



Maintenance Management Order

SUBJECT: Changes to MMO-048-08; Preventive and Operational Maintenance Guidelines for Automated Flat Sorter Machine 100 (AFSM100) with and without ATHS and AFSM100 Daily Test Deck Operating Procedures

DATE: May 21, 2010

NO: MMO-057-10

FILE CODE: H8A, H8B

TO: All AFSM100 Offices

cdav:mm10068aa

MAINTENANCE MANAGEMENT ORDER

MAINTENANCE MANAGEMENT ORDER

This Maintenance Management Order (MMO) directs all AFSM100 maintenance offices to make the necessary changes provided in the attachment of this bulletin. This MMO supplements MMO-048-08.

The changes to MMO-048-08 are due to a new AFSM100 Daily Test Deck. This new test deck replaces the daily performance test located in Attachment 2, item number 18. The new deck also includes elements of the weekly FICS test deck and the fan sort. Therefore, the weekly FICS test deck and fan sort tasks are being removed as part of this change.

This Maintenance Management Order (MMO) directs all AFSM100 maintenance offices to order the AFSM100 Daily Test Deck from TMDC and provides the necessary operational procedures for running the test deck.

Attachment 1 contains the changes required to MMO-048-08 that include the following:

- Changes to the Summary of Workload Estimate of MMO-048-08
- Changes to Attachment 2 of MMO-048-08
- Changes to Attachment 3 of MMO-048-08

Attachment 2 contains all necessary instructions for running the AFSM100 Daily Test Deck. The AFSM100 Daily Test Deck should be immediately ordered from TMDC using NSN 7690-12-000-7470. Initial deployment will be limited to one test deck per machine for each facility. The initial manufacturing of the AFSM100 Daily Test Deck is being performed through MTSC. The initial test deck purchase has been scaled down in an effort to allow MTSC to make any required changes found during national deployment. Therefore, it is important to ensure that all test pieces are recovered at the end of each test deck run.

Attachment 3 contains a spreadsheet that shows a breakdown of each test piece with the following information:

- Sort Results
- IBI Serial Number
- Sort Bin Location (even/odd)
- Sort Type (OCR/POSTNET/IMBC/etc.)
- Destination Address
- Individual Tracking Number

On-line copy of MMO-048-08 has been updated to reflect changes made by MMO-057-10.

Direct any questions or comments concerning this bulletin to the HelpDesk, Maintenance Technical Support Center, P.O. Box 1600, Norman OK 73070-1600; telephone FTS 2000 (405) 573-2123 or toll free (800) 366-4123.



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Attachments:

1. Changes to MMO-048-08
2. AFSM100 Daily Test Deck
3. AFSM100 Daily Test Deck Results

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ATTACHMENT 1

CHANGES TO MMO-048-08

Change the Summary of Workload Estimate for AFSM100 with and without ATHS to read as follows:

| System Configuration | Operation | Routine Servicing Per Machine (hrs/yr) | Repair Time* Per Machine (hrs/yr) | Total Servicing Time Per Machine (hrs/yr) | Operational Maintenance Time Per Machine (hrs/yr) | Non-Productive Time ** Per Machine (hrs/yr) | Total Time Per Machine (hrs/yr) |
|----------------------|-----------|--|-----------------------------------|---|---|---|---------------------------------|
| Non-ATHS 1 Tour | 5 day | 1090 | 327 | 1417 | 230 | 71 | 1718 |
| Non-ATHS 2 Tour | 5 day | 1090 | 327 | 1417 | 373 | 71 | 1861 |
| Non-ATHS 3 Tour | 5 day | 1090 | 327 | 1417 | 373 | 71 | 1861 |
| Non-ATHS 1 Tour | 6 day | 1253 | 376 | 1629 | 276 | 81 | 1986 |
| Non-ATHS 2 Tour | 6 day | 1253 | 376 | 1629 | 447 | 81 | 2158 |
| Non-ATHS 3 Tour | 6 day | 1253 | 376 | 1629 | 447 | 81 | 2158 |
| Non-ATHS 1 Tour | 7 day | 1416 | 425 | 1841 | 322 | 92 | 2255 |
| Non-ATHS 2 Tour | 7 day | 1416 | 425 | 1841 | 522 | 92 | 2455 |
| Non-ATHS 3 Tour | 7 day | 1416 | 425 | 1841 | 522 | 92 | 2455 |
| With ATHS 1 Tour | 5 day | 1324 | 397 | 1721 | 238 | 86 | 2046 |
| With ATHS 2 Tour | 5 day | 1324 | 397 | 1721 | 390 | 86 | 2197 |
| With ATHS 3 Tour | 5 day | 1324 | 397 | 1721 | 390 | 86 | 2197 |
| With ATHS 1 Tour | 6 day | 1530 | 459 | 1989 | 286 | 99 | 2375 |
| With ATHS 2 Tour | 6 day | 1530 | 459 | 1989 | 468 | 99 | 2557 |
| With ATHS 3 Tour | 6 day | 1530 | 459 | 1989 | 468 | 99 | 2557 |
| With ATHS 1 Tour | 7 day | 1737 | 521 | 2258 | 334 | 113 | 2704 |
| With ATHS 2 Tour | 7 day | 1737 | 521 | 2258 | 546 | 113 | 2916 |
| With ATHS 3 Tour | 7 day | 1737 | 521 | 2258 | 546 | 113 | 2916 |

*Repair Time is 30% of machine Routine Servicing time. The repair time shown above is the minimum time allotted per site.

**Non-Productive Time is 5% of Total Service Time.

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Change cover page for Attachment 2 time totals from:

DAILY

Time Total: 179 Minutes Non-ATHS Machines

Time Total: 229 Minutes ATHS Machines

To read:

DAILY

Time Total: 188 Minutes Non-ATHS Machines

Time Total: 238 Minutes ATHS Machines

Change cover page for Attachment 3 time totals from:

WEEKLY

Time Total: 295 Minutes Non-ATHS Machines

Time Total: 315 Minutes ATHS Machines

To read:

WEEKLY

Time Total: 235 Minutes Non-ATHS Machines

Time Total: 255 Minutes ATHS Machines

Change Attachment 2, page 7, item number 18 from:

18. Run performance test.

5 9
MIN
PER
IFS

1. Set up AFSM100 to run test mail. Load and run 40 pieces of random test mail on each infeed station. Stress deck TPUT or DOUBLES test cards can be used.
2. Observe pick-off and vacuum gauge during destacking. Open maintenance access door. Observe that the vacuum gauge needle does not fluctuate more than 5 units as each mailpiece is fed, and that vacuum recovers to high vacuum with each mailpiece. Close maintenance access door.
3. Observe the MIS status screen for acceptable performance. (Pieces Fed, Accept rate, etc.)
4. Perform End of Day.

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To read:

18. **Run Daily Test Deck.** 24 9
MIN

Alternate between the MTSCEVEN and MTSCODD sortplans daily.

1. Set up AFSM100 to run the daily test deck using the even or odd sortplan. Put the machine in BCR/OCR mode.
2. Load each 22 piece grouping on all three infeed stations and start the run.
3. Observe pick-off and vacuum gauge during destacking. Open maintenance access door. Observe that the vacuum gauge needle does not fluctuate more than 5 units as each mailpiece is fed, and that vacuum recovers to high vacuum with each mailpiece. Close maintenance access door.
4. Perform End of Run.
5. Collect test deck from mail tubs.
6. Review FICS label placement on template pieces for proper placement and remove FICS labels (approximately 33 labels to be removed).
7. For AHS Machines, verify tray label placement and remove labels.

Remove Attachment 3, page 7, item numbers 15 and 16:

15. **Run FICS test deck.** Get ready to run the FICS test deck by setting up test at MIS computer. Test each infeed station using stress deck provided with FICS modification and view report. 15 9
MIN
PER
IFS

SORT
MODULE

16. **Perform fan sort maintenance test.** Get ready to run the fan sort maintenance test by setting up the test at MIS computer. Perform fan sort maintenance test and feed test cards. Check for buckets not unlatching and bucket solenoid malfunctions. 15 9
MIN

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ATTACHMENT 2**AFSM100 DAILY TEST DECK****1. PURPOSE**

This maintenance deck tests many functions of the AFSM100 FAR/CoBCR read abilities and arbitration logic in the most expedient manner and provides confidence in the alignments and accuracy of the FAR/CoBCR.

2. OVERVIEW

The AFSM100 Daily Test Deck provides Maintenance and Operations confidence in the machine condition and sorting quality. This deck has sixty-six (66) test flat pieces in three groups of twenty-two (22). The characteristics are such that each group has identical addressing characteristic types, but not the same addressing data. Also, the three groups have different color backgrounds to create contrast ratio differences. This test deck is not designed to be a “stress deck”, which would test the extremes and tolerances of the OCR system’s read abilities. It is designed to test the various functions such that if each test piece sorts as indicated on the piece, then the maintenance person can be reasonably sure the OCR system is properly aligned and functioning as it should, including all communication with the sorter’s Control System and sort arbitration decisions. This provides assurance that the OCR system should sort live mail correctly and accurately. If any of these test pieces do not sort to their assigned bin, then corrective action may be needed if the same piece fails to sort correctly over a period of 2 to 3 days. This test deck is designed to sort every test piece to the bin assigned by the matching sort program, if the OCR system is within working parameters.

3. TEST DECK DATA

Each test piece contains data to be read and interpreted or decoded by the OCR/CoBCR system. Across the top of the test piece will be large red letters reading “FLAT SORTER TEST MAIL – DO NOT DELIVER”. Above this line is a series of possible categories of test piece data with the human readable information of that category, if that data element is actually on the test piece. On this same line and to the right, the last three categories are the bin assignment (for both the MTSCEVEN and MTSCODD sort plans) and the data of this test piece the Sort Arbitration function should have selected. Some of the test pieces may have a POSTNET, PLANET, IMBC (4-State address block barcode), or some combination thereof. These varying elements are used to test the arbitration logic for proper sortation.

The following system functions are being tested:

- OCR Resolution
- BCR Resolution
 - POSTNET
 - PLANET
 - IMBC TRACKING
- Special Services Barcodes
 - CERTIFIED MAIL
 - Insured – (Not yet used by AFSM100 for sorting)
 - Delivery Confirmation

- Return Merchandise – (Not yet used by AFSM100 for sorting)
- Signature Confirmation
- IBI
- FICS ID Tag Lookup
- FICS Label and Print Application
- Sort Arbitration
- ATHS Tray Label Application

The AFSM100 Daily Test Deck also verifies that the sort bin solenoids are working properly by sorting at least one piece to each sort bin on a given side. This is accomplished by using two separate sort plans (MTSCEVEN and MTSCODD) that will be used alternately each day.

4. PHYSICAL CHARACTERISTICS

The physical characteristics of the AFSM100 Daily Test Deck contain varying elements. A majority of the envelopes are standard 9 1/2" x 12" size non-windowed envelopes. The deck also contains windowed pieces designed using EXFC characteristics.

- 9 1/2" x 12" Standard Envelopes
- 9 1/2" x 12" Portrait Double Window Envelopes
- 9 1/2" x 12" Landscape Double Window Envelopes
- 9" x 12" Portrait Single Window Envelopes
- 9 1/2" x 12" Landscape Single Window Envelopes

5. SORTPLAN DOWNLOAD AND INSTALLATION

The following subsections provide the necessary steps to download the AFSM100 Test Deck sort plans from the MTSC webpage, and the steps for installing the sort plans on the AFSM100. This section is only required for systems with the 15.1 MIS software. The next version of MIS/USV software will contain the correct sort plans. Sort plan installation will only be required once, unless the 15.1 MIS software is reloaded.

5.1. SORT PLAN DOWNLOAD

1. Log on to an ACE computer and navigate to the MTSC AFSM100 equipment webpage: http://www.mtsc.usps.gov/Equip_Page.CFM?Prof1_ID=2&Prof2_ID=1
2. Locate the following sort plans under the Daily Test Deck subtitle:
 - a. MTSCEVEN.stf
 - b. MTSCODD.stf
3. Right click on each sort plan and click on **Save Target As..** and save them to the local hard drive.

NOTE

The use of thumb drives is no longer permitted on the AFSM100 due to malicious software concerns. Therefore, it will be necessary to copy the files to an approved media source such as CD ROM or floppy diskettes.

NOTE

Burning files to a CD will require that the CD is closed, not left open for writing more files, once the copy has been completed.

4. Copy the two sortplans to either a CD ROM or floppy disk.
5. Take the media to the AFSM100 MIS and insert into either the CD ROM drive or the floppy disk drive, depending on the type of media being used.
6. Login to the MIS as Maintenance I with the appropriate password.
7. Unlock the keyboard by simultaneously pressing **SHIFT + SHIFT + ESCAPE**.
8. Access the Start Menu by simultaneously pressing **CNTRL + ESCAPE**.
9. From the Start Menu, select **Programs** then **Windows NT Explorer**.
10. Navigate to the drive that contains the media source for the sort plans (either A: or E:).
11. Copy the sort plans and navigate to: **C:\MIS\SDM\Checkin**
12. Paste the sort plans in the **Checkin** directory by right clicking in the directory and clicking **Paste**.
13. Repeat steps 5 through 12 for all remaining AFSM100 machines at the plant.

5.2. SORT PLAN INSTALLATION

1. Login to the MIS computer as **Maintenance I** with the appropriate password.
2. From the main button bar, click on **Sort Plan Manager**, then **Sort Data Manager**. See Figure 2-1.

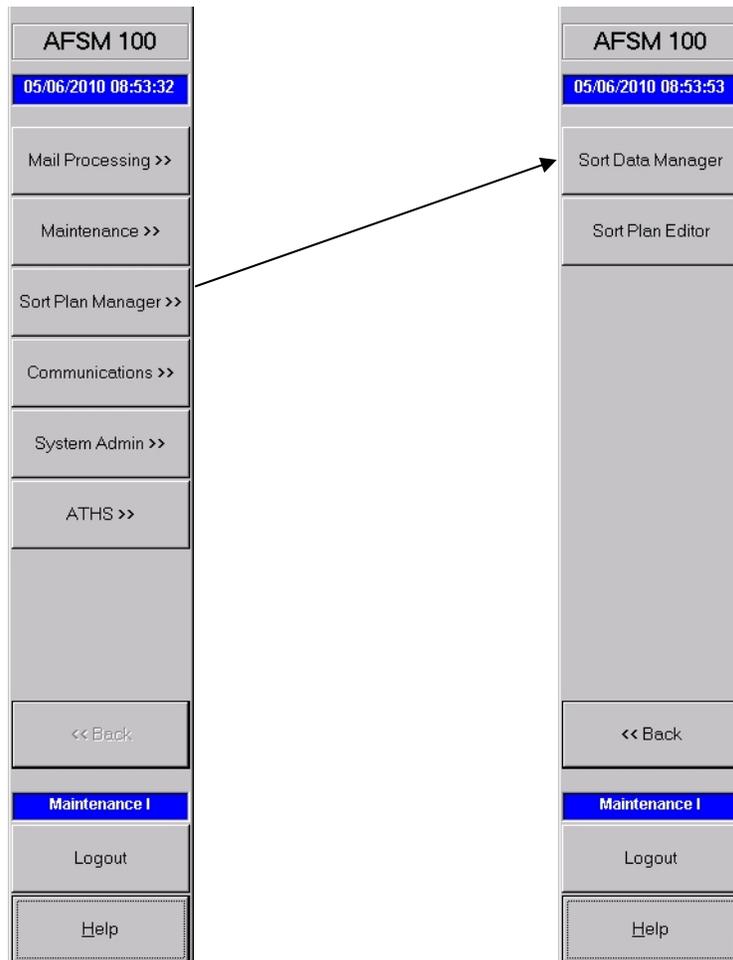


Figure 2-1. Sort Plan Installation

3. From the Sort Data Manager window, click on **Add Sort Plan**. See Figure 2-2.

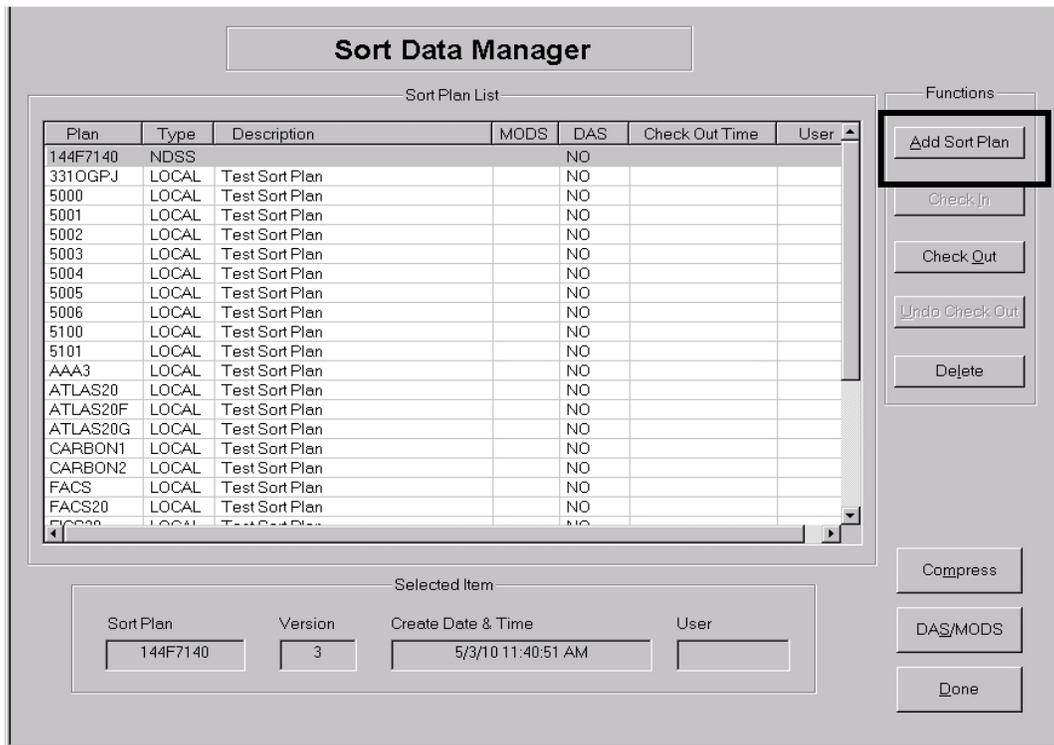


Figure 2-2. Sort Data Manager

4. In the Add Sort Plan window (Figure 2-3), make the following entries depending on which sort plan is being installed:

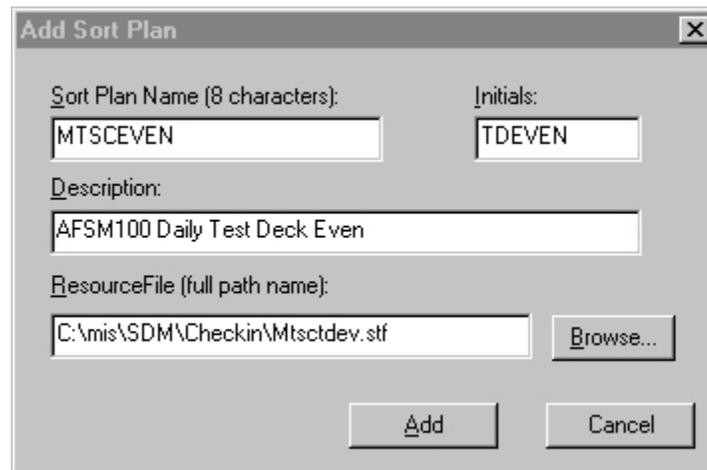


Figure 2-3. Add Sort Plan

- Sort Plan Name: **MTSCEVEN** or **MTSCODD**
- Initials: **TDEVEN** or **TDODD**
- Description: **AFSM100 Daily Test Deck Even** or **Odd**
- Resource File (See Figures 2-3 and 2-4): Click on **Browse....** and navigate to **C:\MIS\SDM\Checkin\MTSCEVEN.stf**

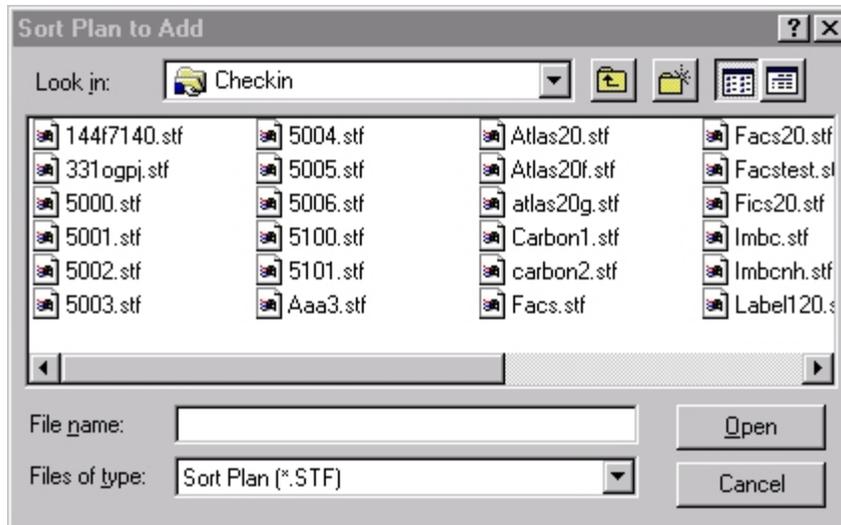


Figure 2-4. Checkin

5. Click **Add**.
6. Upon successful installation of the sort plan, the SDMInterface window will appear. Click **OK** to close. See Figure 2-5.

NOTE

It is not uncommon for an error message to display after clicking the Add button. This error message will state "Failed to copy file resource." Click OK to accept this error message. Start a new run and Click on the box for SORTPLAN. Review list of available sort plans for the MTSC EVEN and ODD sort plans.

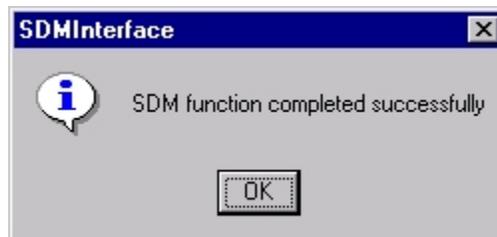


Figure 2-5. SDMInterface

7. Repeat these steps for the remaining sort plan.

6. AFSM100 DAILY TEST DECK OPERATION

The AFSM100 Daily Test Deck run requires specific settings on the MIS and the coding software to be stopped on the first four SAR computers. The following sections provide the necessary steps for the running the test deck.

6.1. SECONDARY ADDRESS READERS (SAR)

1. From the SAR 1 System Menu, click on **System**, then **Logoff**. See Figure 2-6.

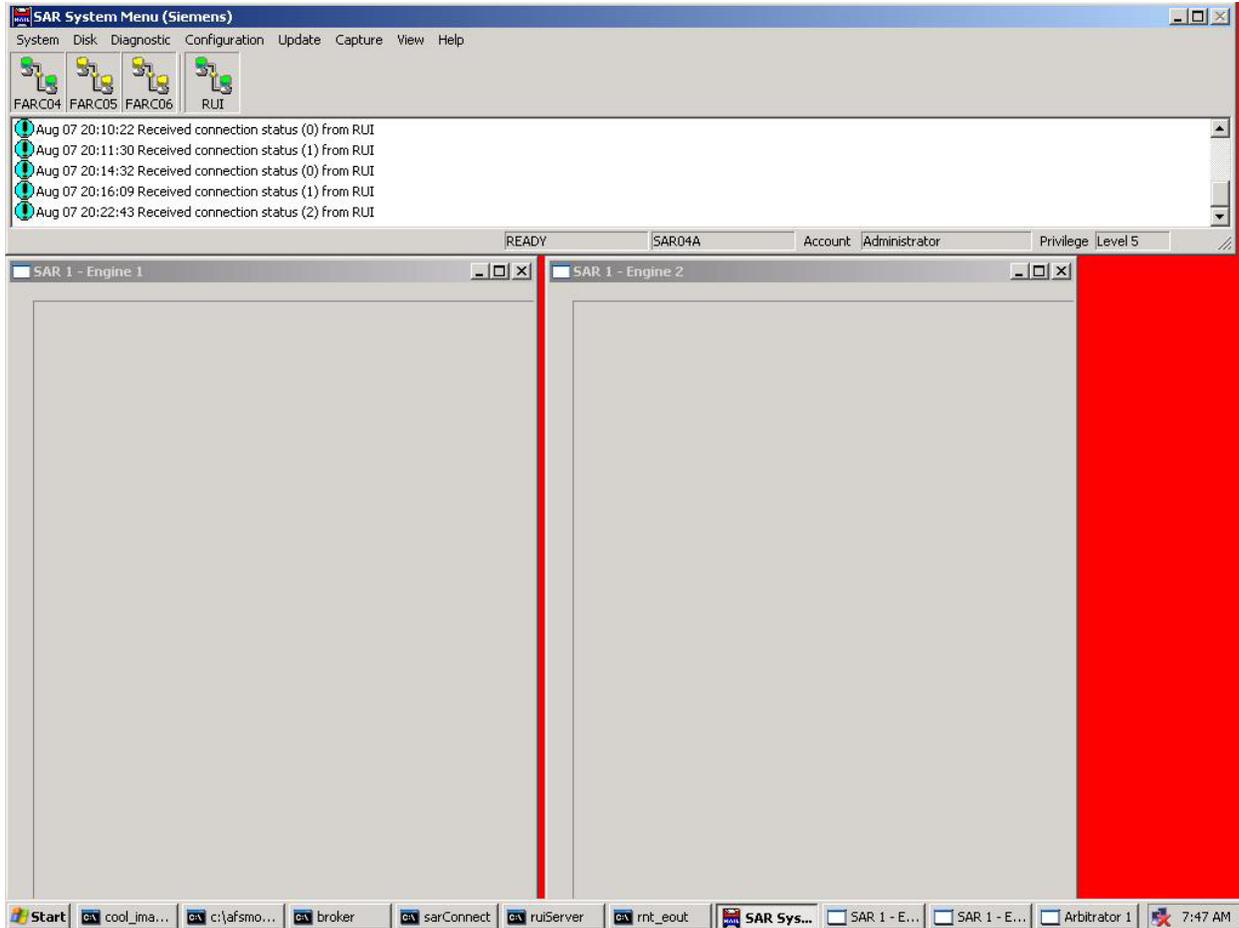


Figure 2-6. SAR System Menu

2. Click the user name down arrow and select **maintenancel** and type in the appropriate password.
3. Once the system is logged in as **maintenancel**, click **System**, then **Stop**.
4. Repeat these steps for SAR computers 2 through 4.

6.2. TEST DECK RUN

1. Login to the MIS computer as **Maintenance I** with the appropriate password.
2. Change the sort parameters to BCR/OCR by performing the following steps:
 - a. From the main button bar, click on **System Admin**, then **Configure**, then **Sort Parameters**.
 - b. From the AFMS100 Sorting Configuration window, change the feeder mode to **BCR/OCR** on all three feeders.
3. Start the test deck run by performing the following steps:
 - a. Click on **Mail Processing**, then **New Run**.
 - b. Type in maintenance user's name in the supervisor name field.
 - c. Ensure that there is a checkmark under the Active heading for each feeder.

- d. Select Operation # **750** for each feeder.

NOTE

The MTSCEVEN and MTSCODD sort plans were designed to be run in an alternating fashion. The MTSCEVEN sort plan allows the test deck pieces to sort on the right side of the machine (bins 1 – 60), while the MTSCODD sort plan will allow the pieces to sort to the left side of the machine (bins 61 – 120). This functionality was put in place to test every bin trip on the machine on a more frequent basis.

- e. Click the box next to the Sort plan field, and select either the **MTSCEVEN** or **MTSCODD** sort plan, and click **OK**. Repeat for feeders 2 and 3.
- f. Ensure the Mode for each feeder is set to **BCR/OCR**.
- g. Click **OK**.
4. Place one set of 22 pieces (color grouping) on each of the three feeders.
5. Start the carousel and feeder and allow the pieces to be picked off.
6. Monitor Sorting Status window for bucket occupation.
7. Verify that at least one piece sorted to each sort bin (1 – 60 for MTSCEVEN and 61 – 120 for MTSCODD). For sortplan MTSCEVEN, bins 14, 46, 59, and 60 will contain more than one piece. For sortplan MTSCODD, bins 64, 106, 119, and 120 will contain more than one piece.
8. Once all test pieces have been verified, end the run from the MIS by clicking on **Mail Processing**, then **End Run**.
9. If this is an ATHS machine, it will be necessary to peel flat mail tub labels from each mail tub and recover the test pieces. If this is a non-ATHS machine, it will be necessary to follow local protocols for maintenance tub removals and recover the test pieces.
10. From the MIS, change the feeder sort parameters back to **BCR/OCR/VCS** for each feeder.
11. From the SAR cabinet, logoff SARs 1 – 4 and login as **operations** with the appropriate password.

7. KNOWN PROBLEMS

This is the initial deployment of the AFSM100 Daily Test Deck. Therefore, as has been seen on other test decks, it is plausible that issues may arise during the running of the test deck that have not been seen through field testing. It is imperative that any issues found with the test pieces be communicated with MTSC via the HelpDesk.

The following issues have been identified through field testing:

1. **OCR/FICS pieces 11, 33, and 55 sorts to the Out of Sort bin:** These pieces are pre-labeled with the FICS ID tag. These FICS ID Tags were used from the FICS test deck. If the FICS test deck has been used recently, these pieces will not sort correctly. It will be necessary to discontinue use of the FICS test deck. After 7 days, the tags will be purged from the system. If this is an immediate issue, contact the MTSC HelpDesk and request that the sort information for those ID tags be removed from the FICS server.

2. **Test pieces with FICS label placement template occasionally do not sort properly:**
There are approximately 9 total pieces with the FICS label placement template. For unknown reasons, the template has been seen to interfere with the OCR address resolution and the pieces sort to either the out of sort bin or reject bin. A work around is to cover the top left side of the label placement template with a blank FICS label. This issue has not been experienced on every machine. Therefore, this work around is acceptable until MTSC identifies the cause of this issue.
3. **Top and bottom edges of the test pieces wear through:** MTSC has been performing life cycle testing on the test pieces to identify how many runs test pieces can be used. So far, the number of runs is approximately 30 before signs of wear and tear can be seen on the top and bottom edges of the test pieces. MTSC has applied a strip of clear tape across the bottom of each piece. This has significantly increased the life of the deck. MTSC is also looking at future alternatives to increase the life of the test deck.

8. TROUBLESHOOTING

The purpose of this section is to provide some instruction on the troubleshooting of individual test deck pieces. As stated earlier, each test piece has a unique PLANET code identifier that will assist the maintenance user with identification of the test pieces.

Generally, the goal of this deck is to provide Maintenance and Operations confidence that the AFSM100 is running sound mechanically as well as software wise. These test pieces were not designed to stress the system mechanically or stress the OCR readability. These pieces were designed to run correctly if the machine is in a good working condition. This means that all facets of the system must be working properly with the correct versions of software.

8.1. DISPLAY BCR/OCR

The Display BCR/OCR screen provides all results that are returned for a given piece. This tool allows the maintenance user to identify the test pieces that failed (i.e. missorted, or to reject bin, or out of sort bin) by using the unique PLANET code identifier. Perform the following steps to access the Display BCR/OCR screen:

1. Login to the MIS as **Maintenance I** with the appropriate password.
2. From the main button bar, click on **Maintenance**, then **Ocr Maintenance**, then **Display BCR/OCR**. See Figure 2-7.

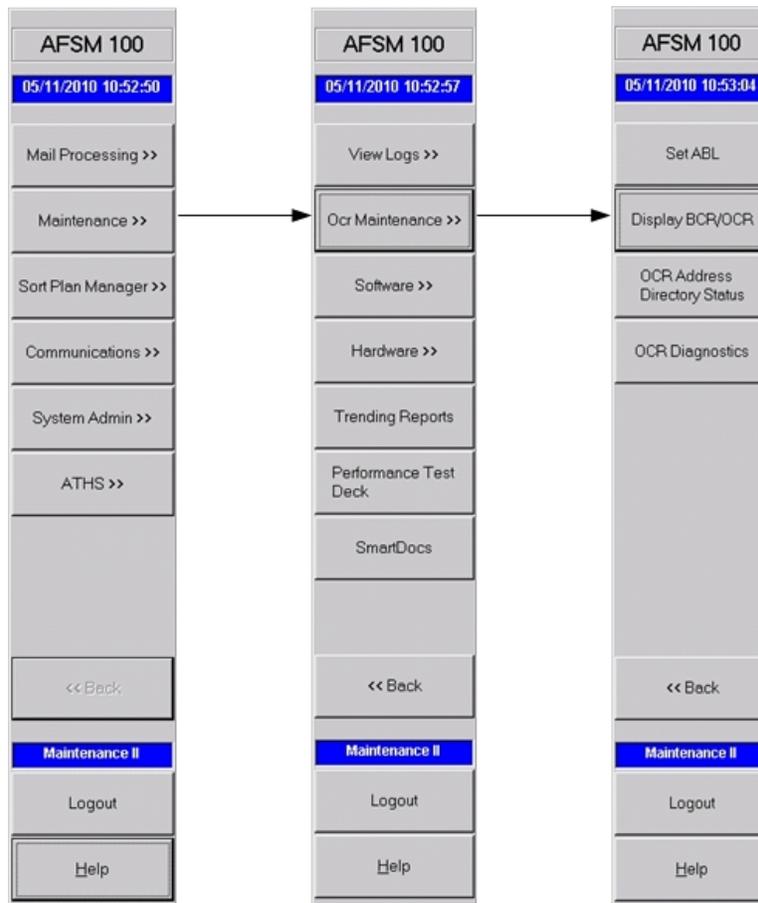


Figure 2-7. Display BCR/OCR

3. The Display / Record Result Codes (Display BCR/OCR) window will open. See Figure 2-8.

NOTE

The following screenshots are for informational purposes only. Both graphics are from the same run but are shown separately as the window is too small to display all results in a single window.

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Display / Record Result Codes

| ID | Feed | Sort | Bin | coBCR 1 | coBCR 2 | ICS | BCR | OCR |
|--------|------|------|-----|---------|---------|-----|-------------|-------|
| 102300 | 2 | OCR | 1 | | | | R 210 | 00303 |
| 102301 | 2 | OCR | 1 | | | | R 210 | 00303 |
| 102302 | 2 | BCR | 1 | | | | 00303450807 | 00303 |
| 102303 | 2 | OCR | 1 | | | | R 210 | 00303 |
| 102304 | 2 | OCR | 1 | | | | R 210 | 00303 |
| 102305 | 2 | PH | 1 | | | | 00303302389 | R 210 |
| 102306 | 2 | PH | 1 | | | | R 210 | R 210 |
| 102307 | 2 | PH | 1 | | | | R 210 | R 210 |
| 102308 | 2 | PH | 1 | | | | 00303302389 | R 210 |
| 102309 | 2 | OCR | 1 | | | | R 210 | 00303 |
| 102310 | 2 | OCR | 1 | | | | R 210 | 00303 |
| 102311 | 2 | BCR | 1 | | | | 00303450807 | 00303 |
| 102312 | 2 | OCR | 1 | | | | R 210 | 00303 |
| 102313 | 2 | OCR | 1 | | | | R 210 | 00303 |
| 102314 | 2 | BCR | 1 | | | | 00303940863 | 00303 |
| 102315 | 2 | BCR | 1 | | | | 00303940863 | 00303 |
| 102316 | 2 | OCR | 1 | | | | R 210 | 00303 |
| 102317 | 2 | OCR | 1 | | | | R 210 | 00303 |
| 102318 | 2 | BCR | 1 | | | | 00303450807 | 00303 |
| 102319 | 2 | OCR | 1 | | | | R 210 | 00303 |
| 102320 | 2 | OCR | 1 | | | | R 210 | 00303 |
| 102321 | 2 | PH | 1 | | | | 00303302389 | R 210 |
| 102322 | 2 | PH | 1 | | | | R 210 | R 210 |

File Name: Start Stop Close

Figure 2-8. Display / Record Result Codes

Display / Record Result Codes

| VCS | Planet 1 | Planet 2 | ICS-Tag 1 | ICS-Ta |
|-----|--------------|--------------|-----------|--------|
| | 260000000039 | | | |
| | 260000000084 | | | |
| | 260000000011 | | | |
| | 260000000020 | 261234567897 | | |
| | 260000000048 | | | |
| | 350030397389 | 260000000057 | | |
| | 300030345480 | 260000000066 | | |
| | 300030345480 | 260000000066 | | |
| | 350030397389 | 260000000057 | | |
| | 260000000048 | | | |
| | 260000000020 | 261234567897 | | |
| | 260000000011 | | | |
| | 260000000084 | | | |
| | 260000000039 | | | |
| | 260000000075 | | | |
| | 260000000075 | | | |
| | 260000000039 | | | |
| | 260000000084 | | | |
| | 260000000011 | | | |
| | 260000000020 | 261234567897 | | |
| | 260000000048 | | | |
| | 350030397389 | 260000000057 | | |
| | 300030345480 | 260000000066 | | |

File Name: Start Stop Close

Figure 2-8. Display / Record Result Codes (cont.)

4. If the test piece number is known for the failed piece, the results for that piece can be located by finding the piece number in the Planet 1 or Planet 2 columns. If there are multiple PLANET codes on the test piece, the test piece number can be listed in either column. The test piece number will be displayed in the following format:

260000000XXY where XX = the piece number (i.e. 01 through 66) and Y = correction digit

8.1.1. Using the Display/Record Result Codes Screen

The Display/Record Result Codes screen can be used to view the live results recorded for individual mail pieces:

- coBCR1
- coBCR2
- ICS
- BCR
- OCR
- VCS
- Planet1
- Planet2
- ICS - Tag1
- ICS - Tag2
- CoPlanet1 thru CoPlanet8
- Special Sect1
- Special Sect2
- 4-State Customer

When opened, the Display/Record Result Codes screen will display live results by individual mail piece for all applicable elements noted above. The table will show the internal ID of each mail item in the ID column. The result, which is returned from each method, will be shown in the coBCR1, coBCR2, ICS, BCR, and OCR columns. The method used to sort the mail item will be shown in the Sort column. Reject codes in the Sort column are specified by "Rxxx", where the xxx is the reject number. A sort-type of PL1 (Planet 1) or PL2 (Planet 2) will display under Sort Type if that result was used for sorting the mailpiece. The bin number where the mail piece was finally sorted to will be shown in the Bin column. The Feeder that inducted the mail piece will be shown in the Feed column.

8.2. AFSM100 REJECT CODES

The following tables provide a list of the reject codes and categories. The reject codes for any rejected test piece will be listed in the Display/Record Result Codes screen. It may be necessary to cross reference the reject code with the table below for troubleshooting any pieces that are persistently rejected. See Table 2-1 and Table 2-2.

Table 2-1. Reject Codes

| Reject Code: | Description: | Special Category: | Source: |
|---------------------|---|--------------------------|----------------|
| 102 | Mail Rejected due to Jams in the Feeder | 1 | Rack |
| 104 | Recycling Reject | 17 | Rack |
| 105 | Sweeping Reject | 13 | Rack |
| 106 | Not discharged into correct bucket | 1 | Rack |
| 107 | Phantom mail | 1 | Rack |
| 109 | VCS Timeout (only used by USVPC if no sanctions present) | 14 | Rack |
| 110 | Double Fed | 10 | Rack |
| 112 | Soft Stop | 2 | Rack |
| 113 | Out of plan (Out of Sort) | 4 | Rack |
| 114 | Maintenance Mode Reject | 1 | Rack |
| 191 | Unexpected_CCT3 reject - Tracking Error | 1 | Rack |
| 193 | Test Reject - Reject for specific test | 1 | Rack |
| 194 | Asynchronous_reject - bad synchronization between the flat, number, and the OCR/VCS | 1 | Rack |
| 195 | To_Videocoding_Reject - No answer from the VCS (Time Out) | 1 | Rack |
| 196 | Fault_Videocoding_Reject - The reject number sent by VCS is no valid | 1 | Rack |
| 197 | System_Fault_Reject - System reject | 1 | Rack |
| 201 | Misfaced - Key pressed at VDT if wrong side of mail might be captured | 9 | VCS |
| 202 | Double Fed - Key pressed at VDT if more than one mail piece is visible on the image | 10 | VCS |
| 203 | Not Readable - <reject> key pressed at VDT if there is no address or address is unreadable | 7 | VCS |
| 205 | Directory Unresolved - <None> key pressed at VDT if address doesn't match the selection found in the directory or without interaction if no result at all | 12 | VCS |
| 206 | Foreign - Key pressed if address is not a U.S. address | 6 | VCS |
| 207 | VCS Timeout: - with no partial result because of to many images for coding devices in use | 14 | VCS |
| 208 | No image from camera for a certain demand for picture | 15 | OCR/VCS |
| 209 | Demand for coding, but the OCR/VCS is not ready | 16 | OCR/VCS |
| 210 | BCR/OCR result reject | 2 | OCR |

Table 2-2. Special Category

| Special Category | Description |
|-------------------------|--------------------------------|
| 1 | Mechanical |
| 2 | No Read (BCR/OCR not resolved) |
| 4 | No Code (VCS no resolved) |
| 6 | Out of Plan |
| 7 | Other Reject |
| 9 | Foreign |
| 10 | VCS Rejects |
| 12 | Planet Code |
| 13 | End of Session |

| Special Category | Description |
|-------------------------|--------------------|
| 14 | VCS Timeout |
| 15 | VCS Image |
| 16 | No VCS Bin |
| 17 | Recycle Limit |

9. TRACKING

The AFSM100 Daily Test Deck was developed to allow for tracking similar to the AFCS/DIOSS test decks that are used in letter automation. MTSC and Engineering are working to have the tracking set up in MHTS and MIRS. However, this tracking will not be enabled until the next release of MIS/USV software.

MAINTENANCE MANAGEMENT ORDER

MAINTENANCE MANAGEMENT ORDER

NOTE

It should be noted that with the currently fielded MIS/USV 15.1 software release, the Certified pieces (1 per grouping) will all sort to the same bin. This will leave two open sort bins for both sort plans. However, each Certified test piece will sort to individual sort bins with the next release of MIS/USV software. This release is scheduled for June 2010.

| OCR | POSTNET | PLANET | IMBC Tracking | IMBC Routing | Special Service | IBI SN | AFSM Bin (Even) | AFSM Bin (Odd) | Sort | Street | City | State | Tracking Planet Code |
|--------------------|---------------|---------------|-----------------------------|---------------|------------------------|--------|-----------------|----------------|-------------|-------------------------|--------|-------|----------------------|
| YELLOW DECK | | | | | | | | | | | | | |
| 00303-4508 | 00303-4508-07 | | | | Delivery Confirmation | 00001 | 001 | 061 | POSTNET | 107 Margie Dr | Xanadu | VA | 26000000001 |
| 00303-9764 | | 26-123456789 | | | Signature Confirmation | 00002 | 002 | 062 | OCR | 14868 Mariposa Creek Rd | Xanadu | VA | 26000000002 |
| 00303-3508 | | | 01-022-083452-1-1-01-0003-0 | 00303-3863-09 | Insured | 00003 | 003 | 063 | IMBC | 188 E Mendocino Ave | Xanadu | VA | 26000000003 |
| 00303-3847 | | | | | Certified | 00004 | 004 | 064 | Certified | 355 Mill St | Xanadu | VA | 26000000004 |
| 00303-3023 | 00303-3023-89 | 35-00303-9738 | | | Return Merchandise | 00005 | 005 | 065 | PLANET | 89 Mill Creek Dr | Xanadu | VA | 26000000005 |
| 00303-1735 | | 30-00303-4548 | 01-022-083452-1-3-01-0006-0 | 00303-1735 | | 00006 | 006 | 066 | PLANET | PO Box 1735 | Xanadu | VA | 26000000006 |
| 00303-3530 | 00303-9408-63 | | | | | 00007 | 007 | 067 | POSTNET | 3475 Williams Ranch Rd | Xanadu | VA | 26000000007 |
| 00303-9450 | | | | | | 00008 | 008 | 068 | OCR | 1781 Ponderosa Rd | Xanadu | VA | 26000000008 |
| 00303-8439 | 00303-8439-52 | | | | | 00009 | 009 | 069 | POSTNET | 23952 Acacia Ct | Xanadu | VA | 26000000009 |
| 00303-8567 | | | | | | 00010 | 010 | 070 | OCR | 1525 Alcott Ln | Xanadu | VA | 26000000010 |
| 00303-8514 | | | J18CUSA100N022713500005T | | | | 031 | 091 | OCR/FICS | 6480 Willowbrook Rd | Xanadu | VA | 26000000011 |
| | | | 01-022-083452-1-4-01-0023-0 | 00303-3119 | | | 047 | 107 | IMBC | N/A | Xanadu | VA | 26000000012 |
| | | | 01-022-083452-1-4-01-0023-1 | 00303-3120 | | | 048 | 108 | IMBC | N/A | Xanadu | VA | 26000000013 |
| | | | 01-022-083452-1-4-01-0023-2 | 00303-4610 | | | 049 | 109 | IMBC | N/A | Xanadu | VA | 26000000014 |
| | | | 01-022-083452-1-4-01-0023-3 | 00303-3844 | | | 050 | 110 | IMBC | N/A | Xanadu | VA | 26000000015 |
| | | | 01-022-083452-1-4-01-0024-2 | 00301-0000 | | | 059 | 119 | Out of Sort | Wrong Zone | Xanadu | VA | 26000000016 |
| | | | 01-022-083452-1-4-01-0024-5 | No ZIP | | | 060 | 120 | Read Reject | No Sort Data | Xanadu | VA | 26000000017 |
| 00303-3304 | | | | | HandScript | | 046 | 106 | OCR | 75 Brookside Dr | Xanadu | VA | 26000000018 |
| 00303-9545 | | | | | | | 032 | 092 | OCR | 1611 Alcott Ln | Xanadu | VA | 26000000019 |
| 00303-8843 | | | | | | | 033 | 093 | OCR | 24066 Tulip Dr | Xanadu | VA | 26000000020 |
| 00303-3107 | | | | | | | 034 | 094 | OCR | 99 N Main St | Xanadu | VA | 26000000021 |
| 00303-3614 | | | | | | | 035 | 095 | OCR | 45 Creekside Ct | Xanadu | VA | 26000000022 |

MAINTENANCE MANAGEMENT ORDER

MAINTENANCE MANAGEMENT ORDER

| OCR | POSTNET | PLANET | IMBC Tracking | IMBC Routing | Special Service | IBI SN | AFSM Bin (Even) | AFSM Bin (Odd) | Sort | Street | City | State | Tracking Planet Code |
|------------------|---------------|---------------|-----------------------------|---------------|------------------------|--------|-----------------|----------------|-------------|---------------------|--------|-------|----------------------|
| BLUE DECK | | | | | | | | | | | | | |
| 00303-4318 | 00303-4318-41 | | | | Delivery Confirmation | 00011 | 011 | 071 | POSTNET | 41 Alder Ct | Xanadu | VA | 26000000023 |
| 00303-9466 | | 26-123456789 | | | Signature Confirmation | 00012 | 012 | 072 | OCR | 24100 Azalea St | Xanadu | VA | 26000000024 |
| 00303-4533 | | | 01-022-083452-1-3-01-0013-0 | 00303-3439-32 | Insured | 00013 | 013 | 073 | IMBC | 1422 Baechtel Rd | Xanadu | VA | 26000000025 |
| 00303-8745 | | | | | Certified | 00014 | 014 | 074 | Certified | 2188 Baywood Way | Xanadu | VA | 26000000026 |
| 00303-9772 | 00303-9772-27 | 35-00303-8441 | | | Return Merchandise | 00015 | 015 | 075 | PLANET | 4627 Bear Canyon Rd | Xanadu | VA | 26000000027 |
| 00303-3003 | | 30-00303-9753 | 01-022-083452-1-3-01-0016-0 | 00303-3003 | | 00016 | 016 | 076 | PLANET | 167 Bittenbender Ln | Xanadu | VA | 26000000028 |
| 00303-8763 | 00303-4615-60 | | | | | 00017 | 017 | 077 | POSTNET | 2288 Blackhawk Dr | Xanadu | VA | 26000000029 |
| 00303-4157 | | | | | | 00018 | 018 | 078 | OCR | 754 Blosser Ln | Xanadu | VA | 26000000030 |
| 00303-8480 | 00303-8480-01 | | | | | 00019 | 019 | 079 | POSTNET | 27801 Blue Lake Rd | Xanadu | VA | 26000000031 |
| 00303-8969 | | | | | | 00020 | 020 | 080 | OCR | 28282 Camellia Dr | Xanadu | VA | 26000000032 |
| 00303-4654 | | | J18CUSA100N022713500004T | | | | 036 | 096 | OCR/FICS | 21583 Viola St | Xanadu | VA | 26000000033 |
| | | | 01-022-083452-1-4-01-0023-4 | 00303-3843 | | | 051 | 111 | IMBC | N/A | Xanadu | VA | 26000000034 |
| | | | 01-022-083452-1-4-01-0023-5 | 00303-4668 | | | 052 | 112 | IMBC | N/A | Xanadu | VA | 26000000035 |
| | | | 01-022-083452-1-4-01-0023-6 | 00303-3852 | | | 053 | 113 | IMBC | N/A | Xanadu | VA | 26000000036 |
| | | | 01-022-083452-1-4-01-0023-7 | 00303-3851 | | | 054 | 114 | IMBC | N/A | Xanadu | VA | 26000000037 |
| | | | 01-022-083452-1-4-01-0024-3 | 00301-0000 | | | 059 | 119 | Out of Sort | Wrong Zone | Xanadu | VA | 26000000038 |
| | | | 01-022-083452-1-4-01-0024-6 | No ZIP | | | 060 | 120 | Read Reject | No Sort Data | Xanadu | VA | 26000000039 |
| 00303-3620 | | | | | HandScript | | 046 | 106 | OCR | 15 Creekside Ct | Xanadu | VA | 26000000040 |
| 00303-4316 | | | | | | | 037 | 097 | OCR | 11 Alder Ct | Xanadu | VA | 26000000041 |
| 00303-4519 | | | | | | | 038 | 098 | OCR | 1450 Willow Ln | Xanadu | VA | 26000000042 |
| 00303-3108 | | | | | | | 039 | 99 | OCR | 96 N Main St | Xanadu | VA | 26000000043 |
| 00303-8414 | | | | | | | 040 | 100 | OCR | 26850 Bear Dr | Xanadu | VA | 26000000044 |

MAINTENANCE MANAGEMENT ORDER

MAINTENANCE MANAGEMENT ORDER

| OCR | POSTNET | PLANET | IMBC Tracking | IMBC Routing | Special Service | IBI SN | AFSM Bin (Even) | AFSM Bin (Odd) | Sort | Street | City | State | Tracking Planet Code |
|-------------------|---------------|---------------|-----------------------------|---------------|------------------------|--------|-----------------|----------------|-------------|-----------------------|--------|-------|----------------------|
| GREEN DECK | | | | | | | | | | | | | |
| 00303-3463 | 00303-3463-01 | | | | Delivery Confirmation | 00021 | 021 | 081 | POSTNET | 101 Catherine Lane | Xanadu | VA | 26000000045 |
| 00303-8796 | | 26-123456789 | | | Signature Confirmation | 00022 | 022 | 082 | OCR | 2300 Center Valley Rd | Xanadu | VA | 26000000046 |
| 00303-7705 | | | 01-022-083452-1-4-01-0023-0 | 00303-3521-62 | Insured | 00023 | 023 | 083 | IMBC | 3969 Chinguapin Rd | Xanadu | VA | 26000000047 |
| 00303-3204 | | | | | Certified | 00024 | 024 | 084 | Certified | 400 E Commercial St | Xanadu | VA | 26000000048 |
| 00303-9400 | 00303-9400-57 | 35-00303-9451 | | | Return Merchandise | 00025 | 025 | 085 | PLANET | 32257 Condor Ct | Xanadu | VA | 26000000049 |
| 00303-8934 | | 30-00303-8806 | 01-022-083452-1-5-01-0026-0 | 00303-8934 | | 00026 | 026 | 086 | PLANET | 24500 Cypress Dr | Xanadu | VA | 26000000050 |
| 00303-8929 | 00303-9732-00 | | | | | 00027 | 027 | 087 | POSTNET | 26173 Daphne Way | Xanadu | VA | 26000000051 |
| 00303-9781 | | | | | | 00028 | 028 | 088 | OCR | 23044 Eastside Rd | Xanadu | VA | 26000000052 |
| 00303-4164 | 00303-4164-58 | | | | | 00029 | 029 | 089 | POSTNET | 158 Franklin Ave | Xanadu | VA | 26000000053 |
| 00303-8560 | | | | | | 00030 | 030 | 090 | OCR | 24222 Lilac Rd | Xanadu | VA | 26000000054 |
| 00303-4262 | | | J18CUSA100N022713500003T | | | | 041 | 101 | OCR/FICS | 274 Walnut St | Xanadu | VA | 26000000055 |
| | | | 01-022-083452-1-4-01-0023-8 | 00303-4006 | | | 055 | 115 | IMBC | N/A | Xanadu | VA | 26000000056 |
| | | | 01-022-083452-1-4-01-0023-9 | 00303-0162 | | | 056 | 116 | IMBC | N/A | Xanadu | VA | 26000000057 |
| | | | 01-022-083452-1-4-01-0024-0 | 00303-0171 | | | 057 | 117 | IMBC | N/A | Xanadu | VA | 26000000058 |
| | | | 01-022-083452-1-4-01-0024-1 | 00303-0260 | | | 058 | 118 | IMBC | N/A | Xanadu | VA | 26000000059 |
| | | | 01-022-083452-1-4-01-0024-4 | 00301-0000 | | | 059 | 119 | Out of Sort | Wrong Zone | Xanadu | VA | 26000000060 |
| | | | 01-022-083452-1-4-01-0024-7 | No ZIP | | | 060 | 120 | Read Reject | No Sort Data | Xanadu | VA | 26000000061 |
| 00303-3302 | | | | | HandScript | | 046 | 106 | OCR | 15 Brookside Dr | Xanadu | VA | 26000000062 |
| 00303-9430 | | | | | | | 042 | 102 | OCR | 25866 Bear Dr | Xanadu | VA | 26000000063 |
| 00303-9620 | | | | | | | 043 | 103 | OCR | 3381 Walker Lake Rd | Xanadu | VA | 26000000064 |
| 00303-3520 | | | | | | | 044 | 104 | OCR | 234 S Main St Ste 1 | Xanadu | VA | 26000000065 |
| 00303-9782 | | | | | | | 045 | 105 | OCR | 2811 Ridgewood Rd | Xanadu | VA | 26000000066 |

MAINTENANCE MANAGEMENT ORDER

MAINTENANCE MANAGEMENT ORDER