# MASS Technical Guide



2011-2019 cycle



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# **Purpose**

MASS<sup>™</sup> 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™ system. The MASS certification cycle is designed to evaluate the ability of MLOCRs and encoding stations to process address information and apply an accurate delivery point barcode (DPBC) 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 similar to 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 mailings 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 Requirements**

Systems used for automation rates must be certified as required during the certification requirement cycle or when an event occurs that requires new certification or recertification. The Certification Department understands that waiting for MASS™ certification is often impractical and costly for customers who purchase new systems and have legitimate reasons for wanting to operate them immediately. 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 Certification Department provides a 45-day courtesy period for new, moved or relocated, upgraded and reassembled systems. The 45-day courtesy is granted by the Certification Department 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 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 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, the Business Mail Entry manager and the Business Mail Acceptance office.

# **Demo Machines**

Machines used for demonstration purposes will be eligible for a 30-day courtesy when notification via the MASS order process is received within seven days of the installation date.

If the customer is going to keep the machine, fifteen (15) calendar days will be added to the 30day courtesy period. This will allow the customer the standard 45-day courtesy for the new installations.

Failure to notify the 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 and is moved to a different address, relocated within the facility, upgraded or reassembled.

The following conditions also require recertification.

- the address matching software utilized by the MLOCR is changed or updated
- the operating system of the machine associated with the Address Recognition System and the Directory Retrieval System is changed
- the camera configuration including switching from a single to a dual camera configuration is changed or updated
- System speed changes
- Model changes

Machines that were previously certified within the current certification period that are moved to a new address or relocated within the same facility that do not include any system changes or updates by the same company will not be charged for the recertification test.

Charges for upgraded and reassembled machines will apply for these types of recertifications based on the Fee Schedule for the current certification period.

# Change of Ownership: End User

When an MLOCR or encoding station is sold or ownership is transferred, the new owner must notify the Certification Department in writing via email to <a href="mailto:cassman.ncsc@usps.gov">cassman.ncsc@usps.gov</a>. 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 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 physically moved to a new address, relocated within the facility or upgraded must be recertified by the new owner. Charges apply based on the Fee Schedule for the current certification period. See Certification Requirements.

# **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 Certification Department. This is known as a hybrid system.

The 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 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 Certification Department will evaluate the documentation and determine an appropriate course of action which may include recertification of all users, a sample of the user base, hardware manufacturers only, or software manufacturers only. It is possible that no action will be taken following notification.

# **Fee-Based Certification**

Fees have been established to cover costs of developing and issuing testing material and administering the CASS and MASS™ program.

CASS customers are billed based on the number of separate software configurations certified, not the number of Stage II files ordered. In contrast, MASS customers are billed for each test deck ordered or the number of tests needed to achieve certification.

Customers are billed as certification is achieved. Billing procedures are coordinated with our Accounts Receivable Department. **All certification test fees are payable within 30 days of the billing date.** 

# Fee Schedule

Fee-Based Certification	AUG/OCT (New Cycle)	NOV/ DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	After July 31, for Current Cycle
CASS	\$200	\$200	\$200	\$500	\$500	\$600	\$700	\$800	\$900	\$1,000
MASS MFG (MLOCR)		\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$1,000	\$1,500
MASS End- Users (MLOCR)					\$500	\$500	\$500	\$500	\$1,000	\$1,500
MASS MFG (Encoder)		\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$750	\$1,000
MASS End- Users (Encoder)					\$300	\$300	\$300	\$300	\$750	\$1,000

# Fee Policy for New, Upgraded or Transferred Machines

# **Prior to Certification Requirement Date**

Half the regular scheduled fee will be charged when the applicant promptly notifies the MASS Department within seven days of the installation date for machines that are new, moved or relocated or upgraded as shown in the Recertification section that will be used to obtain automation discounts.

Normal charges will apply for other certification's based on the Fee Schedule for the current certification period.

# **After the Certification Requirement Date**

New systems initially deployed from a MASS manufacturer to an end user after the certification requirement date will be charged a flat fee of \$750 for MLOCRs and \$500 for encoding stations. These fees apply to any MLOCR or encoding station that is transferred, upgraded or sold to another company. A new system is defined as barcoding equipment that is not in use or is not operational during the time for which certification is requested or during a previous MASS cycle. The applicant must promptly notify the Certification Department within seven days of the installation date by completing and submitting the MASS Order Form.

# The MASS Process

# Certification

A ZIP + 4 can only be assigned when the primary number 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 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 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 software developer in USPS<sup>®</sup> documents and on PostalPro<sup>™</sup> in the Products Guide at <a href="https://postalpro.usps.com/cass/AllSectionsDataFilesCurrentCycle">https://postalpro.usps.com/cass/AllSectionsDataFilesCurrentCycle</a>. The CASS software that will be used on each representative machine must be CASS certified before a MASS test deck can be ordered.

- Provide a matrix of all machines that will be used by your customers to the Certification Department. Please include every machine that is sold or used by your company so we are aware of all machines for your company. The matrix will include the CASS software and version numbers that is used on each machine model.
- Complete an Electronic Product Fulfillment Web Access Request Form (EPF001) 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. The EPF form is available online at <a href="https://postalpro.usps.com/EPF001">https://postalpro.usps.com/EPF001</a>.
- 3. Complete the Manufacturers Terms and Conditions Document

- (<u>https://postalpro.usps.com/MASSTermsCond\_Manufacturer</u>) and a MASS order form (<u>https://postalpro.usps.com/MASS/MASS\_Order\_Form</u>) 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™ manufacturers and end users are required to provide a hardcopy of the PS Form 3553 for evaluation to ensure the facsimile meets USPS® standards. The images that must be returned can be
  - Uploaded to EPF
  - Sent in a ZIPped file in an email attachment to <a href="mailto:cassman.nscs@usps.gov">cassman.nscs@usps.gov</a>
  - Or mailed to:

MASS CERTIFICATION
NATIONAL CUSTOMER SUPPORT CENTER
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 the National Customer Support Center (NCSC).

- \*Machines that cannot spray a LACS<sup>Link®</sup>, Suite<sup>Link®</sup> 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 Certification Department issues a certification letter.
- 6. When applicable, the 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.

# Remote Video Encoding/Local Video Encoding

If an MLOCR is used to capture mailpiece images or to apply Intelligent Mail Barcodes (IMb™), 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 Character Recognition (RCR) or RVE/LVE. The MLOCR coding must be deactivated during 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 the NCSC for evaluation.
- 3. When the manufacturer passes certification, the NCSC 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	MASS Certified
		Notification sent to Licensing Department to put machine in a
		recertification mode.
Fail	Fail	Customer will be sent a new MASS test deck that includes
		forwardable pieces. Notification sent to Licensing Department to
		put machine in a recertification mode.
Fail	Pass	Customer will be sent a new MASS test deck that includes
		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 IMb<sup>™</sup> 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 with the exception of 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.

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

The EPF form is available online at <a href="https://postalpro.usps.com/EPF001">https://postalpro.usps.com/EPF001</a>.

- A separate test deck must be ordered for each machine via the MASS Order Form. The MASS Order Form is available in this document and on line at https://postalpro.usps.com/MASS/MASS\_Order\_Form.
- 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 on line at <a href="https://postalpro.usps.com/MASSTermsCond">https://postalpro.usps.com/MASSTermsCond</a> Manufacturer.
  - 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<sup>Link®</sup>, Suite<sup>Link®</sup> or change of address must cull those mailpieces out of the test deck and return them with the image files to the NCSC.

- 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™ end users are required to provide a hardcopy of the PS Form 3553 for evaluation to ensure the facsimile meets USPS® 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
NATIONAL CUSTOMER SUPPORT CENTER
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 the National Customer Support Center (NCSC).

- 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 review of the test deck until all mailpiece images and culled mailpieces are received. This may delay test results.
- 8. The 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 Certification Department issues a certification letter.
- 10. 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.

# **Test Deck Specifications**

MASS<sup>™</sup> test decks are designed to exercise MLOCR and encoding station address-matching software look-up capabilities emulating the CASS<sup>™</sup> 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 contain 350 mailpieces.

Each test mailpiece consists of one piece of 8  $\frac{1}{2}$  inch white, 20 pound paper folded and inserted into a 24-pound, white-wove, 5  $\frac{3}{4}$  x 9 inches window envelope. The envelope has two windows – one upper and one lower. The upper window measure 1  $\frac{1}{4}$  x 4 inches and is located 3/8 inch from the left edge and 3 11/16 inches from the bottom edge. The bottom window measure 1 3/8

x 4 ½ inches and is located 2 1/6 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\_xx.TIF). The test address appears in the lower window. Inside the window is an Intelligent Mail Barcode which contains the NSCS 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<sup>Link®</sup>, Suite <sup>Link®</sup>, 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.

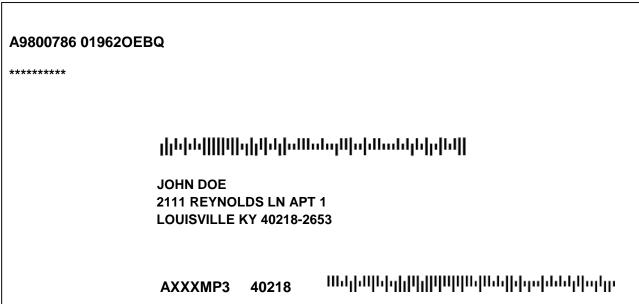
For more information, contact the MASS Certification Department at 800-642-2914 or via email to cassman.ncsc@usps.gov.

# **MASS Electronic File Layout**

Field Sequence Number	Field Description	Length		n From/ ough
1	NCSC IMb™	31	001	031
2	Filler	01	032	032
3	Customer Answer	31	033	063
4	Filler	01	064	064
5	MASS Identifier	07	065	071
6	Filler	01	072	072

7	5-Digit ZIP Code	05	073	077
8	Filler	01	078	078
9	MASS Text Answer	42	079	120
10	Filler	30	121	150

# Sample Test Mailpiece with Answer



# **Test Element Definitions**

# NCSC IMb™

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 11digit routing code, 9999999999 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<sup>Link®</sup>, Suite <sup>Link®</sup>, 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 <a href="https://epfup.usps.gov/up/upload.html">https://epfup.usps.gov/up/upload.html</a>.

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<sup>Link®</sup> and Suite<sup>Link®</sup> 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 <a href="mailto:cassman.ncsc@usps.gov">cassman.ncsc@usps.gov</a>.

Login using the email address and password that was setup on the <a href="https://epf.usps.gov">https://epf.usps.gov</a> 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<sup>Link®</sup> and Suite<sup>Link®</sup> 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 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 Certification Department issues a certification letter.
- 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

Customer Information (Please prin	<i>t</i> )						
Company Official Contact Name			Email Addr	ess			
Company Name							
Street Address, P.O. Box, Rural/Hwy Con	ntract, or Route Number			☐ New F	acility		Apt/Suite
City					State	ZIP + 4	® Code
Telephone Number (Include area code)		Fax Num	ber (Include	area code	)		
Company Salesperson	Telephone Number (Include ar	rea code)	Salesperso	n Email Ad	ddress		
Billing Address (If different from Cust	tomer Information)						
Street Address, P.O. Box, Rural/Hwy Cor	ntract, or Route Number		Moved	☐ New Fa	acility		Apt/Suite
City					State	ZIP + 4	;
I request that my certification be ☐ Service Bureau ☐ Maile ☐ I do not wish to be listed in U.S	er 🔲 Manufactu		® docume	nts and i	ecords a	as:	
Equipment Information							
All MLOCR machines connected to an	· _		cess the M	ASS test	deck with	MPE m	ode turned on.
Check here if this machine is connected to the connected		MPE Cloud					
Check here if this machine uses a Cl		_	<b>7</b>				
Is this machine capable of reading as		-	」no tol ink® appo		raaa2	مري ٦	☐ no
Is this machine capable of printing a	LAGS converted address	s and Sun	e appe	naea aaa	ress? L	<b>」</b> yes	☐ no
User Acknowledgement Statemen	nt						
I hereby certify that all information on the MASS certification test deck will be address files and that any modification use or release. The MASS test deck working that this address-matching prostated in the <i>DMM</i> ® 602.9.	pe obtained using the same of on to the products used to pro will be processed in-house we oduct contains technology that	configurati cess this ith compa at disables	on as used test will req iny-owned s access to	in the pro juire retes or leased outdated	ocessing of sting and r software/ U.S. Pos	of custor recertific hardwa tal Serv	mer/client cation prior to are. I further rice data as
CASS/MASS certification scores a achieved on their passing test for						lose sc	cores
Company Official Contact Signature					Date		
Return Order Form To		NCSC Us					
MASS DEPARTMENT NATIONAL CUSTOMER SUPPO UNITED STATES POSTAL SER' 225 N HUMPHREYS BLVD STE MEMPHIS TN 38188-1001	ORT CENTER VICE E 501	Oustomer Notes					
Phone: 800-642-2914 Fax: 6	50-577-2509						

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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™ Test					
Indicate the type of MASS	test requested.				
☐ MLOCR ☐ Encode	r □ Flats				
Type of Certification					
Indicate the type of certific	ation requested.			Installation date (A	lot required
☐ Renewal Certification ☐ Reassembled	<ul><li>☐ New Certification</li><li>☐ Demonstration</li></ul>	<ul><li>☐ Moved/Relocated</li><li>☐ Hybrid/Conversion</li></ul>	☐ Upgraded	for annual certifica	tion.)
If this new certification inv	olves removing an existi	ng MASS machine, list th	e machine(s) bei	ng removed below:	
MLOCR					
Software Product		Version Number	Configura	tion	MASS ID
Equipment Manufacturer		Model Number	Serial Nui	mber	
<b>Encoding Stations</b>					
Software Product		Version Number	Configura	ation	MASS ID
Equipment Manufacturer		Model Number	Serial Nui	mber*	
* List all serial numbers for networ	ked systems and indicate which	h one is the server (4 stations fo	r test deck).		
Change of Ownership					
Equipment Model Number			Serial Nui	mber	MASS ID
Previous Owner's Name			I		
Previous Owner's Address					
If the machine is not physically reli relocation guidelines.	ocated, a new MASS certificate	may be issued. If the machine i	s physically relocated,	the customer must follow	the machine

MASS001, September 2017 (Page 2 of 2)



# Electronic Product Fulfillment Web Access Request Form

This form is used to create a Web-based account with the National Customer Support Center (NCSC) which will be utilized to receive (download) files for electronic product fulfillment 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 login. Please complete this form and return via United States Postal Service® mail or fax to the address or fax number listed at the bottom of this form.

AIS Prod	ucts		roducts	Licensing/Certification	Products
Carrier Route national	ZIPMove	☐ MAC Ba	atch	ACS (acct.#	)
Carrier Route by state	☐ AIS Viewer	☐ PAVE		AMS API	
City State national	Other (Specify):	AEC P	roducts	CASS™/MASS™ (cust #	)
Delivery Statistics		☐ AEC / A		☐ DPV®	
eLOT® national			Products	☐ DSF <sup>2®</sup>	
eLOT by state	CDS Products	Other	roducts	☐ NCOA <sup>Link®</sup>	
☐ Five-Digit	☐ Bi-Monthly		abeling Lists	LACS <sup>Link®</sup>	
☐ RDI™	☐ Congressional	☐ Nationa	al Zone Charts	Suite <sup>Link®</sup>	
Z4Change	☐ No Stat		ne Charts	Other (Specify):	
☐ ZIP + 4 <sup>®</sup> national	☐ Weekly		no onano		
ZIP + 4 by state	Seeds				
-	Secus				
A. Customer Information					
1. Name					
2. Job Title			3 Tolophono Nun	nber (include area code)	
2. Job Tille			3. Telephone Null	insel (Include area code)	
4. Company Name			5. Email Address		
6. Business Address			7. Corporate HQ	Location (if different from your Busin	ness Address)
B. Customer Computer Acc	cess Authorization				
User Responsibility Agree	ment Statement: I am respor	nsible for Logo	n/Logoff, all action	ons pertaining to the use of my a	assigned
				puter data or files not authorized	
is prohibited. I understand m	y logon ID may be suspended	d indefinitely if	I violate security	procedures or fail to provide up	date
				misuse of a USPS® computer s	
	nd/or criminal prosecution. I u	inderstand tha	t any detected m	isuse of a computer system will	be reported
to the Inspection Service.					
Requester's Signature				Date	
				for authorized USPS work within	
				the Computer Systems Securit	
•	•	ata and logon	D. I WIII periodic	ally review the use of the assign	ed logon ID
and computer files and/or da  1. Name	la.			2. Date	
I. Name				Z. Date	
3. Signature				4. Telephone Number (include a	rea code)
3. Olgilature				4. Telephone Number (molade d	rea code)
If you have any questions read	arding this Web assess regue	at form place	a contact Floo	NCSC Use Only	
If you have any questions regatronic Product Fulfillment at 80				NC3C Dse Offig	y
wise, mail or fax this complete		5 A DIVIIVIO (@usp	os.gov, otrier-	NCSC Business Affiliation	
	S QUALITY PROGRAMS				
	AL CUSTOMER SUPPORT C	ENTER		ID Assigned	
	STATES POSTAL SERVICE	-			
	JMPHREYS BLVD STE 501			Date Customer Contacted	Initials
	S TN 38188-1001			Comments	
FAX: 901	-681-4582			Comments	
DO NOT SEN	D PAYMENT WITH THIS F	FORM.			

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# **Appendix 1:**

PS Form 3553, CASS Summary Report

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# **CASS™ Summary Report**

This form may be generated as the output of address matching processing using CASS Certified™ software in conjunction with current USPS® address database files. Any facsimile must contain the same information in the same format as the printed form.

See DMM<sup>®</sup> Section 602 for more information.

A.	Software									
	1. CASS Certifie	d Company Name			2. CASS C	Certified Softwa	are Name &	Version	3.0	Configuration
S A1	4. Z4Change Ce	ertified Company Name			5. Z4Chan	ge Certified So	oftware Nan	ne & Version	6. (	Configuration
CASS	7. eLOT® Certifie	ed Company Name			8. eLOT C	ertified Softwa	re Name &	Version	9. (	Configuration
S A2	1. MASS™ Cert	ified Company Name			2. MASS (	Certified Softwa	are Name, V	ersion & Model No	o. 3. (	Configuration
MASS									4. N	/ILOCR Serial No.
	List Processor's N	Name			2. Date Lis	t Processed		3. Date of Datab	ase P	roduct Used
					a. Master I	File		a. ZIP + 4 <sup>®</sup> File		
					b. Z4Chan	ge		b. Z4Change		
					c. eLOT			c. eLOT		
					d. CRIS			d. CRIS		
4.	List Name or ID	No. (If using ID No., nui	mber must start with	ID #)	5. Number	of Lists		6. Total Records Processing	Subm	itted for
C.	Output									
	Output Rating	1. Total Coded	2. Validation P	Period	Outpu	ut Rating	1. Total			ation Period
a.	ZIP + 4/DPV Confirmed	•	From To		c. 5-Digit	Coded		From	l	To
b.	Z4Change Processed	-			d. CRRT	Coded <b></b>		From	l	To 
					e eLOT	Assigned		From	l	То
D.	Mailer									
inc	<i>licated above)</i> usir	ing submitted with this ng CASS Certified soft n the <i>DMM</i> Section 602	vare meeting all of th		3. Name a	and Address of	Mailer			
1.	Mailer's Signatur	re	2. Date Sig	ned						
E.	Qualitative St	atistical Summary (	(QSS)							
		al Purposes Only: QS e U.S. Postal Service® p								
Hiç	gh Rise Default	High Rise Exact	RR Default	RR Exa	act	LACS <sup>Link®</sup>	EV	/S	Suite	ink®
_		Privacy No	tice: For informat	ion rega	ırdina our Pı	rivacy Policy.	visit USPS	S.COM®		

# Instructions

# A. 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™/MASS™ 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®/DPV® confirmation using CASS Certified™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: Enter the effective dates as shown below:

Product Name	From Date	To Date
ZIP + 4/DPV Confirmed	30 days before (the 15th of each month or bi- monthly) or no later than 105 days after the file date.	180 days after the ZIP + 4 valid "From" date.
Five-Digit Coded	30 days before (the 15th of each month or bimonthly) or no later than 105 days after the ZIP + 4, Five-digit ZIP, or the Carrier Route product date.	365 days after the Five-Digit Valid "From" date.
Total Carrier Route Coded	30 days before or up to 105 days after the ZIP + 4, Five-Digit ZIP™, or the Carrier Route product date (the 15th of each month or bimonthly) or up to 105 days after the file date.	90 days after the Carrier Route Valid "From" date.
eLOT® Sequence No. Assigned	30 days before or up to 105 days after the eLOT file product date (the 15th of each month or bimonthly).	90 days after the eLOT valid "From" date.

#### D. Mailer

- 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. A significant number of Highrise default/rural route default matches, although these addresses remain eligible for postal automation rate discounts at this time, increase the costs and reduce the efficient delivery of this mail. Mailer's 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<sup>Link®</sup> System

Entries in this box show the number of addresses which have been converted through the LACS<sup>Link</sup> process. LACS<sup>Link</sup> 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® 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<sup>Link®</sup> System

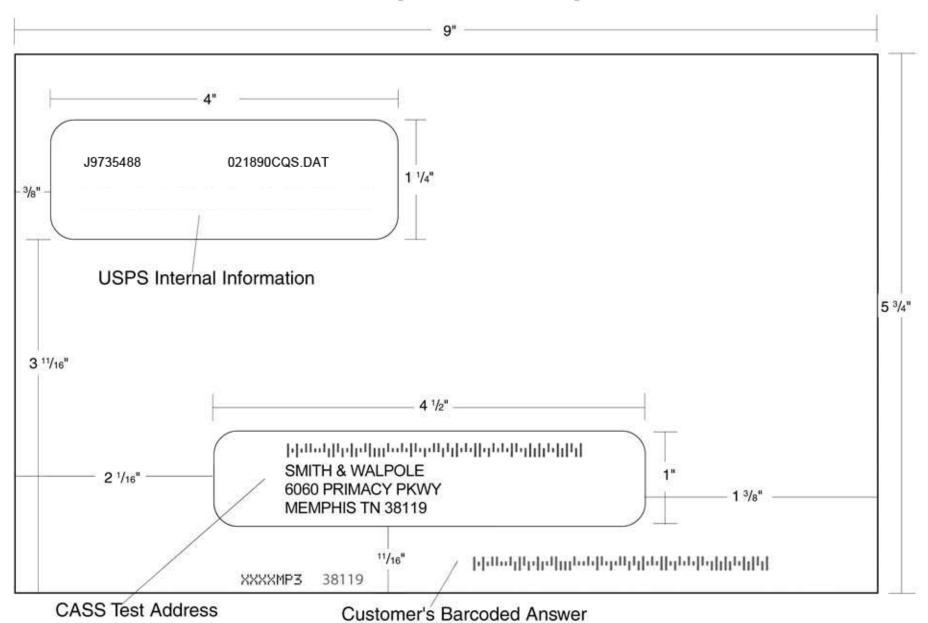
Entries in this box show the number of ZIP+4/DPV confirmed addresses that matched to a highrise default, and the Suite<sup>Link</sup> process returned the appropriate suite number. Only Suite<sup>Link</sup> enabled software will return a value in this box (*Check with your software vendor for obtaining 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** 

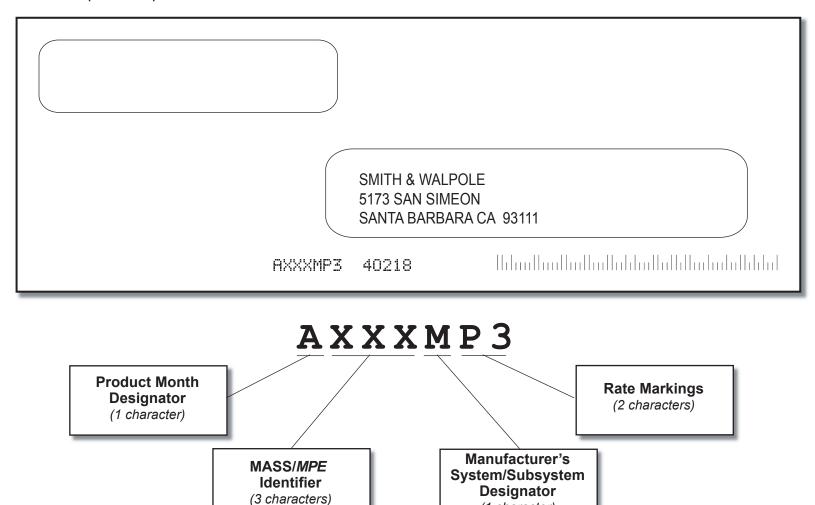
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# **Test Mailpiece Example**

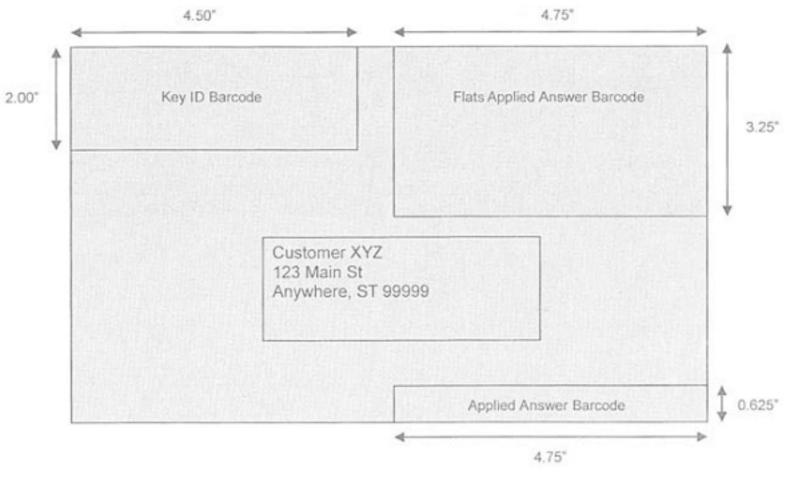


# Identifier/Rate Code

The Identifier/Rate code consist of seven characters representing the product month, system identifier, manufacturer code and rate markings. All MASS™ 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<sup>Link®</sup> MPE platform Identifier is printed in place of the MASS Identifier for MASS certified systems NCOA<sup>Link</sup> MPE equipped and licensed. The MASS Identifier provides for an audit trail and combined with the NCOA<sup>Link</sup> 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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# ..

Cu	stomer No Match Record Translation of Error Codes & Spe	cial Flags
All categories except those with asterisks (*) are requ	uired. 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	AD Firm Name – Swap firm name and Address field	Standard Address with Suffix Dropped
02 ZIP+4 not match	AE Normalized street name	E0 5-digit
03 Carrier ID not match	AF Street Name – Spelling variation	E1 Dropped 5-digit
04 City name not match	AG Firm Name not present – Valid Z4 on input match to firm	* E2 5-digit with misspelled street
05 State abbreviation not match	A0 5-digit	* E3 Dropped 5-digit with misspelled street
06 Out of range	A1 Dropped 5-digit	E4 5-digit with non-mailing name
07 Address is non –deliverable	A4 5-digit with non-mailing name	E5 Dropped 5-digit with non-mailing name
08 Unique ZIP Code not finest level of code	A5 Dropped 5-digit with non-mailing name	* E6 5-digit with misspelled street and non-mailing name
09 LACS Indicator	A8 5-digit misspelled city	* E7 Dropped 5-digit with misspelled street & non-mailing name
10 Perfect Address	* A9 Dropped 5-digit with misspelled city	E8 5-digit with misspelled city
11 General standardization error		* E9 Dropped 5-digit with misspelled city
12 eLOT sequence	Standard Address	
13 eLOT A/D code	(Includes reversed alphanumeric primary/secondary number, reversed	
14 RDI	pre/post directionals, and secondary number combined with primary	Dual Address
15 Fatal Error	number)	F0 Street address
16 LACSLink Indicator	B0 5-Digit	F1 Box record
17 LACSLink Return Code	B1 Dropped 5-digit	F2 Dual Address on separate line
18 SuiteLink Return Code	* B2 5-digit with misspelled street	F4 Street address with non-mailing name
19 Incorrect delivery point barcode (Non-Fatal)	* B3 Dropped 5-digit with misspelled street	F8 Street address with misspelled city
20 Incorrect delivery point barcode	B4 5-digit with non-mailing name	F9 Box record with misspelled city
21 PMB	B5 Dropped 5-digit with non-mailing name	
22 Default flag error/Record type error	* B6 5-digit with misspelled street and non-mailing name	Aliases
30 History	* B7 Dropped 5-digit with misspelled street and non-mailing name	G0 5-digit – Base
DB Business	B8 5-digit with misspelled city	G1 5-digit – Alias
DC CMRA	* B9 Dropped 5-digit with misspelled city	G2 Dropped 5-digit – Base
DD Drop	BE Normalized street names	G3 Dropped 5-digit – Alias
		* G4 5-digit – Out of range
LUE EQUESTIONSI		1 G4 5-ululi – Out of failue
DE Educational	Standard Address with Post-Directional Dropped or Incorrect	
DF False-positive	Standard Address with Post-Directional Dropped or Incorrect	G5 30 character abbreviation alias
DF False-positive DK Drop count	CC Post-directional changed to a non-cardinal directional – no	G5 30 character abbreviation alias
DF False-positive DK Drop count DL LACS	CC Post-directional changed to a non-cardinal directional – no match	G5 30 character abbreviation alias  Alias/Multiple Response
DF False-positive DK Drop count DL LACS DN No Stats	CC Post-directional changed to a non-cardinal directional – no match C0 5-digit	G5 30 character abbreviation alias  Alias/Multiple Response  **H0 5-digit - Base
DF False-positive DK Drop count DL LACS DN No Stats DO Confirmation	CC Post-directional changed to a non-cardinal directional – no match C0 5-digit C1 Dropped 5-digit	G5 30 character abbreviation alias  Alias/Multiple Response
DF False-positive DK Drop count DL LACS DN No Stats DO Confirmation DP PBSA	CC Post-directional changed to a non-cardinal directional – no match C0 5-digit C1 Dropped 5-digit * C2 5-digit with misspelled street	G5 30 character abbreviation alias  Alias/Multiple Response  **H0 5-digit - Base  **H1 5- digit - Alias
DF False-positive DK Drop count DL LACS DN No Stats DO Confirmation DP PBSA DR R777	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	G5 30 character abbreviation alias  Alias/Multiple Response  **H0 5-digit - Base  **H1 5- digit - Alias  Small Town Default
DF False-positive DK Drop count DL LACS DN No Stats DO Confirmation DP PBSA DR R777 DS Seasonal	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	G5 30 character abbreviation alias  Alias/Multiple Response  **H0 5-digit - Base  **H1 5- digit - Alias  Small Town Default  10 Exist in ZIP+4
DF False-positive DK Drop count DL LACS DN No Stats DO Confirmation DP PBSA DR R777 DS Seasonal DT Delivery Type	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	G5 30 character abbreviation alias  Alias/Multiple Response  **H0 5-digit - Base  **H1 5- digit - Alias  Small Town Default  I0 Exist in ZIP+4  **I1 No match in ZIP +4 P&G records exist
DF False-positive DK Drop count DL LACS DN No Stats DO Confirmation DP PBSA DR R777 DS Seasonal DT Delivery Type DV Vacant	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	G5 30 character abbreviation alias  Alias/Multiple Response  **H0 5-digit - Base  **H1 5- digit - Alias  Small Town Default  10 Exist in ZIP+4  **11 No match in ZIP +4 P&G records exist  **12 General delivery match in ZIP+4/G rec only – no match
DF False-positive DK Drop count DL LACS DN No Stats DO Confirmation DP PBSA DR R777 DS Seasonal DT Delivery Type DV Vacant DW Throwback	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	G5 30 character abbreviation alias  Alias/Multiple Response  **H0 5-digit - Base  **H1 5- digit - Alias  Small Town Default  I0 Exist in ZIP+4  **I1 No match in ZIP +4 P&G records exist
DF False-positive DK Drop count DL LACS DN No Stats DO Confirmation DP PBSA DR R777 DS Seasonal DT Delivery Type DV Vacant	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	Alias/Multiple Response  **H0 5-digit - Base  **H1 5- digit - Alias  Small Town Default  10 Exist in ZIP+4  **11 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
DF False-positive DK Drop count DL LACS DN No Stats DO Confirmation DP PBSA DR R777 DS Seasonal DT Delivery Type DV Vacant DW Throwback	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	Alias/Multiple Response  **H0 5-digit - Base  **H1 5- digit - Alias  Small Town Default  10 Exist in ZIP+4  **11 No match in ZIP +4 P&G records exist  **12 General delivery match in ZIP+4/G rec only – no match  **13 No match in ZIP +4/City State  Last Line
DF False-positive DK Drop count DL LACS DN No Stats DO Confirmation DP PBSA DR R777 DS Seasonal DT Delivery Type DV Vacant DW Throwback FT Footnote Code Error	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	Alias/Multiple Response  **H0 5-digit - Base  **H1 5- digit - Alias  Small Town Default  10 Exist in ZIP+4  **11 No match in ZIP +4 P&G records exist  **12 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
DF False-positive DK Drop count DL LACS DN No Stats DO Confirmation DP PBSA DR R777 DS Seasonal DT Delivery Type DV Vacant DW Throwback FT Footnote Code Error	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	Alias/Multiple Response  **H0 5-digit - Base  **H1 5- digit - Alias  Small Town Default  I0 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  **I3 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
DF False-positive DK Drop count DL LACS DN No Stats DO Confirmation DP PBSA DR R777 DS Seasonal DT Delivery Type DV Vacant DW Throwback FT Footnote Code Error  Record Type F Firm	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 Incorrect	Alias/Multiple Response  **H0 5-digit - Base  **H1 5- digit - Alias  Small Town Default  I0 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  **I3 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
DF False-positive DK Drop count DL LACS DN No Stats DO Confirmation DP PBSA DR R777 DS Seasonal DT Delivery Type DV Vacant DW Throwback FT Footnote Code Error  Record Type F Firm G General Delivery	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 Incorrect DC Pre-directional changed to a non-cardinal directional – no	Alias/Multiple Response  **H0 5-digit - Base  **H1 5- digit - Alias  Small Town Default  I0 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  **I3 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
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DF False-positive DK Drop count DL LACS DN No Stats DO Confirmation DP PBSA DR R777 DS Seasonal DT Delivery Type DV Vacant DW Throwback FT Footnote Code Error  Record Type F Firm G General Delivery H Highrise P PO Box	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 Incorrect DC Pre-directional changed to a non-cardinal directional – no match D0 5-digit	Alias/Multiple Response  **H0 5-digit - Base  **H1 5- digit - Alias  Small Town Default  10 Exist in ZIP+4  **11 No match in ZIP +4 P&G records exist  **12 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
DF False-positive DK Drop count DL LACS DN No Stats DO Confirmation DP PBSA DR R777 DS Seasonal DT Delivery Type DV Vacant DW Throwback FT Footnote Code Error  Record Type F Firm G General Delivery H Highrise P PO Box R Rural Route	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 Incorrect DC Pre-directional changed to a non-cardinal directional – no match D0 5-digit D1 Dropped 5-digit	Alias/Multiple Response  **H0 5-digit - Base  **H1 5- digit - Alias  Small Town Default  10 Exist in ZIP+4  **11 No match in ZIP +4 P&G records exist  **12 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
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DF False-positive DK Drop count DL LACS DN No Stats DO Confirmation DP PBSA DR R777 DS Seasonal DT Delivery Type DV Vacant DW Throwback FT Footnote Code Error  Record Type F Firm G General Delivery H Highrise P PO Box R Rural Route S Street	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 Incorrect 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	Alias/Multiple Response  **H0 5-digit - Base  **H1 5- digit - Alias  Small Town Default  10 Exist in ZIP+4  **11 No match in ZIP +4 P&G records exist  **12 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 don't 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. J0 5-digit J1 Dropped 5-digit
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#### **ZIP Correction Multiple Response** Multiple Finance Number Matching \*\* K0 5-digit R0 Incorrect 5-digit within finance number \*\*W0 Multiple response within finance no. - dropped 5-digit R1 Invalid 5-digit \*\* K1 Dropped 5-digit W1 Single response within finance no – dropped 5-digit \*\* K2 5-digit with misspelled street R2 Incorrect 5-digit within finance number and incorrect +4 W2 Altered street name R4 Incorrect 5-digit within finance number and blank city/state \*\* K3 Dropped 5-digit with misspelled street W3 No correlation between city and ZIP - Match in ZIP \*\* K4 5-digit with dropped or incorrect component R5 Incorrect 5-digit not within finance number \*\*W4 City and ZIP Code from different finance numbers \*\* K5 Dropped 5-digit and/or incorrect component W5 City and state does not agree with ZIP Code - match \*\* K6 5-digit with dropped/incorrect component & misspelled street **Highrise Default or Delivery Point Alternate** to ZIP Code \*\* K7 Dropped 5-digit and/or incorrect component & misspelled S0 With 5-digit W6 City and ZIP Code agree, state from different finance street S4 With 5-digit highrise number S5 "Chase the Base" – Delivery point alternate on input, return \*\* K8 5-digit with misspelled city \*\* K9 Dropped 5-digit with misspelled city highrise exact Highrise \*\* S6 With 5-digit highrise multiple X0 With a firm suite number \*X2 With misspelled street Inexact/Questionable Matching Logic **Hyphenated Ranges** X8 With a firm suite number and misspelled city \* L0 5-digit T1 Numeric alpha no match to numeric/numeric alpha exists \* L1 Dropped 5-digit T2 Alphanumeric/numeric alpha-transpose to make match Split/Combined Elements T3 Delete hyphen Y0 Combine pre-directional with street name T4 Add hyphen Y1 Split pre-directional works off street name **Key Elements Also Known As** T5 Sec alphanumeric insert hyphen and transpose – default Y2 Drop suffix words off street name \*\*\*\*MA Out of range - no match T6 Add alpha to match to numeric range only Y3 Drop suffix words off multi-word street name M0 With 5-digit \*\* T7 Add double alphas and validate no match to numeric Y4 Combine suffix with street name M1 Dropped 5-digit \*\* T8 Transpose alpha to beginning/no match to numeric range Y5 Combine suffix with street name M8 5-digit with misspelled city TA Recombine hyphenated trailing primary alpha with \*\*Y6 Invalid street name M9 Dropped 5-digit with misspelled city secondary number \*Y7 Street name spelling variations TB Recombine non-hyphenated trailing primary alpha with \*\*\*NDF Position Error secondary number N0 5-digit **ZIPMove** TC Recombine hyphenated trailing primary numeric with N1 Dropped 5-digit Z0 Valid match in new finance number - match secondary number 71 Invalid match in 7IPMove – match TD Recombine hyphenated trailing alphanumeric/numeric alpha **Extra Information** Z2 Valid ZIPMove match: invalid in new finance number with secondary number OA Input contains double secondary. One is valid and the other is no match TE Recombine sec values into one – exact match only a PMB OB Input contains double "#". One is valid sec the other is PMB APO/DPO/FPO Out of Range/Overlapping OC Input contains a sec and "#". One is valid sec the other is UA Bad org info in address line without ZIP Code \*\*10 Bad PO Box for finance no/ZP UB Out of range records for PSC box numbers 11 Overlapping PO Box ranges/return lowest ZIP+4 OD "#" or valid or invalid sec designator for PBSA \*\*15 Bad rural route for finance no/ZIP U0 Clean military addresses with 5-digit O0 5-digit \*\*20 Invalid primary number U1 Reversed box/PSC number with ZIP Code O1 Dropped 5-digit U2 Reversed box/PSC number without ZIP Code 21 Invalid secondary number O2 PMB on address line U3 Good address/ZIP Code with invalid city name 22 "EWS" no match; input is exact match to EWS record O3 PMB on secondary address line \*\*\* U4 PSC box turned into PO Box with ZIP Code 23 LACSLink O4 Valid Secondary with \*\* U5 Missing PSC, CMR, unit number with good box number \*\*24 LACSLink no match O5 PMB number is valid PO Box number - no match U6 Good military address with invalid ZIP Code 25 SuiteLink O6 Invalid sec with "#" sign - default match U7 Bad org info in Firm Name field with good ZIP Code 26 SuiteLink no match O7 Double "#" signs at the end of address line - invalid U8 Bad org info in Firm Name field without ZIP Code 27 Match to R777 – do not count as valid ZIP+4 on 3553 O8 Double "#" signs at the end of address line, one valid value the U9 Bad org info in address line with ZIP Code 28 Single Trailing Alpha - DPV w/o trailing alpha other is invalid 29 Single Trailing Alpha –not allowed to drop trailing alpha because of address pattern Syndrome P0 Seattle Syndrome with 5-digit on input **Delivery Address Line** P1 Seattle Syndrome dropped 5-digit on input \*\*V0 Contains firm name \*\*\* P2 Salt Lake Syndrome with 5-digit on input \*\*V1 Contains highrise name \*\*\* 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

#### **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
- 4J 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 "Blg"
- 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
- \*\*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 directional 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
- 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.

DATE: 11/05/2008

TIME: 20:24:27 PAGE: 1

SPS 47-2467 U.S. POSTAL SERVICE - CODING ACCURACY SUPPORT SYSTEM

FINAL SCORE (MINIMUM 98.5%): 99.69%

NATIONAL CUSTOMER SUPPORT CENTER

EPORT CI1030P1 CUSTOMER STATISTICS

CUSTOMER NAME: USPS CUSTOMER ID: 004210MAY
FASTFORW CUST: SERIAL: 1234567

ID ASSIGNED: XXX

ID RETURNED: XXX

IM BARCODE: YES

COUNT GRADING STATISTICS 2,000 INSTIAL TOTAL CASS RECORDS 1.992 (FF= 0) AVAILABLE FOR GRADING 78 (FF= 0 / OLD= 0) RECS BYPASSED Z4CHANGE/NON-DELIVERABLE MANUAL OVERRIDES REJECT < 7.5 % NO BARCODE SPRAYED ONLY CORRECT SDIGIT SPRAYED BARCODE UNREADABLE (UNRD) < 2.5 % 1 NO PLUSA ON MAIL PIECE 100.00% 1,914 TOTAL RECORDS AVAILABLE FOR GRADING 1,908 (FF= 0) 99.69% CORRECTLY CODED RECORDS PENALTY FOR HISREAD/HISCODE ERRORS 0 X .5 000000 PENALTY DEFAULT (KEYING) DEPTH/CODE ERR 0 900960% 00000000000 CORRECTLY CODED ADJUSTED FOR PENALTIES BONUS POINTS AWARDED (NOT ENOUGH BONUS QUESTIONS CORRECT) 0.00% 0.31% TOTAL RECORDS COUNTED INCORRECT 6.00 INCORRECTLY CODED RECORDS G BARCODE UHREADABLE (UNRD) > 2.5 % REJECTS > 7.5% COUNTED INCORRECT PENALTY FOR MISREAD/MISCODE ERRORS 000000 PENALTY DEFAULT (KEYING) DEPTH/CODE ERR 0 0 (MAX= 3) - CAN NOT EXCEED HAX INCORRECTLY CODED PERFECT ADDRESSES - NO FATAL ADDON INCORRECTLY CODED FATAL ADDON 0 (MAX= 9) - CAN NOT EXCEED MAX INCORRECTLY CODED DPBC 

**发发发发星的变形式或形式紧张的紧张的黑脸和轻点光亮发展的正面或有特殊光光的现在形式,不是不明显的正式不知识的正式的现在分词的现在分词的现在分词是不是现在的一个人们的现在分词** 

## This sample includes FASTforward results.

SPS 47-2467

U.S. POSTAL SERVICE - CODING ACCURACY SUPPORT SYSTEM NATIONAL CUSTOMER SUPPORT CENTER

DATE: 05/02/2010 TIME: 20:11:02

PAGE: 1

EPORT CIIO30P1

CUSTOMER NAME: USPS

FASTFORW CUST: F

CUSTOMER STATISTICS

CUSTOMER ID: 004210AAX SERIAL: 123456789 ID ASSIGNED: -XX ID RETURNED: -XX IM BARCODE: YES LACSLINK PRINT: YES STELINE PRINT: YES

SRADING STATISTICS		COUNT				
INITIAL TOTAL CASS RECORDS		2,000				
AVAILABLE FOR GRADING		,995	(FF	= 1000		
RECS BYPASSED		19	(FF	. 4/	DLD=	03
Z4CHANGE/NON-DELIVERABLE	1					
MANUAL OVERRIDES	0					
REJECT < 7.5 %	2					
NO BARCODE SPRAYED 2						
ONLY CORRECT SDIGIT SPRAYED 0						
BARCODE UNREADABLE (UNRD) < 2.5 % 000	00000					
NO PLUSS ON HAIL PIECE	0					
TOTAL RECORDS AVAILABLE FOR GRADING	1	,976				100.00%
CORRECTLY CODED RECORDS		1	955	(FF=	963	98.94%
PENALTY FOR MISREAD/MISCODE ERRORS	2 X	.5	1	.00		
PENALTY DEFAULT (KEYING) DEPTH/CODE ERR	0		0			
CORRECTLY CODED ADJUSTED FOR PENALTIES		1	954	0.0		98.89%
BONUS POINTS AWARDED (NOT ENOUGH BONUS QUES	TIONS CO	DRRECT	(1)			0.00%
TOTAL RECORDS COUNTED INCORRECT			22	. 60		1.11%
INCORRECTLY CODED RECORDS	21					
BARCODE UNREADABLE (UNRD) > 2.5 %	0					
REJECTS > 7.5% COUNTED INCORRECT	o					
PENALTY FOR MISREAD/MISCODE ERRORS	1.00					
PENALTY DEFAULT (KEYING) DEPTH/CODE ERR	0					
FASTFORWARD MOVE SCORING:						
PIECES AVAILABLE FOR GRADING	150					
TOTAL RECORDS COUNTED INCORRECT			04	0.0		04.00%
TOTAL RECORDS COUNTED CORRECT			96	.00		96.00%
			****	******		*********
INCORRECTLY CODED PERFECT ADDRESSES			9	MAX=		3)
INCORRECTLY CODED FATAL ADDON			0			
INCORRECTLY CODED DPSC			2	=XAM		9)
					*****	
FINAL SCORE MASS (MINIMUM 98.5%): 98.89	n FF	s sco	DRE (	MUMINIM	95%):	96.00%
••••						*********

## This sample is the Intelligent Mail® Barcode result.

REPORT CIIO33Pl

USPS 47-2467 U.S. POSTAL SERVICE - CODING ACCURACY SUPPORT SYSTEM

NATIONAL CUSTOMER SUPPORT CENTER

CUSTOMER STATISTICS

DATE: 04/01/2008

TIME: 20:48 14

PAGE: L

CUSTOMER NAME USPS

FASTFORW CUST.

CUSTONER ID: 004210MAY

SERIAL. ID ASSIGNED.

12345678 XXX

ID RETURNED: XXX

IN BARCODE: YES

STATISTICAL OVERVIEW

COUNT

INITIAL TOTAL CASS RECORDS

350

RECORD'S AVAILABLE FOR GRADING

348

RECORDS CODED CORRECTLY

348

TOTAL RECORDS COUNTED INCORRECT

0

TRACKING BARCODE FINAL SCORE (HIMIHUM 100%) 100%

OPTION 1 - MAILER ID HUST BE 666666

SERTAL NUMBER HUST BE 9 DIGITS THAT ARE THE SAHE OR UNIQUE, BUT HOT ALL ZEROS

OPTION 2 MAILER ID MUST BE 999999999

SERIAL NUMBER HUST BE 6 DIGITS THAT ARE THE SAME OR UNIQUE. BUT NOT ALL TEROS

OPTION 3. USE ASSIGNED MAILER ID, IF MAILER ID IS 6 DIGITS, SERTAL NUMBER MUST BE 9 DIGITS AND VICE VERSA

<sup>\*\*</sup> BARCODE ID HUST EQUAL OO

<sup>..</sup> SERVICE CODE MUST EQUAL 700

<sup>..</sup> HATLER ID/SERIAL NUMBER OPTIONS

## **Appendix 5:**

**No Match Report** 

### **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 prebarcoded in the address block of the mailpiece.

Y = YesN = No

- c = Customer sprayed pre-barcode as the customer answer
- 4. Z9 indicates the presence of an invalid ZIP+4 Code on the mailpiece.

Y = YesN = 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.

O = Odd E = EvenB = Both

Y = Z4Change

USPS 47-2467

REPORT CIIO30P2

US POSTAL SERVICE - CODING ACCURACY SUPPORT SYSTEM NATIONAL CUSTOMER SUPPORT CENTER CUSTOMER NO MATCH REPORT ADDRESSES WHICH ARE GRADED AND SCORED

DATE: 11/07/2005 TIME: 20525146 PAGE: 15

CUSTOMER NAME: USPS

CUSTOMER ID: 000040DCF

	SS REC	GASS RECORD GIVEN				CASS STAN	CASS STANDARDIZATION ANSWER	ANSWER	CASTONER.	CUSTOHER RECORD RETURNED	IRNED
JAHES B RYAN INC		€			2AMES	B RYAN TWC	(5)				
600 N 30TH ST # 3924 4 1137	3924 1 11				H 009	600 N 30TH ST # 3924	4 1117	_			
CANDEN		7	50180		CAMBEN		٢	08:05-1363 99			
(2)						(9)		(10)		UNREA - DABL	ABL E
CASS KEY B9806679	SIZE	BARCODE N	K 7.9	CASE MIXED	FONT D	SPECÍAL FLAG 07	RECGRD TYPE H	21P+4 0DD/EVEH/30TH Y		RECORD	Z1P+4 000/EVEN/BGTH
						=					
INDIA GARHENTS	1	•			AIGH1	INDIA GARHENTS	1				
CARLSTADT	Ĉ ≖	# 5643 #J (	07072		CARLSTADT	MSACK ST	27 ZF B 3643	07072 - 1313 26			
		(3)								REJ	
CASS KEY 89806779	SIZE	BARCODE	59 N	CASE HIXED	FORT	SPECIAL FLAG 08	RECORD TYPE H	ZT9+4 GDD/EVEN/80TH E		RECORD TYPE	ZIP+4 ODD/EVEN/BDTH
					3	000000000000000000000000000000000000000					
FADET AND FULLEX ASSULT 905 KINGS HWY N 4 9786 7	4 9786 7	<b>,</b> -1			905 KI	905 KINGS MWY H STE I A 9788	30C 1 A 9788				
CHERRY MILL		7	08034		CHERRY HILL	ו אנונ	ž	08054-1534 01			(8)
			(4)					:		08034 - 1	-1536 99×
CASS XEY 89806780	4 A	BARCODE N	7.9 N	CASE	FONT	SPECTAL FLAS DB	RECORD TYPE H	ZIP-4 QDD/EVEN/BOTH O		RECORD TYPE	ZIP+4 ODD/EVEH/BOTH
DOBBS ANNEX					DOBBS ANNEX	ANNEX			ŀ		
GENERAL DELIVERY		1	75032		GENERAL	GENERAL DELIVERY Rockwaii	×	75087 - 9959	GENERAL DELIVERY		(8)
						<b>!</b>			;	75938 - 9	#66 6666
CASS KEY 89806877	SIZE	8ARCODE N	2 7	CASE	10 ea	SPECTAL FLAG RO	RECORD TYPE G	ZIP+4 ODD/EVEN/80TH B		RECORD TYPE G	Z19+4   ODD/EVEH/80TH
JUNGLE FOWL VACATIONS	T10HS			İ	JUNGTE	JUNGLE FOWL VACATIONS	NS		,		
962 X08 69 3H					FC 59	80% 20¢			HC 69		
GRADY		ĕ	73561-4598	4598	SRADY		96 X	13569-9601 06		( <u>7)</u> 9 - 13581	(7) - 9801 06
CASS KEY B9866940	SIZE	BARCODE	6Z	CASE	F0.47	SPECIAL FLAG R2	RECORD TYPE R	21P+4 000/EVE4/80TH B	(6) <sup>^</sup>	RECORD TYPE R	21P+4 000/EVEH/BOTH
F	:	1			┪	ł	ŀ				

FONT B SIZE A: ABCDE FONT B SIZE C: ABCDE

FONT C SIZE A: ABCDE

FONT 8 SIZE A: ABCDE FONT 8 SIZE C: ABCDE

FONT A SIZE A: ABCDE

CINCS! FAR 2000

USPS 47-2467

US POSTAL SERVICE - CODING ACCURACY SUPPORT SYSTEM NATIONAL CUSTOMER SUPPORT CENTER CUSTOMER NO MATCH REPORT ADDRESSES WHICH ARE GRADED AND SCORED

DATE: 07/16/2008 TIME: 20142477 PAGE: 1

REPORT CII030P2

USPS CUSTONER NAME:

004210TAA CUSTONER ID:

CASS RECORD BESCH	SSREE	380.666				CASS STANDAR	47.00	N ANSWER THE PROPERTY.	WE THE BUSIONER	DUSTONER RECORDING TO	KEDILLING
MARSH & MCLENNDEN			(1)		SARCOD	BARCODE ID : 00 SERVICE CODE: 700		(9)	BARCODE ID : 00 SERVICE CODE: 000	<b>.</b>	<u>(2)</u>
356 FIRST STREET APARTHENT	APARTHEN	* *	Ì		HA.I LER	ID: UNACCEPTED	EPTED		ة	* *	NOT ALLOWED
HOBOKEN		Ř	07030		SERTAL	-	EPTED		SERIAL NUMBER: 000000000	*	NOT ALLOWED
(Z)						( <u>9)</u>					
CASS KEY 00077	SIZE	BARCODE	52	CASE	FONT	SPECIAL FLAG AD	RECORD TYPE	Z1P+4 000/EVEN		RECORD TYPE	ZIP+4 GDD/EVEN
n.Junios. 300					BARCODE 10	E 10 : 00			1		
B39 WILLOW AVENUE APARTHENT	APARTKE	SNT 2			MAILER	MAILER ID: UNACCEPTED	EPTED		SERVICE CODE: UCU HAILER ID: 000000000		NOT ALLOWED
новокех		ž	07030		SERIAL	HUMBER: UMACCI	EPTED		SERIAL NUMBER: 000000000	*	HOT ALLOWED
CASS KEY OOLD4	312E	BARCODE	29	CASE	המאז	SPECIAL FLAG AO	RECORD TYPE	ZIP+4 ODD/EVEN		RECORD TYPE	21P+4 0DD/EVEH
NOS LES SENONE	1				BARCODE ID	E ID : 00			BARCODE ID : 00	<u> </u>	
901 NE NESA ST					HAILER	HAILER IB: UNACCEPTED	EPTED		i	¥	NOT ALLOWED
OLATHE		KS	66061		SERIAL	NUMBER: UNACC	ЕРТЕД		SERIAL NUMBER: 000000000	2	NOT ALLOWED
CASS KEY 03342	SIZE	BARCODE	52	CASE	FONT	SPECIAL FLAG DO	RECORD	ZIP+4 ODD/EVEN		RECORD TYPE	21P+4 0DD/EVEM
WOODCREEK CONDOS					BARCODE	ARCODE ID : 00 ERVICE CODE: 700			BARCODE ID : 00 SERVICE CODE: 000	*	
29652 HIDDLEBELT RD UNIT 1401F FARMINGTON HILLS	RD UNIT	1401F HI	48334		MAILER SERIAL	MAILER ID: UNACCEPTED SERIAL NUMBER: UNACCEPTED	EPTED EPTED		MAILER ID: 000000000 SERIAL NUMBER: 00000000	# # # 3	NOT ALLOWED NOT ALLOWED
CASS KEY 07793	SIZE	BARCODE	62	CASE	FDNT	SPECIAL FLAG T6	RECORD TYPE	21P+4 0DD/EVEN		RECORD TYPE	ZIP+4 ODD/EVEN
CASS	SIZE	BARCODE	62	CASE	FORT	SPECIAL FLAG	RECORD TYPE	ZIP+4 OOD/EVEN		RECORD TYPE	21P+4 aDD/EVEH
C! NU31 AAR 7000	FONT A	FONT A SIZE A:	ABCDE	FONT	<b>平</b>	SIZE A: ABCDE SIZE C: ABCDE	FONT C	SIZE A. ABCDE SIZE C: ABCDE	FONT D SIZE A: A FONT D SIZE C: A	ABCDE ABCDE	

# **Appendix 6:**

**Electronic Data File Description** 

## **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: 051230AAG

#### Header Record:

CHO			
03		DIC X(300)	<b>\/Δ   Ε Δ   "*"</b>
05		1 10 X(300)	VALUE ALE .
00		PIC X(05)	VALUE SPACES.
			VALUE 'USPS 47-2467'.
			VALUE 001 0 47 2407 .
			VALUE
		PIC X(06)	VALUE 'DATE'
			VALUE BATE.
			VALUE '/'.
			77.202 71
			VALUE '/'.
			VALUE SPACES.
05	PS-LINE-3.		
	10 FILLER	PIC X(75)	VALUE SPACES.
	10 FILLER		
	' NATIONAL CUSTOME		
	10 FILLER	PIC X(71)	VALUE SPACES.
	10 FILLER		VALUE 'TIME'.
	10 CII030P2-HH	PIC X(02).	
	10 FILLER	PIC X(01)	VALUE ':'.
	10 CII030P2-MN	PIX X(02).	
	10 FILLER	PIC X(01)	VALUE ':'.
	10 CII0D0P2-SS	PIC X(02).	
	10 FILLER	PIC X(01)	VALUE SPACES.
05	P2-LINE-4.		
	10 FILLER	PIC X(05)	VALUE SPACES.
	05 05	10 FILLER 05 P2-LINE2. 10 FILLER 10 CII030P2-MM 10 FILLER 10 CII030P2-DD 10 FILLER 10 CII030P2-CC 10 CII030P2-YY 10 FILLER 10 CII030P2-HH 10 FILLER 10 CII030P2-MN 10 FILLER 10 CII030P2-SS 10 FILLER	05 P2-LINE 1.

	10 FILLER	PIC X(15)	VALUE
	'REPORT CII030P2'		
	10 FILLER	PIC X(70)	VALUE SPACES.
	10 FILLER	PIC X(50)	VALUE
	<ul> <li>ADDRESSES WHICH</li> </ul>	HARE 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 CII030P2-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 CII030P2-NUM	PIC X (09).	

#### Data Record:

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

	Data records will start in record 8 and follow th	is format:
01		C X(01). C X(08).
	* ORIGINAL INPUT FIELDS  05 ERR-RPT2-IFIRST-FIRM  05 ERR-RPT2-ICITY  05 ERR-RPT2-ISTATE  05 ERR-RPT2-ISEC-URB-FIRM  05 ERR-RPT2-1DELADDR  * STANDARD POSTAL ANSWER FIELDS  05 ERR-RPT2-SFIRST-FIRM  05 ERR-RPT2-SSEC-URB-FIRM  05 ERR-RPT2-SSEC-URB-FIRM  05 ERR-RPT2-SADDRESS  05 ERR-RPT2-SCITY  05 ERR-RPT2-SSTATE  05 ERR-RPT2-SZIP  05 ERR-RPT2-SZIP  05 ERR-RPT2-SADDON  05 ERR-RPT2-SADDON  05 ERR-RPT2-SDELPT  05 FILLER	PIC X(40). PIC X(10). PIC X(28). PIC X(02). PIC X(30). PIC X(64).

* MISCEL	LANEOUS REPORT FIELDS		
05	ERR-RPT2-MCONTROL.		
* Sizo volu	10 ERR-RPT2-MCNTL-SIZE		PIC X(02).
* Size value	es: A C 10 ERR-RPT2-MCNTL-BARCO	DE	PIC X(01).
* Invalid BA	RCODE Present on mailpiece in \		PIC X(01).
* Values:	Y N	MULMICLA	
	10 ERR-RPT2-MCNTL-ZIP9		PIC X(01).
* Invalid ZI	P+4 Present on mailpieces:		,
* Values:	Y N		
* Casa yalı	10 ERR-RPT2-MCNTL-CASE		PIC X(05).
* Case vali	ues: Upper Mixed 10 ERR-RPT2-MCNTL-FONT		PIC X(01).
* Font valu	les: A B C D		PIC X(01).
	ERR-RPT2-MRECTYPE		PIC X(01).
	ERR-RPT2-FILLER1		PIC X(01).
05	ERR-RPT2-MSPECIAL		PIC X(02).
05	ERR-RPT2-MODDEVEN		PIC X(01).
* CUSTO	MER RETURNED ANSWER		
	ERR-RPT2-CZIP		PIC X(05).
05	ERR-RPT2-CHYPHEN		PIC X(01).
05	ERR-RPT2-CADDON		PIC X(04).
05			
	10 ERR-RPT2-CDPBC-ANS		PIC X(02).
	10 ERR-RPT2-CDPBC-		PIC X(02).
05	CHKDGT ERR-RPT2-FILLER2		
03	LIXIX-IXF 12-1 ILLLIX		
* DATA R	ELATING TO CUST RETURNED	ZIP+4 ANSWE	R
	e parsed information associated wi		
	mer. It is taken from ZIP+4 informa		oe different
	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.	FIC A(50).	
00	10 ERR-RPT2-PRIMLO	PIC X(10).	
	10 FILLER	PIC X(03)	VALUE '-'.
	10 ERR-RPT2-PRIMHI	PIC X(10).	
	10 FILLER	PIC X(27).	
05	ERR-RPT2-LINE3.		
	10 ERR-RPT2-PREDIR	PIC X(02).	
	10 FILLER	PIC X(01)	VALUE SPACE.
	10 ERR-RPT2-STRNAME	PIC X(28).	\/ALLIE
	10 FILLER 10 ERR-RPT2-SUFFIX	PIC X(01) PIC X(04).	VALUE SPACE.
	10 FILLER	PIC X(04). PIC X(01).	VALUE SPACE.
	10 FRELER 10 ERR-RPT2-POSTDIR	PIC X(01).	VALUE OF AUE.
	10 FILLER	PIC X(11)	VALUE SPACE.
05	ERR-RPT2-LINE4.	, ,	
	10 ERR-RPT2-SECUNIT	PIC X(04).	

	10 FILLER	PIC X(01).	
	10 ERR-RPT2-SECLO	PIC X(08).	
	10 FILLER	PIC X (03)	VALUE '-'.
	10 ERR-RPT2-SECHI	PIC X(08).	
	10 FILLER	PIC X(26).	
05	ERR-RPT2-CRECTYPE	PIC X(01).	
05	ERR-RPT2-CODDEVEN	PIC X(01).	

## Appendix 7:

**Guidelines for Printing LACS**<sup>Link®</sup> **Information** 

#### **LACS**Link®

LACS<sup>Link</sup> is mandatory for CASS<sup>™</sup> and MASS<sup>™</sup> 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<sup>Link</sup> information.

#### A9800786 019620EBQ

\*\*\*\*\*

լինինվ||||||||իլիմինինանորՄիսիՄոսնդնիլինվ|

**JOHN DOE** 

**RR 3 BOX 68** 

**MORGANVILLE NJ 07751** 

4 NOLAN RD 07751

**AXXXMP3** 07751

ՈՒԵլիՍինիդիկիկիկիկինիներիդոինեկիուկը

Note: Example is not to scale.

Flats must comply with current DMM® Barcode Placement standards.

Refer to the LACSLink Printing Guidelines posted on PostalPro at <a href="https://postalpro.usps.com/CycleM">https://postalpro.usps.com/CycleM</a> Printing Guidelines LACSLink.

## **Appendix 8:**

Suite<sup>Link®</sup> Product

#### Suite<sup>Link®</sup> Product

Suite<sup>Link</sup> 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<sup>Link</sup> process returns the appropriate suite number when available.

The Suite<sup>Link</sup> 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 rates.

The USPS will allow developers to return Suite<sup>Link</sup> 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<sup>Link</sup> 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<sup>Link</sup> 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 Link address.

Example:

Input: UT Animal Research

910 Madison Ave Ste 9 (invalid secondary)

Memphis TN 38103

Output: UT ANIMAL RESEARCH

> 910 MADISON AVE STE 823 Dropped invalid input secondary

MEMPHIS TN 38103-3435

Output: UT ANIMAL RESEARCH Appended invalid input

910 MADISON AVE STE 823 STE 9

secondary to the end of the

Moved invalid input secondary

MEMPHIS TN 38103-3435 address

Output: UT ANIMAL RESEARCH

STE 9

910 MADISON AVE STE 823 To second address line

MEMPHIS TN 38103-3435

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

Output: UT ANIMAL RESEARCH

> 910 MADISON AVE STE 823 # 9 Invalid input secondary changed

MEMPHIS TN 38103-3435 to a pound sign (#)

Output: UT ANIMAL RESEARCH

Moved invalid input secondary to Second address line and changed 910 MADISON AVE STE 823

MEMPHIS TN 38103-3435 To a pound sign (#)

We encourage mailers to append the secondary Suite 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<sup>Link</sup> address.

See the following mailpiece examples.

#### A9800786 019620EBQ

\*\*\*\*\*

լինինի||||||||դիվնդիմ||սնդիկսիննանկնիրին||

**ARMY CAREER CENTER** 

217 AVE UNIV INTER STE 100

**SAN GERMAN PR 00683** 

**217 AVE UNIV INTER STE 105 00683** 

A9800786 01962OEBQ				
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