FILLER PIC X(300) VALUE ALL "*".
05 P2-LINE2.
10 FILLER PIC X(05) VALUE SPACES.
10 FILLER PIC X(12) VALUE ‘USPS 47-2467’.

10 FILLER
10 FILLER
'US POSTAL SERVICE - CODING ACCURACY SUPPORT SYSTEM'
10 FILLER PIC $\times(71)$ VALUE SPACES.
10 FILLER PIC X(06) VALUE 'DATE'.
10 CII030P2-MM
10 FILIER PICX(01).
10 CIIO30P2-DD
10 FILLER
10 CIIO30P2-CC
10 CIIO30P2-YY
10 FILER PIC X (02)
PIC X(08) VALUE SPACES.
05 PS-LINE-3.
10 FILLER PIC X(75) VALUE SPACES.
10 FILLER PIC X(50) VALUE
‘ NATIONAL CUSTOMER SUPPORT CENTER ‘.
10 FILLER PIC X(71) VALUE SPACES.
10 FILLER PIC X(06) VALUE 'TIME'.
10 CIIO30P2-HH
10 FILLER PIC $\times(01)$ VALUE ' $\because$ '.
10 CIIO30P2-MN
10 FILLER
10 CIIODOP2-SS
10 FILLER
05 P2-LINE-4.
10 FILLER PIC X(05) VALUE SPACES.

|  | 10 FILLER | PIC X(15) | VALUE |
| :---: | :---: | :---: | :---: |
|  | 'REPORT CII030P2' |  |  |
|  | 10 FILLER | PIC X(70) | VALUE SPACES. |
|  | 10 FILLER | PIC X(50) | VALUE |
|  | ، ADDRESSES WHICH | ARE GRADED | AND SCORED |
|  | 10 FILLER | PIC X(95) | VALUE SPACES. |
| 05 | P2-LINE-5. |  |  |
|  | 10 FILLER | PIC X(05) | VALUE SPACES. |
|  | 10 FILLER | PIC X(16) | VALUE |
|  | 'CUSTOMER NAME: ' |  |  |
|  | 10 CIIO30P2-NAME | PIC X(40). |  |
|  | 10 FILLER | PIX X(374) | VALUE SPACES. |
| 05 | P2-LINE-6. |  |  |
|  | 10 FILLER | PICX(05) | VALUE SPACES. |
|  | 10 FILLER | PIC X(16) | VALUE |
|  | 'CUSTOMER ID: 10 CIIO30P2-NUM | PIC X (09). |  |

## Data Record:

Data records will start in record 8 and follow this format:

01
ERRORPT2-WORK-RECD.
05 ERR-RPT2-CARR-CNTL PIC X(01).
05 ERR-RPT2-CASS-KEY PIC X(08).
*---. ORIGINAL_INPILIEIEIDS
05 ERR-RPT2-IFIRST-FIRM PIC X(40).
05 ERR-RPT2-IZIP PIC X(10).

05 ERR-RPT2-ICITY PIC X(28).
05 ERR-RPT2-ISTATE PIC X(02).
05 ERR-RPT2-ISEC-URB-FIRM PIC X(30).
05 ERR-RPT2-1DELADDR PIC X(64).
*----- STANDARD POSTAL ANSWER FIELDS
05 ERR-RPT2-SFIRST-FIRM
PIC X(40).
05 ERR-RPT2-SSEC-URB-FIRM
PIC X(40).
05 ERR-RPT2-SADDRESS PIC X(64).
05 ERR-RPT2-SCITY PIC X(28).
05 ERR-RPT2-SSTATE PIC X(02).
05 ERR-RPT2-SZIP PIC X(05).
05 ERR-RPT2-SHYPHEN PIC X(01).
05 ERR-RPT2-SADDON PIC X(04).
05 ERR-RPT2-SDELPT PIC X(02).
05 FILLER PIC X(01).
*----- MISCELLANEOUS REPORT FIELDS
05 ERR-RPT2-MCONTROL. 10 ERR-RPT2-MCNTL-SIZE PIC X(02).

* Size values: A C

10 ERR-RPT2-MCNTL-BARCODE PIC X(01).

* Invalid BARCODE Present on mailpiece in WIDEAREA
* Values: Y N

10 ERR-RPT2-MCNTL-ZIP9 PIC X(01).

* Invalid ZIP+4 Present on mailpieces:
* Values: Y N

10 ERR-RPT2-MCNTL-CASE

* Case values: Upper Mixed

10 ERR-RPT2-MCNTL-FONT PIC X(01).

* Font values: A B C D

05 ERR-RPT2-MRECTYPE PIC X(01).
05 ERR-RPT2-FILLER1
05 ERR-RPT2-MSPECIAL PIC X(01).

05 ERR-RPT2-MODDEVEN
PIC X(02).
PIC X(01).
*----- CUSTOMER RETURNED ANSWER
05 ERR-RPT2-CZIP
PIC X(05).
05 ERR-RPT2-CHYPHEN
PIC X(01).
05 ERR-RPT2-CADDON
PIC X(04).
05 ERR-RPT2-CDPBC. 10 ERR-RPT2-CDPBC-ANS

PIC X(02).
10 ERR-RPT2-CDPBCCHKDGT
05 ERR-RPT2-FILLER2
*----- DATA RELATING TO CUST RETURNED ZIP+4 ANSWER --------------

* This is the parsed information associated with the returned ZIP+4 from
* the customer. It is taken from ZIP+4 information that may be different
* from the customer's due to timing of the ZIP+4 data.

05 ERR-RPT2-LINE1. 10 ERR-RPT2-FRIM

PIC X(50).
05 ERR-RPT2-LINE2. 10 ERR-RPT2-PRIMLO 10 FILLER 10 ERR-RPT2-PRIMHI 10 FILLER
05 ERR-RPT2-LINE3. 10 ERR-RPT2-PREDIR 10 FILLER 10 ERR-RPT2-STRNAME 10 FILLER 10 ERR-RPT2-SUFFIX 10 FILLER 10 ERR-RPT2-POSTDIR 10 FILLER
05 ERR-RPT2-LINE4. 10 ERR-RPT2-SECUNIT

PIC X(10).
PIC X(03)
VALUE ‘-‘.
PIC X(10).
PIC X(27).
PIC X(02).
PIC X(01) VALUE SPACE.
PIC X(28).
PIC X(01) VALUE SPACE.
PIC X(04).
PIC X(01). VALUE SPACE.
PIC X(02).
PIC X(11) VALUE SPACE.
PIC X(04).

10 FILLER
10 ERR-RPT2-SECLO 10 FILLER
10 ERR-RPT2-SECHI 10 FILLER

ERR-RPT2-CRECTYPE ERR-RPT2-CODDEVEN

PIC X(01).
PIC X(08).
PIC X (03) VALUE ${ }^{-}$-
PIC X(08).
PIC X(26).
PIC X(01).
PIC X(01).

# Appendix 7: Guidelines for Printing LACSLink® Information 

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## LACSLink® ${ }^{\circledR}$

LACS ${ }^{\text {Link }}$ is mandatory for CASS ${ }^{\text {TM }}$ and MASS ${ }^{\text {TM }}$ certification and must be used in the production environment. When a new LACS converted address is found, the new address must be shown. If the new address is not returned only the 5-digit ZIP Code associated with the original input address can be returned. A mailpiece that uses only the 5 -digit will not qualify for automation discounts.

Below is an example of a mailpiece with text information placement for MASS machines printing LACS ${ }^{\text {Link }}$ information.

## A9800786 01962OEBQ

**********

## 

JOHN DOE
RR 3 BOX 68
MORGANVILLE NJ 07751
4 NOLAN RD 07751
AXXXMP3
07751


Note: Example is not to scale.
Flats must comply with current DMM® Barcode Placement standards.
Refer to the LACS ${ }^{\text {Link }}$ Printing Guidelines posted on PostalPro at https://postalpro.usps.com/Print Guidelines LACSLink.

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Appendix 8: Suite ${ }^{\text {Link }{ }^{\circledR} \text { Product }}$

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## SuiteLink® Product

Suite ${ }^{\text {Link }}$ improves business addresses by adding secondary suite numbers to candidate records where there is a known secondary deficiency. Given a business name and an associated ZIP + 4 coded address that matches to a highrise or street default, the Suite ${ }^{\text {Link }}$ process returns the appropriate suite number when available.

The Suite ${ }^{\text {Link }}$ product should be queried when an address matches to a street or highrise default record. If a business name match is found and a secondary number is returned, the new suite information must be appended to the original address for CASS testing.

## Example:

Input:
ARMY CAREER CENTER
217 AVE UNIV INTER STE 100

SAN GERMAN PR 00683-3988

## Correct Match: Must be returned for CASS testing

## Output:

ARMY CAREER CENTER
217 AVE UNIV INTER STE 105
SAN GERMAN PR 00683-3988
For live production mail, the suite number does not have to be appended to the address but must be included in the barcode that is sprayed on the mailpiece to qualify for automation ates.

The USPS will allow developers to return Suite ${ }^{\text {Link }}$ address in different manners for production software. However, for CASS testing the new address must be returned in the Stage II file.

## Production Options

## Example:

Input:

## ARMY CAREER CENTER

217 AVE UNIV INTER STE 100 (invalid secondary)
SAN GERMAN PR 00683

Output: ARMY CAREER CENTER
217 AVE UNIV INTER STE 105
Dropped invalid input secondary
SAN GERMAN PR 00683-3988
Suite ${ }^{\text {Link }}$ Return Code: A

## Optional Formats in Production Product

Based on the input address, CASS software can return invalid extraneous information in several optional formats.

We encourage mailers to append the secondary Suite ${ }^{\text {Link }}$ matched information to the mailpiece to help ensure the mail reaches the intended recipient. However, this is optional. The mailer can choose not to append the valid secondary information to the mailpiece. However, the 11-digit barcode must match the appended Suite ${ }^{\text {Link }}$ address.

| Example: Input: | UT Animal Research 910 Madison Ave Ste 9 (invalid secon Memphis TN 38103 | dary) |
| :---: | :---: | :---: |
| Output: | UT ANIMAL RESEARCH 910 MADISON AVE STE 823 MEMPHIS TN 38103-3435 | Dropped invalid input secondary |
| Output: | UT ANIMAL RESEARCH 910 MADISON AVE STE 823 STE 9 MEMPHIS TN 38103-3435 | Appended invalid input secondary to the end of the address |
| Output: | UT ANIMAL RESEARCH STE 9 <br> 910 MADISON AVE STE 823 MEMPHIS TN 38103-3435 | Moved invalid input secondary To second address line |

The extraneous info can also be changed to a pound sign.

| Output: | UT ANIMAL RESEARCH <br> 910 MADISON AVE STE 823 \# 9 | Invalid input secondary changed <br> to a pound sign (\#) |
| :--- | :--- | :--- |
|  | MEMPHIS TN 38103-3435 |  |
|  | UT ANIMAL RESEARCH |  |
| \# 9 | Moved invalid input secondary to |  |
| 910 MADISON AVE STE 823 | Second address line and <br> changed |  |
|  | MEMPHIS TN 38103-3435 | To a pound sign (\#) |

We encourage mailers to append the secondary Suite ${ }^{\text {Link }}$ matched information to the mailpiece to help ensure the mail reaches the intended recipient. This is optional. The mailer can choose
not to append the valid secondary information to the mailpiece. However, the 11-digit barcode must match the appended Suite ${ }^{\text {Link }}$ address.

See the following mailpiece examples.
Mailpiece Example 1

## A9800786 01962OEBQ

**********

## 

ARMY CAREER CENTER
217 AVE UNIV INTER STE 100
SAN GERMAN PR 00683

AXXXMP3 00683
217 AVE UNIV INTER STE 10500683


Mailpiece Example 2
A9800786 $019620 E B Q$
**********

## 

ARMY CAREER CENTER
217 AVE UNIV INTER STE 100
SAN GERMAN PR 00683
\# 105



[^0]:    

