

MAINTENANCE TECHNICAL SUPPORT CENTER  
HEADQUARTERS MAINTENANCE OPERATIONS  
UNITED STATES POSTAL SERVICE



# Maintenance Management Order

**SUBJECT:** USS Daily Scale Validation Procedures

**DATE:** January 24, 2020

**TO:** All USS Sites

**NO:** MMO-167-19

**FILE CODE:** EM

sbui:mm19233ae

Online Change Record		
Change #	Date	Description of Change
1	05/03/2021	Added Class Code CA.

This Maintenance Management Order (MMO) provides procedures for performing Daily Induction Line Scale Validation on the Dimension-Weigh-Scan (DWS) scale of the Universal Sorting System (USS). This bulletin applies to Acronym USS and Class Codes AA, BA and CA.

A 5-pound In-Motion Scale Test Weight (PSN 3915-18-000-2327) is necessary to complete the required validations. Sites are to configure the tracking number of the 5-pound In-Motion Scale Test Weight in the FMPCS Configuration **Configure Validation Weight** menu. Additional information on this procedure is included in Attachment 1.

When performing the daily Preventive Maintenance (PM) task for Induction Line Scale Validation, sites must validate that the configured serial number and tracking barcode match the Validation Weight before performing the task. USS sites are to complete the required information for the Validation Weight in the Configuration section of the Fixed Mechanization Process Control System (FMPCS) computer. This will provide additional information for revenue protection.

This interim task will be added into a pending Preventive Maintenance MMO. The procedure will validate the scales and the tracking barcode data flow in one test procedure. Sites are prohibited from altering the test weight by any means. If test weight damage occurs that results in a failed scale validation, return the weight to Topeka Material Distribution Center (TMDC) for recalibration. A failed test weight is one that fails scale validation when a known good test weight (weighed on another machine or new from box) passes.

Each site is required to create a local PM task with a daily frequency to perform the validation on each DWS scale pending the release of the eCBM bulletin.

The initial Validation Weight configuration entry will take 10 minutes per machine to perform. A new FMPCS backup must be created after this procedure is completed.

For questions or comments concerning this bulletin contact the MTSC HelpDesk, either online at **MTSC>HELPDESK>Create/Update Tickets** or call (800) 366-4123.



FOR

Frederick L. Jackson III  
Manager  
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- Attachments:
1. FMPCS Validation Weight Configuration
  2. Daily Dynamic Scale Validation Procedure
  3. Static Scale Validation Procedure

Associated Materials: 5-Pound In-Motion Scale Test Weight (PSN 3915-18-000-2327)

## ATTACHMENT 1

### FMPCS VALIDATION WEIGHT CONFIGURATION

The Validation Weight information must be configured in FMPCS.

It is important that the site verify the correct tracking number is entered in FMPCS. Failure to verify the tracking number information is accurate may result in the site showing up as failing to perform Daily Induction Line Scale Validation on the Headquarters reporting systems.

USS machines will have one validation weight entry that is to be populated with a tracking number. The weight will be sorted to the discharge defined in the configuration for that weight.

1. At the FMPCS computer, type **signon maint**, and then enter the password. If password is not available, contact MTSC HelpDesk.
2. Use the arrow keys to select **Configuration**, and then press **Enter** (Figure 1-1).

```
FMPCS 8.5.5                Mid-Carolina P&DC (USS-1)                Thu Jul 11 14:23
Main Sorter Controller Menu
What would you like to do?
View message log
Sorter control
In service/Out of service
Reports
Change live routing
Edit routing offline
Maintenance
Configuration
Series control
Manage Users, Files, Local Watch List and FTP
USPS date
Help
Command:
Response:
```

**Figure 1-1. Configuration**

- Use the arrow keys to select **More choices on next menu**, and then press **Enter**. Then highlight **More choices on next menu**, followed by pressing Enter again for the next two screens (Figure 1-2).

```
FMPCS 8.5.5                Mid-Carolina P&DC (USS-1)                Wed Jun 26 11:53
                                                                    Configure Equipment
What would you like to do?
  Configure sorter
  Configure dynamic recirculation
  Configure induction unit
  Configure discharge unit
  Configure sensor
  Configure tray straightener
  Configure transfer
  Configure conveyor
  Configure barcode reader system
  Display a configuration report
  Save configuration
  More choices on next menu
Command:
Response:
```

**Figure 1-2. More Choices on Next Menu**

- Use the arrow keys to select **Configure validation weight**, and then press **Enter** (Figure 1-3).

```
FMPCS 8.5.5                Mid-Carolina P&DC (USS-1)                Wed Jun 26 11:55
                                                                    Configure Equipment
What would you like to do?
  Configure series
  Configure series belt
  Configure split-tray station
  Configure export compliance
  Configure validation weight
Command:
Response:
```

**Figure 1-3. Configure Validation Weight**

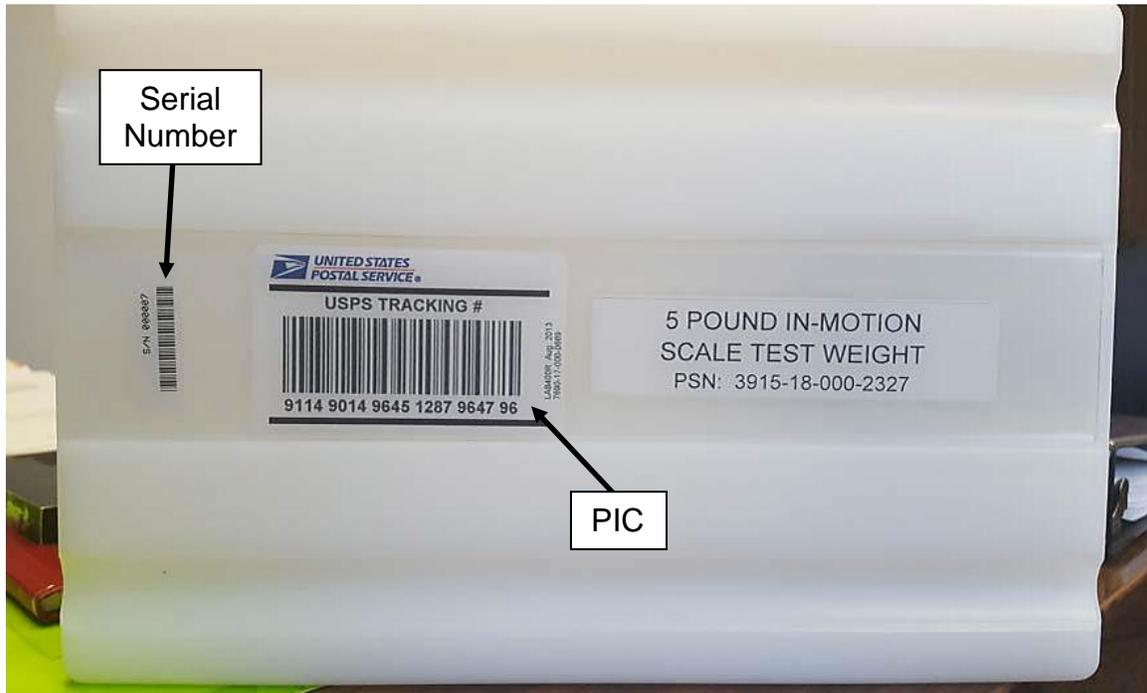
5. Select **VW01** and then press **Enter** (Figure 1-4).

FMPCS 8.5.5	Mid-Carolina P&DC (USS-1)	Thu Jul 11 14:20
Change Validation Weight barcode, weight, variation and destination		
Which ValidationWeight?		
<b>VW01</b>		
Command:		
Response:		

**Figure 1-4. VW01**

6. Use the arrow keys to move between fields and fill in the Label, PIC, Weight, Weight Variation and Destination information based on the 5-Pound In-Motion Scale Test Weight (Figure 1-5 and Figure 1-6).
  - a. In the **Label** field, type **5\_Lb\_S/N\_** followed by the six-digits of the weight serial number. Do not use spaces. Use the underscore character as shown in Figure 6.
  - b. In the **PIC** field, type the 22-digit human readable number from the Tracking Barcode on the weight.
  - c. In the **Weight** field, type **500**
  - d. In the **Weight Variation** field, type **7**

- e. In the **Destination** field, enter the discharge chute the where the Validation Weight should be sorted. In Figure 1-6, discharge **RT-02** is shown



**Figure 1-5. Five-Pound In-Motion Scale Test Weight**

FMPCS 8.5.5	Mid-Carolina P&DC (USS-1)	Wed Jun 26 11:56
Change Validation Weight barcode, weight, variation and destination		
Enter new information:		
Validation Weight:	VW01	(not changeable)
Label:	[5_Lb_S/N_000414]	(label or NONE to remove)
PIC:	[9114901496451287968862	] (PIC label)
Weight:	[500 ]	(weight in 0.01 lb)
Weight Variation:	[7 ]	(weight variation in 0.01 lb)
Destination:	[RT-02 ]	(destination)
Command:		
Response:		

**Figure 1-6. Input Data**

7. Press **Enter** after all fields have been populated (Figure 1-7).

FMPCS 8.5.5	Mid-Carolina P&DC (USS-1)	Wed Jun 26 11:55
Change Validation Weight barcode, weight, variation and destination		
Which ValidationWeight?		
5 Lb S/N 000414		
Command:		
Response:		

**Figure 1-7. Update Validation Weight Screen**

8. Type **save conf** to save your configuration changes.
9. Make a new site data backup.

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**ATTACHMENT 2****DAILY DYNAMIC SCALE VALIDATION PROCEDURE****1.0. LOAD THE MAINTENANCE SORT PLAN (ROUTING TABLE)**

Load the Maintenance routing table using the Fixed Mechanization Process Control System (FMPCS) menu.

1. Sign on as **USPS** (Figure 2-1).

Command: signon usps	
Response:	
Password: [*****█ ]	Wait

**Figure 2-1. FMPCS Sign On Screen**

2. From the FMPCS Main Sorter Controller Menu (Figure 2-2), select **Change live routing** and press **Enter**.

FMPCS 8.5.5	Mid-Carolina P&DC (USS-1)	Fri Dec 20 15:41
Main Sorter Controller Menu		
What would you like to do?		
View message log		
Sorter control		
In service/Out of service		
Reports		
<b>Change live routing</b>		
Edit routing offline		
Maintenance		
Configuration		
Series control		
Manage Users, Files, Local Watch List and FTP		
USPS date		
Help		
Command:		
Response:		

**Figure 2-2. Main Sorter Controller Menu**

- From the Routing menu, select **Load a routing table for sortation** (Figure 2-3) and press **Enter**.

```
FMPCS 8.5.5                Mid-Carolina P&DC (USS-1)                Fri Dec 20 15:41
                               LIVE: Change Live Routing
What would you like to do?
Move a routing group to a destination or family
Route a zipcode range to a destination or family
Route a sack/tray code range to a destination or family
Route a foreign code range to a destination or family
Route a Midas code range to a destination or family
Route a Starship code range to a destination or family
Route a routing group to a destination or family
Route mail to a secondary sorter
Setup a mailtype, family, CIN class, routing group or operation number
Save the routing table
Load a routing table for sortation
Routing reports
Command:
Response:
```

**Figure 2-3. Change Live Routing Menu**

- From the routing tables, select **maintenance.rt** and press **Enter** (not shown).

## 2.0. VERIFY VALIDATION WEIGHT CONFIGURATION

1. Press **Esc** key (Escape) to return to the Main Sorter Controller menu.
2. Use the arrow keys to select **Configuration**, press **Enter** (Figure 2-4).

```
FMPCS 8.5.5                               Mid-Carolina P&DC (USS-1)           Thu Jul 11 14:23
                                           Main Sorter Controller Menu
What would you like to do?
View message log
Sorter control
In service/Out of service
Reports
Change live routing
Edit routing offline
Maintenance
Configuration
Series control
Manage Users, Files, Local Watch List and FTP
USPS date
Help
-----
Command:
Response:
```

**Figure 2-4. Configuration**

- Use the arrow keys to select **More choices on next menu**, and then press **Enter**. Highlight **More choices on next menu**, followed by pressing Enter again for the next two screens (Figure 2-5).

```
FMPCS 8.5.5                Mid-Carolina P&DC (USS-1)                Wed Jun 26 11:53
                                                                    Configure Equipment
What would you like to do?
  Configure sorter
  Configure dynamic recirculation
  Configure induction unit
  Configure discharge unit
  Configure sensor
  Configure tray straightener
  Configure transfer
  Configure conveyor
  Configure barcode reader system
  Display a configuration report
  Save configuration
  More choices on next menu
Command:
Response:
```

**Figure 2-5. More Choices on Next Menu**

- Use the arrow keys to select **Configure validation weight** and then press **Enter** (Figure 2-6).

```
FMPCS 8.5.5                Mid-Carolina P&DC (USS-1)                Wed Jun 26 11:55
                                                                    Configure Equipment
What would you like to do?
  Configure series
  Configure series belt
  Configure split-tray station
  Configure export compliance
  Configure validation weight
Command:
Response:
```

**Figure 2-6. Configure Validation Weight**

5. Select the **Serial Number (S/N)** of the Validation Weight being used (Figure 2-7).

```

FMPCS 8.5.5                               Mid-Carolina P&DC (USS-1)           Wed Jun 26 11:55
Change Validation Weight barcode, weight, variation and destination
Which ValidationWeight?
5 Lb S/N 000414

Command:
Response:

```

**Figure 2-7. VW01**

6. Verify the information for the Validation Weight(s) matches the information configured in FMPCS or update the configuration as necessary (Figure 2-8).
7. Verify the Weight is set at **500** and the Weight Variation is set at **7**.

```

FMPCS 8.5.5                               Mid-Carolina P&DC (USS-1)           Wed Jun 26 11:56
Change Validation Weight barcode, weight, variation and destination
Enter new information:

Validation Weight: VW01                      (not changeable)
Label:          [5_Lb_S/N_000414]             (label or NONE to remove)
PIC:           [9114901496451287968862      ] (PIC label)
Weight:        [500 ]                         (weight in 0.01 lb)
Weight Variation: [7 ]                       (weight variation in 0.01 lb)
Destination:   [RT-02 ]                     (destination)

Command:
Response:

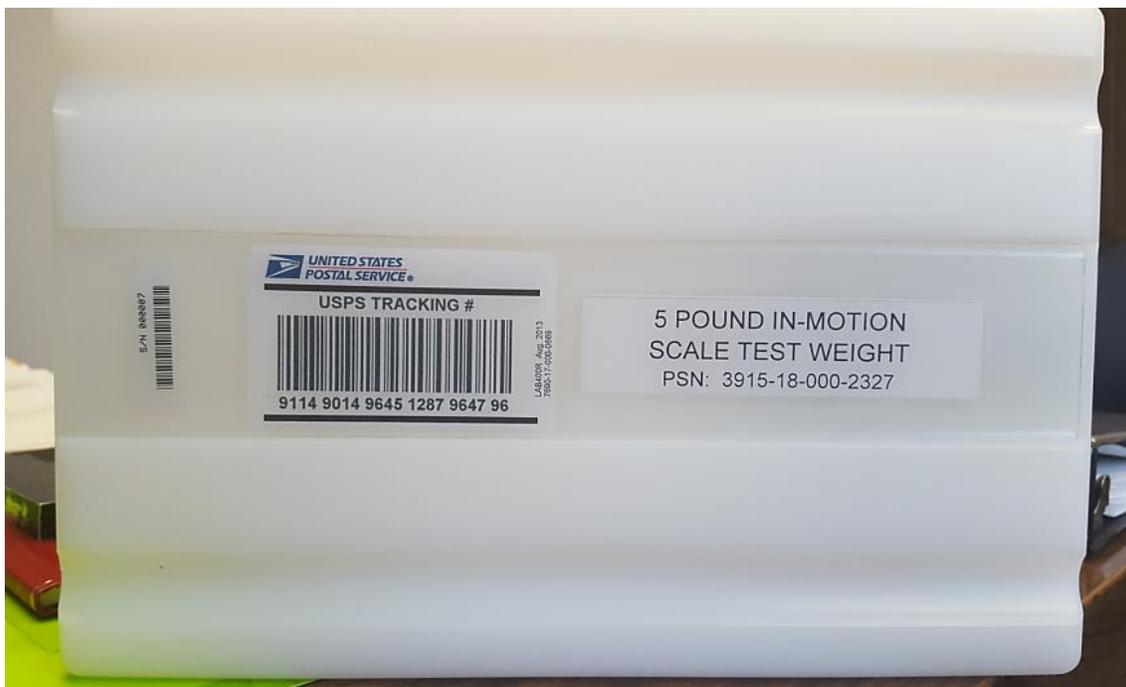
```

**Figure 2-8. Verify Tracking Number (PIC) and Serial Number (Label)**

8. If changes were made in the Validation Weight configuration, use the **Save Config** command and create a new site backup.

### 3.0. PERFORM SCALE VALIDATION

1. Ensure the Validation Weight's destination run-out is clear and free to receive the weight once the validation process has been completed.
2. Start the sorter using the USS GUI and allow the sorter time to come up to speed (approximately one minute).
3. Start induction line number 1 and allow the conveyor time to come up to speed (approximately 5 seconds).
4. Place validation weight (Figure 2-9) onto the induction line infeed conveyor and allow it to induct onto the sorter. Weight will discharge to the destination configured in the **Destination** field (Figure 2-8).



**Figure 2-9. Five-Pound Test Weight**

#### 4.0. VERIFY VALIDATIONS WERE SUCCESSFUL

1. At the FMPCS Sorter Control computer, verify that scale weight is 5-pounds +/- 1 ounce.
  - a. Use the page up / page down buttons to navigate to the **Main Sorter Controller Menu** (Figure 2-10).
  - b. From the menu, select **Reports** and press **Enter**.

```
FMPCS 8.5.5                Mid-Carolina P&DC (USS-1)                Fri Dec 20 15:38
Main Sorter Controller Menu

What would you like to do?

View message log
Sorter control
In service/Out of service
Reports
Change live routing
Edit routing offline
Maintenance
Configuration
Series control
Manage Users, Files, Local Watch List and FTP
USPS date
Help

Command:
Response:
```

**Figure 2-10. Main Sorter Controller Menu > Reports**

- c. From the menu, select **Recent reject report** and press **Enter** (Figure 2-11).

```

FMPCS 8.5.5                Mid-Carolina P&DC (USS-1)                Fri Dec 20 15:37
                                Reports
What report would you like to see?

Volume report
Accountable volume report
Induction volume report
Reject volume report
ZIP density report
CIN density report
Recent reject report
Mail report
Configuration report
Maintenance reports
Routing reports
More choices on next menu

Command:
Response:

```

**Figure 2-11. Reports Menu**

- d. Leave all day/year/time selections blank to display today's report (Figure 2-12). Press **Enter** to view report.

```

                                Recent Reject Report
Which day and time?

Day:           [      ]      (JAN - DEC 1-31, or blank for today)
Year:          [      ]      (1985 - 2037, or blank for current)
Time:          [      ]      (HH:MM, or HH:MM:SS, or blank for current time)

```

**Figure 2-12. Recent Reject Report Day/Year/Time**

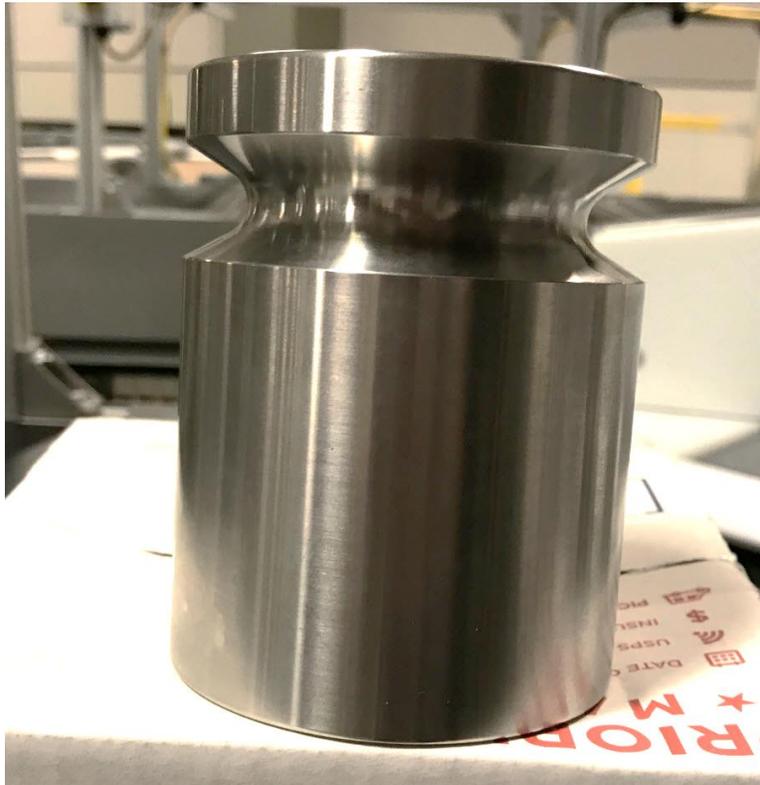
- e. Verify that all induction lines are displayed, the tracking barcode is correct, and the weight is listed as **5 lb. +/- 1 ounce**.
2. If the scale weight is not within 1 ounce of 5 pounds, perform a Static Validation as explained in Attachment 3. A scale calibration may be required for that induction line scale using the scale calibration procedure on the MTSC USS equipment page (**MTSC > USS > General > DWS Scale Calibration**).
  3. Notify supervisor of any discrepancies.
  4. Return to Attachment 2, Section 1.0 Load the Maintenance Sort Plan (Routing Table). Repeat Step 1 through Step 3.
  5. From the routing tables, select **idle.rt** and press **Enter** (not shown).

### ATTACHMENT 3

#### STATIC SCALE VALIDATION PROCEDURE

Perform the static validation procedure to check scale calibration if the dynamic validation will not pass successfully. If static validation fails, perform scale calibration. If static validation passes, check for mechanical issues that could affect the dynamic validation.

1. Place the 5000-gram test weight (deployed with machine) on the induction line number 1 scale (Figure 3-1).
2. Ensure scale is reading 5000-grams +/- 27 grams.
3. If scale is not within tolerance, make needed adjustments using the scale calibration procedure on the MTSC USS equipment page (**MTSC > USS > General > DWS Scale Calibration**).
4. Report any deficiencies to your supervisor.



**Figure 3-1. 5000-Gram Test Weight**