



PAVE™

Technical Guide

**Quality Mail starts
with Certified Software**

PAVE™ (Presort Accuracy, Validation, and Evaluation)

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Purpose

The PAVE™ program is a process designed in cooperation with the mailing industry to evaluate presort software and determine its accuracy in sorting address files according to *Domestic Mail Manual* (DMM®) standards. PAVE is available **only** to software developers, i.e., companies that develop presort software for resale or internal use. Participation in the program is purely voluntary. Although this program evaluates and validates presort products manufactured by developers, PAVE **does not guarantee acceptance** of mail prepared using PAVE certified software; however, PAVE does provide national approval of computer generated facsimiles of United States Postal Service (USPS®) postage statements, standardized documentation, and other presort documentation.

Overview

The USPS defines a PAVE™ certified software product as a presorting product specifically written to operate on a particular platform or operating system and assigned a specific version number. Many products use different language compilers to process files within different operating systems or on different hardware platforms. Therefore, to maintain the highest quality standards, PAVE will certify a **developer's product that operates on a particular platform at the current version number**. The developer may submit all platforms, or as many as are desired, for certification. PAVE will evaluate each presort product platform on its own merits and will issue a specific certification for that platform if warranted.

Note: Throughout this manual, any reference to a "presort product" implies a product written for a specific hardware/software platform at the current version number.

Example:

Developer	Presort Product	Platforms	Version
Presort R Us	FASTsort	Windows NT for PC	1.2

Types of Certification

PAVE Gold Certification

Presort products that choose to participate in both electronic *and* hard copy documentation testing will receive Gold certification upon successful completion of all presort tests taken. Electronic testing allows tracking and verification of every mailpiece within a test file. Developers must append each test address record with the specific presort information as described in "PAVE™ Test File Description" (see Appendix A & B). Developers who support the electronic file format undergo closer scrutiny.

PAVE provides the following benefits for developers seeking Gold certification:

1. All Gold certified presort products will be listed before all Standard certified products in the PAVE Certified Products List (see <http://ribbs.usps.gov/files/PAVE/PUBS>).
2. All certificates issued to presort products will indicate Gold Certification.
3. Re-testing fees are assessed after three free electronic attempts and/or two free hard copy attempts.
4. Review and grading of products attempting Gold certification will be expedited over products attempting Standard certification during the testing cycle.

PAVE Standard Certification

Presort products submitting only hard copy testing documentation will receive Standard certification upon successful completion of all presort tests taken. Developers will process test files through their presort product and return hard copy results for examination in the form of the USPS® Qualification Report, postage statement facsimiles, barcoded container labels, etc. Hard copy evaluation is labor-intensive and limited because each individual mailpiece cannot be tracked to its ultimate location within the final presort outcome. Therefore, all Standard certified presort products will be listed after the Gold certified products in the PAVE™ Certified Developers List. Furthermore, all products submitted for Standard certification will have tests processed after the Gold certified products during the testing cycle. Re-testing fees for Standard participants are assessed after two free hard copy attempts.

MLOCR Certification

Presort products that choose to participate in MLOCR Certification must return both electronic *and* hard copy documentation together for each test. Electronic testing allows tracking and verification of every mailpiece within a test file. Developers must append each test address record with the specific presort information as described in “Universal File Format” (see Appendix A and Appendix B).

MLOCR Certification provides the following benefits for developers seeking certification:

1. All MLOCR certified presort products will be listed after PAVE™ Gold products listing (see <http://ribbs.usps.gov/files/PAVE/PUBS>).
2. All certificates issued to presort products will indicate MLOCR Certification.
3. Re-testing fees are assessed after three free electronic/two hard copy attempts.
4. Review and grading of products attempting MLOCR certification will take priority over products attempting Standard certification during the testing cycle.

Version Number Policy

All PAVE™ certifications are awarded to specific versions of presort products. To receive PAVE certification, these guidelines should be followed:

- If all submitted tests are completed successfully with in one testing round, without the need for any corrections or changes, the original version number of the presort product submitted will be certified.
- After grading and before certification, if corrections or changes to presort logic are required for any of the test categories, a new version number will be specified by the developer of the presort products after all corrections and modifications are successfully completed.
- Developer will provide PAVE with an estimated release date for the certified version.
- Changing a PAVE certified product's version number requires recertification of the product at the new version number.

The components of the version number are as follows:

Field A	Field B	Field C	Field D
Version No.	Revision No.	PAVE Cycle	Manufacturer No.
2.	01.	J	.96.09

Field A contains the software version number assigned by the developer. The number left of the decimal point represents the major release number, and the number to the right of the decimal point represents the version of the presort logic code. Any change to an existing software product's presort logic must be reported in writing to the BMA Certification Department at the National Customer Support Center (NCSC) before release. The change will be evaluated to determine whether the product requires recertification.

Field B contains the software revision number representing any non-presort logic change to the software product. A change in the revision number would be enacted by, but not limited to, an update of postage rate tables, labeling lists, or zone charts; enhancements to the user interface; updates to print drivers; or other types of revisions or updates.

Field C contains the PAVE cycle indicator assigned by the BMA Certification Department.

Field D contains the manufacturer number, which may be used by the manufacturer to indicate other internal tracking information such as monthly or quarterly database releases. *Note: If Field D is used to indicate database release dates, the USPS® recommends using a 2-byte number to indicate the year followed by a decimal and another 2-byte number to indicate the month of the database.*

Reporting of Product and Version Number

For the purpose of PAVE™ certification, the USPS **requires** developers to indicate the product name and version number at the bottom of postage statement facsimiles and in the header portion of the USPS Qualification Report. Doing so will facilitate efficient resolution of errors or problems encountered when the presorted mail is presented for acceptance.

As a reminder do not release a product as PAVE Certified that is not listed on the RIBBS site. Business Mail Acceptance utilizes this site to verify PAVE certified software and use of an unlisted product could result in a delay of the mailing.

Multiple Products with Same Presort Engine

It is recommended that all presort products that produce a mailing sortation under various environments be tested for PAVE™ Certification.

However, It is recognized that, within the same business entity/development group, the same presort engine can be used for a variety of presort products. In some instances, this covers multiple versions of the same presort product that are designed to run on different operating systems. It may also apply to a presort engine that is bundled with other software enhancements, such as address matching software, resulting in a new product line.

In the situations described above, the developer may elect to submit one product for full certification testing. It is required this be the product that incorporates the full set of supported options. Upon successful completion of certification of the primary product, PAVE will reserve the right to perform sample testing on the latest product, provided the same presort engine is utilized without any additional code alterations or modifications added.

A statement attesting to the fact that the presort engine has not been altered will be required. The number of additional tests needed may vary between *developers*, *dependent on the stated capabilities of the additional product versions being tested*.

Licensing Certified Products

If the PAVE™ certified software is licensed to or from another company, the USPS® National Customer Support Center (NCSC) must be notified in writing by both parties and the requirements of PAVE Certification testing will be similar to that described for “Multiple Products with Same Presort Engine”.

If a certified product is licensed, repackaged and sold by another company as a different product but without any modifications being made, other than graphic changes to accommodate the new company and software information, then PAVE certification can be extended to the second product without the need for additional testing. Certification

for the original product must be completed before the second product can receive certification. PAVE will reserve the right to perform sample testing on the newly packaged product prior to certification being extended. Any substantiated deficiencies that are subsequently reported from field activities would, if not corrected, adversely affect the certifications of both products.

When a presort engine is licensed to another company and the second company builds its own user interface around the presort code in order to market a new product line, full testing of the new product will have to be performed before that product can be PAVE certified.

PAVE Phraseology

The USPS prohibits the use of any PAVE™ phraseology on all official USPS forms and required documentation, including postage statement facsimiles and the USPS Qualification Report. However, PAVE certified developers may use the phrase “PAVE Certified” on marketing materials, packaging, advertisements, and other user documentation if it corresponds to and identifies a **specific** presort category for which the product is certified. In other words, if you advertise that your product is “PAVE Certified”, you **MUST** list all the presort categories that your product is certified for. If there are space constraints to the advertisement, you must state “Certified for ## presort categories see our (website, users manual, certificate etc.) for details”. When an advertisement directs a customer to Websites, user manuals, certificates etc for additional information it **MUST** plainly state each presort category certified. On websites, all references to PAVE should link to the list of presort categories that your product is certified for.

It is suggested that you consult the BMA Certification department when designing materials where the phrase “PAVE certified” will be used.

PAVE Advertising Policy

Only Pave™ certified developers may use the phrase “PAVE certified” on marketing materials, packaging, advertisements, websites, and any other user documentation. If you advertise that your product is “PAVE certified”, you **MUST** list all the presort categories that your product is certified for. If there are space constraints to the advertisement you must state “Certified for # presort categories see our (website, users manual, certificate etc.) for details.” The location you direct the consumer to **MUST** plainly state each category certified. If you choose to pre-produce mass quantities of promotional materials user’s guides, CD with graphics, etc. using the term “PAVE certified”. **BE PREPARED** to suspend use of these items if your certification is not current.

Violation Consequences

Any examples of misrepresentation of PAVE™ certification will be turned over to Postal Legal Department and the U. S. Postal Inspection Service.

1st Offense warrants a “cease and desist” letter from the National Customer Support Center. Postal Inspection Service and Legal Department will be notified.

2nd Offense warrants a temporary suspension of certification (removal from PAVE certified list on the USPS® website) until correction can be made.

3rd Offense warrants a suspension of certification privileges for a period of time to be determined depending on the severity of the infraction (decided upon by NCSC Management).

Examples of Corrective Actions

1. Retraction
2. Withholding advertising or marketing literature
3. Postponement of product catalog mailings
4. Removal of PAVE certified from exhibitor displays
5. Removal of any PAVE reference from Website

Field Error Detection and Resolution

It is the BMA Certification Department’s goal, to assist developers in achieving the highest quality presort product possible. The field error detection and resolution policy is used by both the BMA Certification department and the developer to ensure presort product quality. Regardless of cycle schedules, quality assurance remains an ongoing part of the PAVE™ certification program. Occasionally, presort errors are detected and reported by USPS® field personnel or mailers after a PAVE certified product has been distributed to customers. If this situation occurs, the following protocol is followed to resolve the problem:

1. The BMA Certification Department starts an incident report file for the product and version number.
2. The BMA Certification Department tries to determine if the problem is a presort error or some other problem such as a user setup issue.
3. The BMA Certification Department alerts the developer to the existence of a possible problem.
4. The BMA Certification Department and the developer collaborate in determining a reasonable time frame in which to correct the problem. ***If the time frame is exceeded, PAVE certification may be revoked or suspended.***
5. The BMA Certification Department will keep all appropriate parties informed of the status and progress.

6. The BMA Certification Department reserves the right to request that the developer retest any applicable test files before release.

7. When the BMA Certification Department determines that the problem has been corrected, the developer will release a patch to all customers.

Selection Rationale

The BMA Certification Department evaluates the accuracy of presort products by testing a variety of presort scenarios each certification cycle. The USPS selects different scenarios based upon, but not limited to, three key factors:

1. Presort categories most often used by different mailers (to cover the widest range of presorted mailings).
2. Presort categories in which significant errors are being detected by business mail entry units (BMEUs).
3. Presort categories that are relatively new.

Upon successful completion of the PAVE™ testing process, each product is awarded a certificate specifying each presort category for which PAVE certification is awarded.

PAVE Cycle J Calendar

April 14, 2008, Cycle J Testing begins
May 14, 2008, Certifications for Cycle I Expire
July 12, 2008, Testing fees take effect
October 17, 2008, Cycle J testing ends
May 14, 2009, Cycle J certifications expire

Out-of-Cycle and Retesting Fees

The PAVE™ certification program is free-of-charge, for the first 90 days of a cycle, to developers participating during the normal testing cycle or when a DMM® initiated PAVE cycle is conducted. However, a fee is charged for:

- any developer initiating testing in the PAVE program after the initial 90 day ‘free’ period of a cycle
- any product that has failed three electronic and two hard copy tests in any one test category

This fee is assessed as follows:

- Minimum fee for first Out of Cycle or Retest is \$250.00. This is made up by the initial evaluation fee of \$200 and Initial test (file generation) fee of \$50.00.
- Each additional test has a fee of \$35.00 each. This is made up by the evaluation fee of \$25.00 and test file generation for \$10.00.
- **Example 1:** If you are taking one out of cycle/retest the charge is \$250.00, as explained above.
- **Example 2:** If you are taking three out of cycle/retests the charge is \$320.00. This is made up of the \$250.00 of the initial testing fee and the \$70.00 for the additional 2 tests.

Note: PAVE certifications obtained “out-of-cycle” have the same expiration date as all “in-cycle” certifications.

Data Products Available

The NCSC has a variety of data products and services available for developers to utilize in creating a comprehensive presort product. For information regarding the availability, applicable costs, etc. of these items, contact the NCSC at 800-238-3150 and request a free copy of the *Products, Services, and Publications (PS&P) CD-ROM*. Products and Services include, but are not limited to:

- Carrier Route Product
- City State Product
- Delivery Statistics Product
- Enhanced Line of Travel (eLOT™) Product
- Zone Chart
- Labeling Lists
- ZIP+4® Product

The PAVE Certification Process

The developer has the choice of testing in any or all of the available categories. Due to the complexity of programming presort software products, the USPS® requests that all files (i.e., a suite) which the developer intends to certify be submitted together. All developers are required to complete and return their test files (electronic or hard copy) within 30 calendar days from the date on the cover sheet. Developers attempting Gold certification must successfully complete both the electronic AND hard copy testing process.

Electronic files should be submitted zipped. The PAVE™ preferred method for returning files is via the PAVE File Transfer Protocol (FTP) site

<https://ribbs.usps.gov/files/pave/customers/uploads/>. If desired, files can be submitted via CD-ROM. When using the FTP the developer should e-mail the BMA Certification department at pave.ncsc@usps.gov to inform them that the file has been uploaded to the FTP site. Developers utilizing their own labeling must ensure the phrase “Deliver Immediately, PAVE Tests Enclosed” is posted conspicuously on the outside of the mailing container and return ALL test files and/or all hard copy documentation to:

**BMA CERTIFICATION DEPARTMENT
ATTENTION: PAVE DEPARTMENT
UNITED STATES POSTAL SERVICE
NATIONAL CUSTOMER SUPPORT CENTER
6060 PRIMACY PKWY STE 101
MEMPHIS TN 38188-0001**

Test data is provided in the form of address files. Each presort scenario has its own address file and has specific characteristics and attributes, such as mailpiece dimensions, specific entry point, sortation levels allowed, processing category, etc. Each file is processed as a specific presort job with explicit parameters. PAVE™ is a certification standard of excellence; therefore, we will certify and list your product’s required and optional mail preparation standards for each presort category.

Note: Whether pursuing Gold, Standard, or MLOCR certification, it is imperative that developers follow all rules and parameters stated in “General Testing Instructions” (see page 18) to achieve certification. Failure to do so will warrant an outright rejection of your test submission before any actual grading of presort. Furthermore, this will count towards one of the three electric or two hard copy tests for the free evaluations given.

The following presort test categories are available for Cycle J:

- First-Class Automation Mail
- First-Class Machinable Mail
- First-Class Presorted Mail
- First-Class Presorted Parcels
- First-Class Cotrayed Flats
- Periodicals Automation Mail
- Periodicals Presorted Mail
- Periodicals Cosacked Flats
- Standard Mail Automation Mail
- Standard Mail Machinable Mail
- Standard Mail Presorted Mail
- Standard Mail Enhanced Carrier Route Mail
- Standard Mail Irregular Parcels
- Standard Mail Cosacked Flats
- Optional Presort Preparations under 705

Each file is graded individually for its accuracy of presort and compliance with current DMM® regulations. The evaluation includes inspection of standardized documentation; container labels, computer-generated postage statement facsimiles, and other presort documentation. If the electronic file and/or documentation presented is deemed 100 percent accurate and in compliance with current DMM regulations, certification is awarded for the specific presort category tested. If any errors preventing certification are detected, an evaluation report identifying the specific violations and their appropriate DMM references will be provided to the developer. After the proper changes and/or adjustments are made to the software, the developer is responsible for ordering a new test file.

Reprocessing the original test is prohibited. In some instances, the BMA Certification Department may request that a product be retested in certain categories if a failure or modification affects another category.

Cycle J certifications are effective until the next cycle begins.

Developers whose products have completed all intended tests and have been certified for any or all presort categories receive an official PAVE™ certificate and will have their name, address, and presort product name and version number included in the list of PAVE certified software. Weekly updates are available electronically through the USPS® Website. To access the list go to <http://ribbs.usps.gov/file/PAVE/PUBS>.

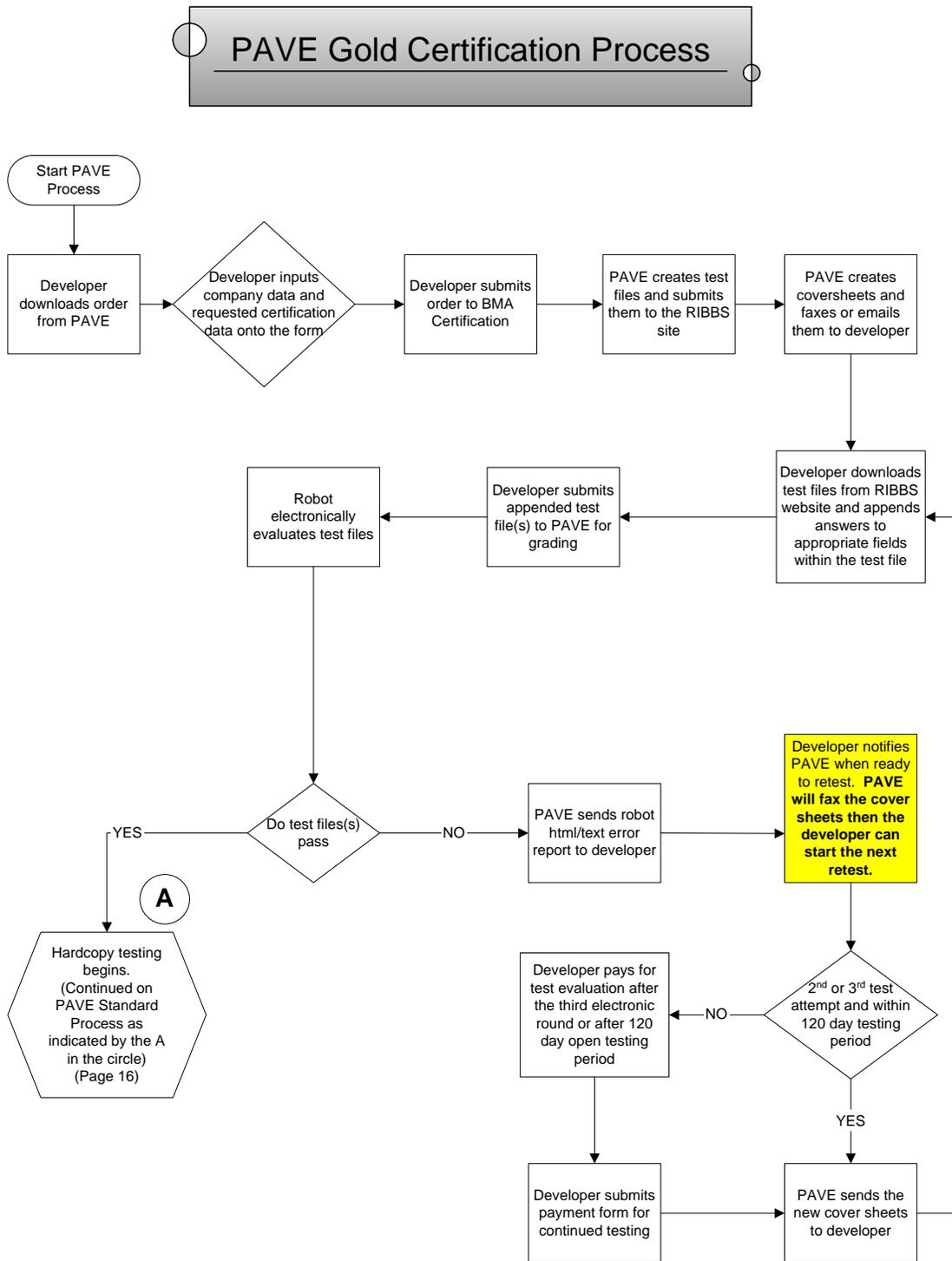
Naming of Files

In Cycle J we will be using a two-character field in the test file name that will be the Set Identifier. The set identifier will start with H or E representing hard copy or electronic tests respectively. A four character Test Identification Number will follow the Identifier. (ex. HB_J209 will break down to Set HB, Cycle J, Test 209). All test files will end in a .tst suffix. To facilitate processing of the returned electronic files, developers are required to retain this same naming convention when preparing the amended files. Text files that are generated as a result of electronic grading will be in this same format with a specific Mail Split Stream Indicator attached to the end of the Test File number.

Products Attempting Gold Certification

After processing the test, the developer returns (within 30 calendar days of the date on the cover sheet) the appended electronic test file. The test file will be processed through the PAVE™ electronic grading program. The computerized grading program is designed to search for specific violations of presort rules and USPS regulations. If any errors are discovered, the developer is notified (robot report information will be provided) and asked to retest. If no errors are detected, then the developer is notified that the electronic submission has passed and should now submit a complete set of hard copy documentation from a newly assigned test series. That documentation is then reviewed and graded in the same manner as it would be for Standard certification (see “Products Attempting Standard Certification,” page 13). If passed, the developer becomes Gold certified; otherwise, the developer will be asked to retest hard copy (which could also include electronic re-testing, depending upon the errors detected).

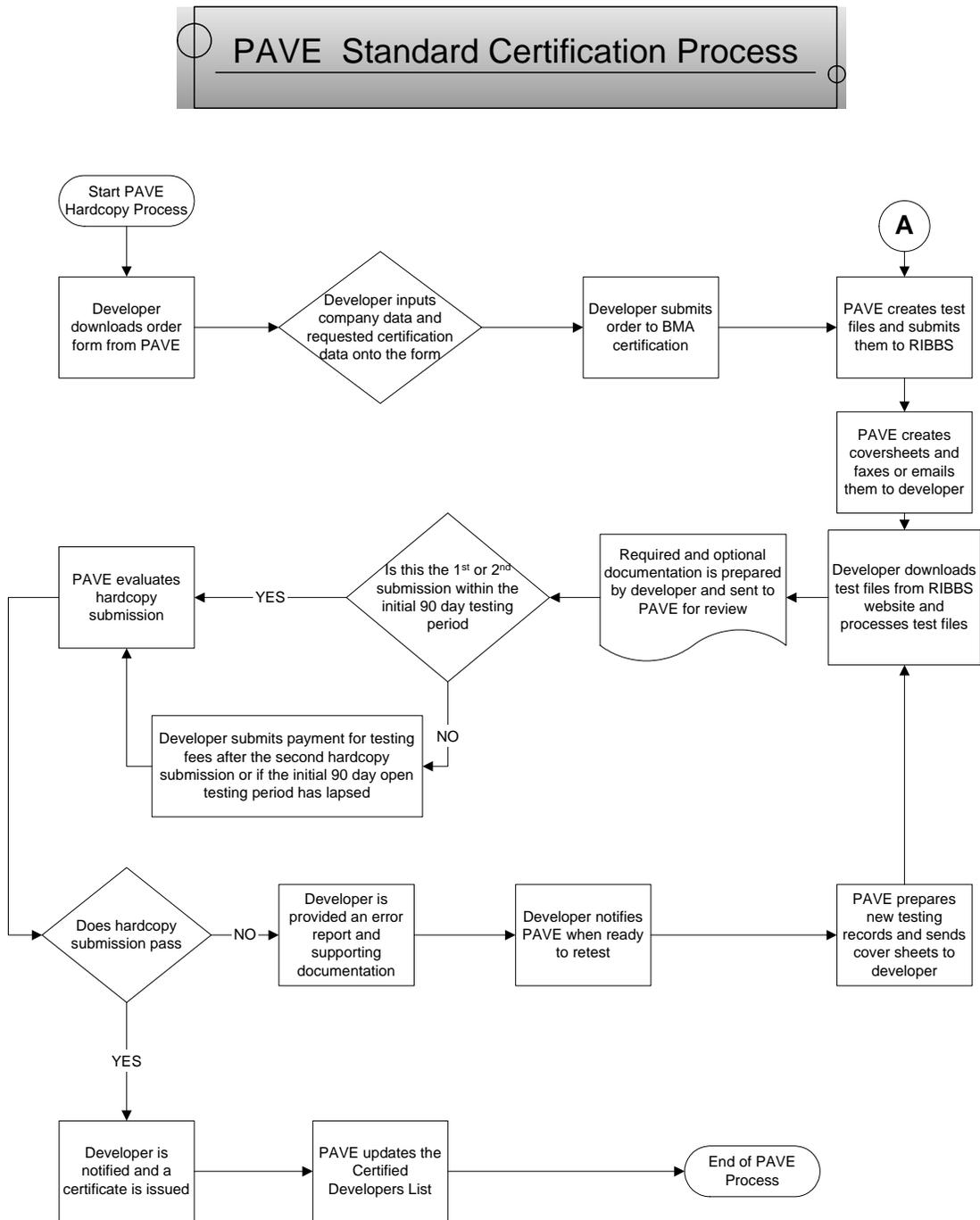
Figure 1. PAVE Gold Certification Process



Products Attempting Standard Certification

After processing the test, the developer returns (within 30 days of the date on the cover sheet) hard copies of all required presort documentation produced by the presort product (see “Required Hard Copy Output, page 21). PAVE™ will manually review the documentation to determine compliance with DMM® regulations and proper formatting of reports and postage statement facsimiles. If any errors are detected, retesting is required. When the output is determined to be accurate, Standard certification is awarded (see Figure 3, PAVE Standard Certification Process, page 14).

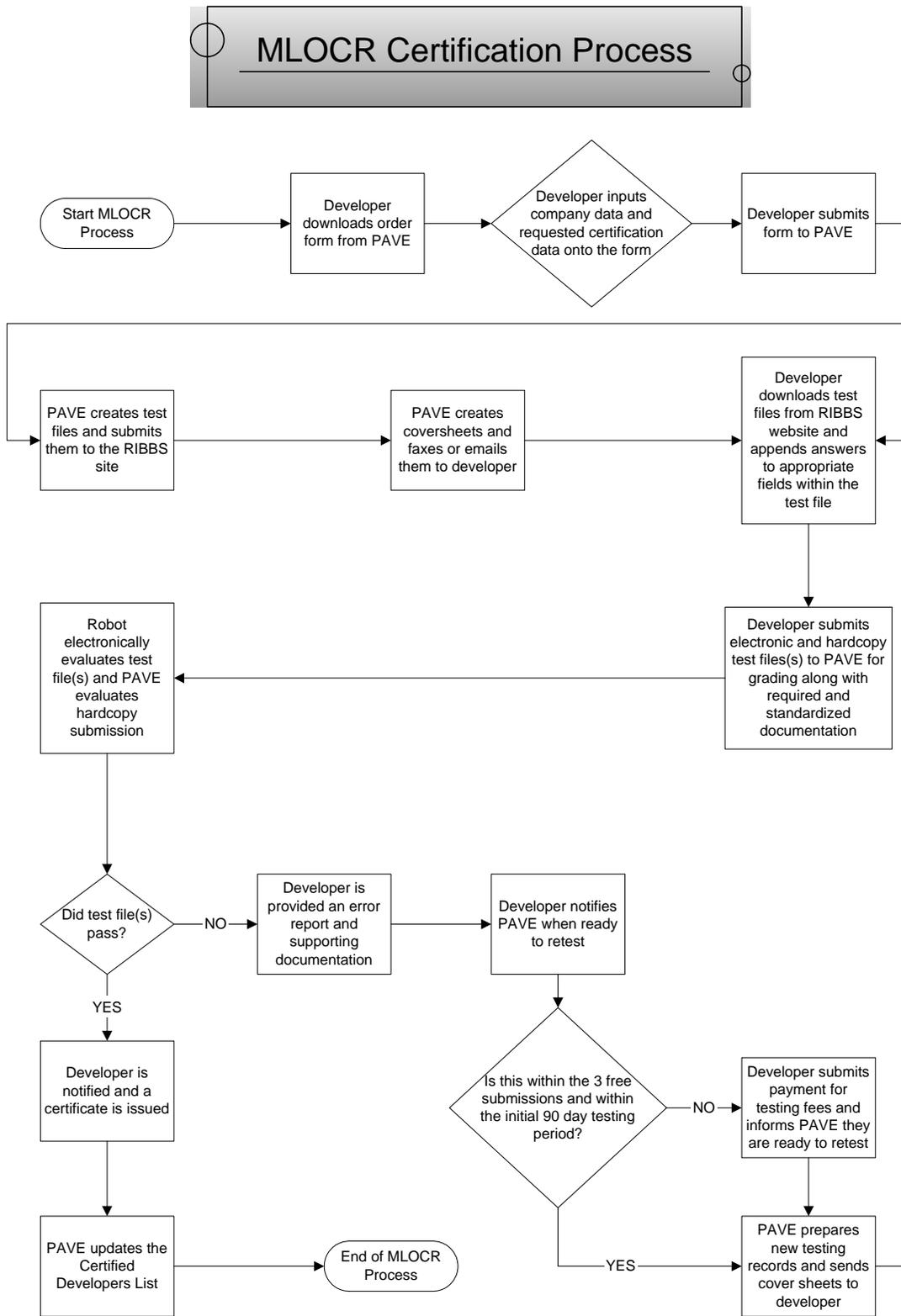
Figure 3. PAVE Standard Certification Process



Products Attempting MLOCR Certification

After processing the test, the developer returns (within 30 calendar days of the date on the cover sheet) the appended electronic test file and hard copies of all required presort documentation produced by the presort product. The electronic test file will be processed through the PAVE™ electronic grading program, and the hard copy will be manually reviewed to determine compliance with DMM® regulations and proper formatting of reports and postage statement facsimiles. The computerized grading program is designed to search for specific violations of presort rules and USPS® regulations. If any errors are discovered, the developer is notified and asked to retest. The new test will count towards one of the three free attempts. If no errors are detected, then the developer is notified that he or she has passed electronic grading and we will then process the returned hard copy documentation from the test series. That documentation is then reviewed and graded in the same manner as it would be for MLOCR certification. If passed, the developer becomes MLOCR certified; otherwise, the developer will be asked to retest (which will also include electronic re-testing).

Figure 2. MLOCR Certification Process



List of Presort Scenarios

For PAVE™ Cycle J, the USPS offers the following domestic presort categories for testing:

Table 1: Presort Scenarios

PRESORT CATEGORY	DMM REF #	TEST #
PREREQUISITE TESTS		
(Required for Products Not Previously Certified in Cycle J – PAVE staff will assign the appropriate test(s), if needed)		
1. First-Class Mail Letters or Flats	235, 335	J010
2. First-Class Mail Cotrayed Flats	705.9.1	J011
3. First-Class Mail Cotrayed Flats	705.9.1	J012
4. First-Class Mail Cotrayed Flats	705.9.1	J013
5. Standard Mail Letters or Flats	245, 345	J020
6. Standard Mail Flats	345.5.7, 345.7.4	J021
7. Standard Mail Cosacked Flats	705.9.3	J023
8. Standard Mail Cosacked Flats	705.9.3	J024
9. Standard Mail Cosacked Flats	705.9.3	J025
10. MAC Batch First-Class Mail Letters or Flats	235, 335	J600
FIRST-CLASS MAIL TESTS		
11. First-Class Mail Multi-Presort File for Automation and Machinable Letters	235.6, 235.5.3	J101
12. First-Class Mail Automation Letters	235.6	J102
13. First-Class Mail Nonmachinable Letters	235.5.3	J103
14. First-Class Mail Automation Flats-Bundle Based	335.6.5	J104
15. First-Class Mail Nonautomation Flats	335.5.5	J105
16. First-Class Mail Presorted Parcels	435.4	J106
17. First-Class Mail Automation Letters Flats-Tray Based Option	335.6.6	J107
18. First-Class Mail Cotrayed Flats	705.9.1	J108
19. First-Class Mail Automation Letters-MLOCR	235.6	J109
20. First-Class Mail Automation Flats Tray Based-MLOCR	335.6.6	J110
21. First-Class Mail Automation Letters – Low Volume Products Only	235.6	J120
22. MAC Batch First-Class Mail Automation Letters	235.6	J602
23. MAC Batch First-Class Mail Automation Flats-Tray Based Option	335.6.6	J607
PERIODICALS TESTS		
24. Periodicals Multi-Presort File for Automation and Presorted Nonautomation Letters	707.22.5, 707.24	J201
25. Periodicals Carrier Route Letters - eLOT	707.23.3	J202
26. Periodicals Carrier Route Letters – Walk Sequence	707.23.3	J203
27. Periodicals Automation Flats	707.25.3	J204
28. Periodicals Nonautomation Flats	707.22.6	J205
29. Periodicals Carrier Route Flats – eLOT	707.23.4	J206
30. Periodicals Carrier Route Flats – Walk Sequence	707.23.4	J207
31. Periodicals Bundle Reallocation SCF w/3-digit Pallets	705.8.11.3	J208
32. Periodicals Bundle Reallocation SCF w/o 3-digit Pallets	705.8.11.4	J209
33. Periodicals Machinable Flat Bundles on Pallets	705.8.10.1	J210
34. Periodicals Cosacked Machinable Flats	705.9.2	J211
35. Periodicals Merged Bundles in Sacks	705.10.1.4	J212

PERIODICALS TESTS (Continued)	DMM	TEST #
	REF #	
36. Periodicals Merged Bundles on Pallets	705.10.1.5	J213
37. Periodicals Merged Bundles on Pallets-5% Threshold	705.12.1.5	J214
38. Periodicals Merged Bundles on Pallets-5% Threshold **	705.13.1.5	J215
39. Periodicals Nonmachinable Flat Bundles on Pallets	705.8.10.1	J216
40. Periodicals NonBarcoded Machinable Flats-Tray Prep.	707.22.7	J217
41. Periodicals Barcoded Machinable Flats-Tray Preparation	707.25.4	J218
42. Periodicals Machinable Flats - Cotrayed Preparation	705.9.2	J219
43. Periodicals Mach. Bundles on Pallets ADC Reallocation	705.8.12	J220

STANDARD MAIL TESTS

44. Standard Mail Multi-Presort File for Automation and Presorted Machinable Letters	245.5.4, 245.7.5	J301
45. Standard Mail Automation Letters	245.7.5	J302
46. Standard Mail Nonmachinable Letters	245.5.4	J303
47. Standard Mail ECR Letters-eLOT	245.6.7	J304
48. Standard Mail ECR Letters-Walk Sequence	245.6.7	J305
49. Standard Mail Automation Flats	345.7.4	J306
50. Standard Mail Nonautomation Flats	345.5.5	J307
51. Standard Mail ECR Flats-eLOT	345.6.7	J308
52. Standard Mail ECR Flats-Walk Sequence	345.6.7	J309
53. Standard Mail Irregular Parcels	445.5.4	J311
54. Standard Mail Not-Flat-Machinable Pieces < 6 oz	445.6.3.2	J312
55. Standard Mail Bundle Reallocation SCF w/3-digit Pallets	705.8.11.3	J313
56. Standard Mail Bundle Reallocation SCF w/o 3-digit Pallets	705.8.11.4	J314
57. Standard Mail Bundle Reallocation ASF/BMC Pallets	705.8.13	J315
58. Standard Mail Flat Bundles on Pallets	705.8.10.2	J316
59. Standard Mail Cosacked Flats	705.9.3	J317
60. Standard Mail Merged Flats in Sacks	705.10.2.4	J318
61. Standard Mail Merged Flats on Pallets	705.10.2.5	J319
62. Standard Mail Merged Bundles on Pallets-5% Threshold	705.12.2.4	J320
63. Standard Mail Merged Bundles on Pallets-5% Threshold **	705.13.2.4	J321
64. Standard Mail Automation Letters (Overflow Trays Off)	245.7.5	J322
65. Standard Mail ECR Letters-eLOT Heavy Letter	245.6.7	J323
66. Standard Mail Automation and Machinable Letters-Low Volume Products Only	245.7.5, 245.5.3	J330

Note: Process any applicable prerequisite test or required test only once.

**** Indicates using City-Sate File**

General Testing Instructions

To achieve PAVE™ certification, the following instructions, guidelines, and parameters must be followed explicitly:

Step 1: Complete **On-Line** (or) **Hardcopy** PAVE order form located at the following URLs:

On-Line: <http://www.ribbs.usps.gov/>

(under RIBBS Links, click on PAVE, click PAVE Order Form, enter your PAVE Developer ID and click Submit; at this point enter your order information)

Hardcopy: <http://ribbs.usps.gov/files/PAVE/PUBS/PAVEORDERFORM.DOC>

Step 2: Fax or email the hardcopy order form to the BMA Certification department. Fax number is 901-821-6206 and email is pave.ncsc@usps.gov.

Step 3: After the order form has been received and processed, a coversheet will be faxed to the software developer (for on-line instructions go to Step 3A). The software developer will review the coversheet and return it with approval and/or changes.

Step 3A: Please reference the PAVE On-Line User Guide for further instructions which is located at URL: <http://ribbs.usps.gov>

Step 4: Download the appropriate test files and data tools from RIBBS at the following URL: <http://ribbs.usps.gov/files/PAVE/> and click on PAVE Test Files, then click the appropriate Cycle at that time.

Step 5: Process the test files and produce the required documentation. Electronic files should be submitted zipped. The preferred method for returning files is via the PAVE File Transfer Protocol (FTP) site.

Step 6: The BMA Certification department will verify that the files have been received and contact the software developer with test results. Please allow two weeks for results.

Step 7: If the software developer has questions regarding their test results, they should be emailed to pave.ncsc@usps.gov. Once the questions have been answered, a conference call will be scheduled if necessary. Once the conference call is complete, the BMA Certification department will verify with the software developer which test sets are required for further testing.

Step 8: If there are no questions and there is a PASS, a signoff sheet will be emailed to the software developer. Once it is approved, the certified product will be posted to RIBBS.

PAVE™ Test Files

Many presort categories require successful completion of multiple tests to achieve certification. If you choose to test in more than one scenario, the required tests only need to be processed once.

Below is the testing structure for Cycle J. The prerequisite tests J010 through J025 are mandatory **only for Developers that are not currently PAVE certified**. Certain tests require additional tests to also be taken. These additional required tests can be found on the Parameter Report.

File J010 – *only for products not PAVE certified in Cycle I.*

A prerequisite test, for certification in any First-Class Mail presort category along with any applicable First-Class test(s) (J101-J108) of your choice. (If you choose to take more than one First-Class Mail test, process File J010 only once).

File J011, J012, J013 – *only for products not PAVE™ certified in Cycle I.* Prerequisite tests for certification of First-Class Cotrayed Flats (DMM® 705.9.0).

File J020 – *only for products not PAVE certified in Cycle I.*

A prerequisite test, for certification in any Standard Mail presort category along with any applicable Standard Mail test(s) (J301 – J323) of your choice. (If you choose to take more than one Standard Mail test, process File J020 only once).

File J021 – *only for products not PAVE certified in Cycle I.*

A prerequisite test for certification in any Standard Mail flats presort category along with any applicable Standard Mail flats test(s) of your choice. (If you choose to take more than one Standard Mail flats test, process File J021 only once).

File J023, J024, J025 – *only for products not PAVE certified in Cycle I.*

Prerequisite tests for certification of Standard Mail Cosacked Flats (DMM 705.9.3).

Files J101 - J110

First Class™ Mail tests including automation, presorted, machinable, and cotrayed presort categories. Tests will cover a variety of processing categories including letters, flats, and parcels. Also included is the optional preparation for tray based auto flats.

Files J201 - J220

Periodicals Mail tests including automation, presorted, carrier route, and cosacking, presort categories. Tests will cover a variety of processing categories including letters, flats, and bundles on pallets. Also included are optional preparations such as bundle re-allocation, and merging of carrier-route mail in sacks or on pallets.

Files J301- J323, J330

Standard Mail™ tests including automation, presorted, machinable, nonmachinable, carrier route, and cosacked presort categories. Tests will cover a variety of processing categories including letters, flats, parcels, and bundles on pallets. Also included are optional preparations such as bundle reallocation and merging of carrier-route mail in sacks or on pallets.

Each test file commands different logic flows; one test might employ the minimum piece rule, while another could use the maximum and minimum pound rules. Each presort scenario is supplied with specific parameters and requirements. If your product cannot comply with any particular requirement as it is defined, you are **required** to notify the BMA Certification Department at the NCSC before processing the file. An exception may be granted **ONLY** if the BMA Certification Department is contacted in advance and determines that a substituted value will not compromise the integrity of the test.

For the purposes of PAVE™ testing, the BMA Certification department will provide all developers with a data set including all pertinent files used to create the address file test. These files include the appropriate Labeling Lists, Address Management System (AMS) data, City State file, and applicable zone charts. ALL tests processed by your software **MUST** utilize the data files provided. Failure to do so may result in test errors.

Documentation

Required Hard Copy Output

An integral requirement of the PAVE™ certification process is the manual review of hard copy documentation. This review is performed for Gold, MLOCR and Standard testing. After processing the presort scenario, ALL developers must return an USPS® Qualification Report. As an added benefit of the PAVE program, the BMA Certification department will also examine any additional presort documentation generated by the software, as well as container labels, and computer generated facsimiles. To determine which, if any, of the additional documentation is necessary for any given test, consult the specific cover sheet provided by PAVE for the test.

HARD COPY OUTPUT REQUIRED

HARD COPY OUTPUT	REQUIRED
USPS Qualification Report	Each Test
Job Setup Parameter Report (JSP)	Each Test – this must contain all information requested to be provided on the PAVE Cover Sheet.
PAVE Cover Sheet	ONLY if no JSP is provided
Completed Postage Statement Facsimile	ONLY if produced by software AND indicated as necessary on the PAVE cover sheet
Barcoded Tray and Sack Tags	ONLY if produced by software AND indicated as necessary on the PAVE cover sheet
MLOCR Reports (see Appendix D)	Required for MLOCR testing
Additional User Documentation	ONLY if produced by software AND indicated as necessary on the PAVE cover sheet.

PAVE Cover Sheet

Each test ordered includes an individualized cover sheet. The cover sheet indicates any necessary optional processes (electronic and/or hard copy testing) and/or documentation requirements (hard copy testing) for that specific test. The parameter section lists the parameters of the piece used for the test. If the developer uses these parameters **exactly**, indicate this by checking the boxes beside the measurement used in the space provided. If the parameters are not used exactly, the developer must provide the measurements used. Additional parameters are needed for accurate grading. The developer must fill in all remaining information. It is crucial to the process to have the cover sheet completed in full. The cover sheet also includes vital information concerning your company and product. This information will be reported directly on the PAVE™ Certified Software List. When certification is awarded, you are responsible for

confirming the accuracy of your listing on each cover sheet. It is imperative that you review each listing carefully.

Job Setup Parameter Report

Presort products that produce a Job Setup Parameter (JSP) report are exempt from returning the completed PAVE Cover Sheet IF the following components are included, and easily identified, in the JSP:

- Class of mail, DMM® reference
- Mailpiece height, length, thickness, and weight
- Container type (do not use with MLOCR)
- Maximum pieces per container
- Entry point
- Product name and version number
- Total Pieces Processed
- Full Tray Default Setting (do not use with MLOCR)
- Full Tray Default set by (do not use with MLOCR)
- Maximum Bundle Width (do not use with MLOCR)

Attach the JSP or cover sheet to your hard copy results, and return it with the other required hard copy output for each test. Remember that upon successful completion of product testing, the information on the cover sheet will be used for your listing on the *PAVE Certified Software List*. Regardless if the presort product supports the JSP format or utilizes the PAVE cover sheet – the developer is responsible for confirming all company and product information.

Postage Statement Facsimile

PAVE™ reviews all computer-generated postage statement facsimiles for form and content. Developers must submit hard copy facsimiles when indicated by the PAVE Cover Sheet (*Do not submit with electronic test*). For the purpose of PAVE certification, each PS Form facsimile is required to have “Facsimile” on the bottom of each page next to the form number. Developers are also **required to include the product name and version number on each facsimile.**

Within Cycle J, the PAVE™ Certification process will include the verification of postage calculations on any and all submitted postage statement facsimiles. Consult DMM® 604.7 and 707.2 for guidelines to these computations.

Tray and Sack Labels

The PAVE™ certification process includes analysis of barcoded tray and sack labels. If your presort product produces tray and sack labels, they should be returned when indicated by the PAVE Cover Sheet with any other required documentation for review. The BMA Certification Department will examine labels for correct usage of labeling list tables and formatting of line 1 (destination), line 2 (contents), and line 3 (office of mailing or mailer information) based on DMM 335.4.0, 345.4.0, 435.3.0, 445.4.0, and 707.21.0 standards. Barcoded labels will be analyzed for the utilization of the

Interleaved 2/5 Barcode. Barcode scanners and microscopic equipment will be used to analyze and verify the point size of alphanumerics, bar height, and bar width according to DMM 335, 345, 435, 445, and 707. A compliance report will be made, and all products that properly produce barcoded labels will be indicated on the *PAVE Certified Software List*.

Standardized Documentation

Standardized documentation (i.e., USPS® Qualification Report) must meet the USPS standards set forth in DMM 708.1.2. The following is a brief description of the requirements of the USPS Qualification Report and steps for preparing the report. Numbers 1-8 describe the header information required on the top of each page of the standardized documentation. The sample on page 25 shows an example of a Qualification Report for First Class™ Automation Letters (DMM 235). For additional samples, go to ribbs.usps.gov, select PAVE™ on the left hand side, select Publications on the right side of the screen.

1. **Report:** USPS Qualification Report (Only acceptable name for the report)
2. **Entry:** Memphis TN 38115 (5-digit ZIP Code™ where your mail is being entered)
3. **Sort:** First-Class, DMM 235 (Presort category and DMM reference)
4. **Mailer:** Gump's Mailing Service (Name of the mailer)
5. **Mail ID:** 12345ABC (Job ID applicable to the mailer)
6. **Date:** 3/15/08 (Date that the mailing is deposited)
7. **Page:** 1 (Each page is required to be numbered sequentially)
8. **Product and Version Number:** FASTsort v1.2 (Required)
Under the heading of the report, information that will be needed to verify your mail is listed in columns.
9. **Tray/Sack #** (Numbers the containers for verification)
10. **Tray Size** (Applicable to letter trays only; indicate 1' or 2' for MM trays and 'E' for EMM trays)
11. **Tray Level** (Informs acceptance clerk of contents of the container; may be found in DMM 708.1.4 Sortation Levels)
12. **Tray ZIP** (Container destination, according to the labeling list)
13. **Group Dest.** (Groups within the container)
14. **Rates** (Actual names of the rate level or corresponding abbreviations can be found in DMM® 708.1.3.) Codes that inform the clerk of the rate claimed within the container: CB (Carrier Route Barcoded), 5B (5-digit Barcoded), 3B (3-digit Barcoded), AA (AADC Automated), AM (AADC Mixed)
15. **Running Total** (Total number of pieces added by containers)
16. **Totals** (Total pieces by rate; must equal running total)
17. **Rate Summary** (Lists each rate category and total pieces claimed at each rate—total must equal the grand total of your running total)

Per DMM 708.1.2c.7, information may be reported in either of the following formats:

- 1) (*PAVE™ Preferred*) Container sortation level and by ZIP Code™ destination within each container or
- 2) ZIP Code™ destination and, within each ZIP Code™, by container sortation level.

If reporting containers by ZIP Code™ destination within sortation level – the pieces within the containers should be also reported by ZIP Code™ destination within sortation level. For example, an ADC tray may hold 5-digit, 3-digit and ADC bundles. Within that tray, the 5-digit bundles would be reported in ZIP Code™ sequence, followed by the 3-digit bundles (in sequence) and, finally, the ADC bundle(s). **Whichever format is selected by the developer, the reporting of the mailpieces must be consistent.**

Standardized Documentation Sample

For First-Class Mail Automation - Letters/Cards, DMM 235.6.0

Report: USPS Qualification Report
Entry: Denniston KY 40316
Sort: First Class, DMM 235

Mailer: Saver's Mailing Service
Mail ID: cc26553669
Date: July 14, 2007

Job ID Applicable to the Mailer: TSTSORT V1.2
Date that the mailing is deposited: [Blank]
Product and Version Number: TSTSORT V1.2

Name of Mailer: [Blank]

Page 1
Page Number: [Blank]

Tray #	Tray Size	Tray Level	Tray ZIP	Group Destination*	RATES				Running Total
					5B	3B	AB	BB	
1	2	5DG	01603						250
2	2	5DG	01703		250				650
3	2	5DG	75601		400				1127
4	2	3DG	012		477				1604
5	1	3DG	012			477			1627
6	2	3DGS	110	110		23			1677
				113		50			1727
				114		50			1792
				116		65			2067
7	2	3DG	405			275			2544
	1	3DG	405			477			2567
8	1	3DG	756	75601	145	23			2712
				756		60			2772
9	1	3DG	404				15		2787
10	2	AADC	403	407			87		2874
				411			99		2973
				412			149		3122
11	2	AADC	941	940			149		3271
				941			84		3355
				943			122		3477
				944			122		3599
12	2	MAAD	403	A941			29		3628
				A006				99	3727
				A07099				96	3823
				A079				93	3916
				A112				65	3981
				A180				7	3988
				A270				117	4105
13	1	MAAD	403	A270				32	4137
				A630				9	4146
				A757				140	4286
TOTALS									4286

Lists Each Rate Category and Total Pieces Claimed at Each Rate

RATE SUMMARY	PIECES
AUTOMATION 5-DIGIT (5B)	1,272
AUTOMATION 3-DIGIT (3B)	1,500
AUTOMATION AADC (AB)	856
AUTOMATION BASIC (BB)	658
TOTAL AUTOMATION (LETTERS/CARDS)	4,286

1272 1500 856 658
 Total Pieces by Rate; Must Equal Running Total

* Report tray number and tray size if information is available.

** In Group Dest column, report each separate group within a tray level, including carrier routes, 3-digits and 5-digits, or AADCs.

Periodicals Standardized Documentation

Summary Reporting

For Periodicals, a summary of the total number of copies mailed to each zone is included at the end of the documentation. This summary is not required if the presort software produces a PAVE™ certified postage statement, but PAVE does encourage the use of this summary for all periodicals mailings. A similar report, the Detailed Zone Listing for Periodicals, is required by DMM® 708.1.6 to support the presorted mailing and is to be maintained by the mailer but is not a required part of Standardized Documentation. Therefore, the Detailed Zone Listing will be reviewed during Cycle J for PAVE certification. If the developer wants this listing reflected as an available option on the PAVE Certified Developers Listing, it must be submitted for evaluation during the certification process. The Detailed Zone Listing, reports number of copies mailed to each 3-digit ZIP Code™ destination. Examples of these summary listings are shown below:

Table 2 – Zone Summary Report

Sample Zone Summary Report (DMM 708.1.2.e.4)	
(not required if presort software produces a PAVE-Certified Postage Statement)	
<u>Zone</u>	<u>Copies</u>
ICD	480
IC	215
DDU	435
DADC	13
SCF	86
1&2	120
3	33
4	120
5	56
6	42
7	0
8	0
Total Copies:	1,600

Table 3 – Detailed Zone Listing
Sample Detailed Zone Listing for Periodicals (DMM 708.1.6)

Table 3 – Detailed Zone Listing

Sample Detailed Zone Listing for Periodicals (DMM 708.1.6)												
<u>3-digit</u>	<u>ICD</u>	<u>IC</u>	<u>DDU</u>	<u>SCF</u>	<u>1&2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>Totals</u>
015			215			33						248
120	432			86	70							836
124		215			50							1,101
214			220									1,321
455							120					1,441
690								56				1,497
814									42			1,539
932										35		1,574
950											13	1,587
Zone Totals:	432	215	435	86	120	33	120	56	42	35	13	1,587

Standardized Documentation – Pallets

Only one Rate Summary Report per “mailing job” is necessary for mailings of bundles on pallets. Separate Qualification Reports can be submitted for the resulting pallets and sacks that are created during processing of the mailing and Qualification Reports can be separated by entry points for PVDS mailings but only one consolidated rate summary is required. This summary should appear after the last logical pallet of the detail portion of the USPS® Qualification Report.

Bundle Preparation

The basic standards for preparation of bundles is contained in DMM® 235, 245, 335, 345, 445, 707. An individual bundle is prepared whenever the number of mailpieces for a presort destination meets the minimum volume standards for the rate claimed. For non-letter Periodicals, low-volume bundles, while authorized by DMM regulations, should not be used for PAVE testing purposes, unless this is a default setting which cannot be turned off.

Firm Bundle Reporting

A firm bundle is two or more copies for the same actual mailing address placed in one physical bundle creating one mailpiece for delivery. Firm bundles are used in Presorted Periodicals mailings only. Each physical firm bundle must be claimed as a single piece for postage rate calculation purposes. It must be accompanied by, and physically separate from, five other Presorted pieces bundled to the same destination to satisfy a six-piece bundle requirement, regardless of the number of copies in the firm bundle.

Standardized Documentation – Reporting Routine for Containers/Groups/Bundles

The DMM® section 708.1.2c.7 describes two distinctly different reporting routines for the sortation order of containers and for bundles/groups as well:

- A. report information either in ZIP Code™ order and by sortation level **OR**
- B. by sortation level and within each sortation level, by ZIP Code™.

Whichever reporting routine is chosen for the container level, it must be adhered to for all containers throughout the USPS® Qualification report. Likewise, whichever reporting routine is chosen for the bundle/group level, it also must be adhered to for all bundle/groups throughout the USPS Qualification report. Maintaining consistency throughout the documentation is vital to the acceptance process as well as your PAVE™ evaluation. DMM also reflects two different ways of reporting origin SCF containers. In DMM sections 235, 335, and 707, for example, the origin/optional entry 3-digit tray preparation is addressed within (as part of) the 3-digit sortation level. Under DMM sections 245, 345, 445, the origin 3-digit tray is listed as a distinctly separate sortation level prepared and reported between the 3-digit and ADC sortation levels. Either way of reporting these origin/optional entry pieces has been, and will continue to be, acceptable but consistency within the mailing is necessary. Within the DMM presorts, the sequencing of rate columns across the heading of the Qualification Reports allows two different options. One option is to sequence the rate columns by rate category (carrier route rates, automation rates, presorted rates) and another technique is to sequence them by sortation level (Carrier Route Rate codes, 5-digit and 3-digit or 3/5 rate codes, AADC rate, and mixed rate).

Below is a list of PAVE preferred guidelines for standardized documentation. Adherence to these standards is NOT mandatory. The provisions and rules contained within the DMM **remain** the ruling guidelines that determine if a software product achieves PAVE certification.

The minimum *PAVE™ Preferred* guidelines for standardized documentation are:

- 1) Containers are separated and reported by sortation level sequence and by ZIP Code™ destination within sortation level.
- 2) Where applicable, bundles within containers are also reported by sortation level sequence and by destination ZIP Code™ sequence within sortation level.
- 3) To ensure bundles to the same destination are sequenced and reported together within a cotrayed or cosacked mailing, the preferred sequencing of the rate code column headings on a Qualification Report is by sortation level: Carrier Route Rates – 5-digit rates – 3-digit rates – etc.

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