

MAINTENANCE TECHNICAL SUPPORT CENTER
HEADQUARTERS MAINTENANCE OPERATIONS
UNITED STATES POSTAL SERVICE



Maintenance Management Order

SUBJECT: Flats Sequencing System (FSS) Site
Management Server (SMS) Preventive
Maintenance Plan

DATE: September 17, 2013

NO: MMO-090-13

TO: All FSS Sites

FILE CODE: H1A
wvol:mm13039af

Online Change Record		
Change #	Date	Description of Change
2	02/03/2021	In Attachment 2, Task 7120, added Step 10 and in Task 7130, added Step 8.
1	11/17/2020	

This Maintenance Management Order (MMO) provides Operational and Preventive Maintenance Guidelines for the Flats Sequencing System (FSS) Site Manager Server (SMS) System (FSSSMS). This bulletin applies to Acronym FSSSMS, Class Code AA.

The workhours indicated in the workload estimate (Attachment 1) are based on a 20-hour operations window and reflect the *maximum* annual workhours required to maintain each system. Actual workhour requirements and the frequency of tasks are dependent on run time and pieces processed. Therefore, PM workhour requirements will vary day-to-day based on site-specific machine utilization. Management may modify task frequencies to address local conditions.

The minimum maintenance skill level required to perform each task is included in the Minimum Skill Level column of each checklist. This does not preclude higher-level employees from performing any of this work.

Preventive Maintenance (PM) guidelines provide maintenance employees with the recommended task based maintenance activities. The Electronic Conditioned Based Maintenance (eCBM) is an abbreviated task list that represents a portion of the PM checklist. The complete master PM checklist must be accessible to all maintenance employees when performing PM and eCBM task based maintenance activities.

WARNING

Various products requiring Material Safety Data Sheets (MSDS) may be utilized during the performance of the procedures in this bulletin. Ensure the current MSDS for each product used is on file and available to all employees. When reordering such a product, it is suggested that current MSDS be requested. Refer to MSDS for appropriate personal protective equipment.

WARNING

The use of compressed or blown air is prohibited. An alternative cleaning method such as a HEPA filtered vacuum cleaner, a damp rag, lint-free cloth, or brush must be used in place of compressed or blown air.

WARNING

Steps contained in this bulletin may require the use of Personal Protective Equipment (PPE). Refer to the current Electrical Work Plan (EWP) MMO for appropriate PPE requirements.

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



Robert E. Albert
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Maintenance Technical Support Center
HQ Maintenance Operations

- Attachments
1. Summary of Workload Estimate for FSSSMS System
 2. FSSSMS Master Checklist: 03-FSSSMS-AA-001-M

ATTACHMENT 1

SUMMARY

WORKLOAD ESTIMATE

FOR FSSSMS SYSTEM

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**SUMMARY
WORKLOAD ESTIMATE
FOR FSS SMS**

Operation	Routine Servicing (hrs/yr)	Repair* (hrs/yr)	Routine Servicing + Repair Time (hrs/yr)	Non-productive Time** (hrs/yr)	Total Servicing Per Machine (hrs/yr)	Operational Maintenance + Total Servicing		
						1 Tour (hrs/yr) XX	2 Tours (hrs/yr) XX	3 Tours (hrs/yr) XX
5	95.73	28.72	124.45	12.44	136.89	136.89	136.89	136.89
6	100.60	32.88	142.48	14.25	156.73	156.73	156.73	156.73
7	123.47	37.04	160.51	16.05	176.56	176.56	176.56	176.56

NOTES:

* Repair estimates based on 30% of servicing.

** Based on 10% of total servicing and repair.

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ATTACHMENT 2

FSSSMS MASTER CHECKLIST

03-FSSSMS-AA-001-M

Time Total: See Attachment 1

U.S. Postal Service Maintenance Checklist	IDENTIFICATION													
	WORK CODE		EQUIPMENT ACRONYM						CLASS CODE		NUMBER			TYPE
	0	3	F	S	S	S	M	S		A	A	0	0	1
Equipment Nomenclature Flats Sequencing System Site Management Server		Equipment Model						Bulletin Filename mm13039af			Occurrence eCBM			

Part or Component	Item No	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req (min)	Min. Skill Lev	Thresholds		
					Run Hours	Pieces Fed (000)	Freq.

SAFETY STATEMENT	7000	<p>COMPLY WITH ALL SAFETY PRECAUTIONS. Disconnect power and apply lockouts when required by this instruction. Refer to current local lockout procedures to properly shutdown and lockout this machine. Open equipment and inspect dust conditions. Check for suspicious dust or unusual debris. If any unusual substance is found, notify supervisor prior to proceeding with any further action on the equipment.</p> <p>THE USE OF COMPRESSED OR BLOWN AIR IS PROHIBITED.</p> <p>When cleaning is required, an alternative cleaning method such as a HEPA filtered vacuum cleaner or a damp rag must be used in place of compressed or blown air. A lint-free cloth or brush may be used on optical equipment only when other cleaning methods cannot be used. Report safety deficiencies to your supervisor immediately upon detection.</p> <p>WARNING FOR EWP/PPE.</p> <p>Steps contained in this bulletin may require the use of Personal Protective Equipment (PPE). Refer to the current Electrical Work Plan (EWP) MMO for appropriate PPE requirements.</p>	1	All			
SMS SERVER ASSEMBLY: COMPUTER, PRIMARY SMS	7100	<p>Clean Cabinet Chassis Filter.</p> <ol style="list-style-type: none"> 1. Open SMS cabinet front door. 2. Remove two screws and filter frame bar. 3. Remove filter. 4. Vacuum dust from filter. If necessary replace filter or rinse in warm water. Ensure filter is dry before re-installing it. 5. Install filter. 6. Install filter frame bar and secure with two screws. 7. Close SMS cabinet front door. <p>Refer to MS-209 Volume E, Section 7 Chassis Filter Cleaning.</p>	6*	10			4

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SMS SERVER ASSEMBLY: DIRECTORY SERVER	7110	<p>Clean Computer.</p> <p>Perform Directory Server shut down procedure.</p> <ol style="list-style-type: none"> Disconnect outlet strip from facility outlet. <div style="text-align: center; border: 1px solid black; padding: 2px; width: fit-content; margin: 10px auto;"> CAUTION </div> <p>Extreme care should be taken that rules regarding electro-static-discharge (ESD) are strictly followed when handling all printed circuit boards, including those in logic racks, system computers, etc. This includes the use of wrist straps and ESD pads.</p> <ol style="list-style-type: none"> Set up ESD workstation kit in accordance with current ESD MMO. Remove two screws from sides of cover. Loosen cover screw and remove cover. Clean dust and debris from inside server using an approved HEPA filter shop vacuum cleaner. Reinstall cover on Directory Server. Perform Directory Server power up procedures. <p>Refer to MS-209 Volume G, Section 5 operation procedure.</p> <p>Refer to MS-209 Volume G, Section 5 power-up procedure of directory server.</p>	10	10			52
SMS SERVER ASSEMBLY: COMPUTER, PRIMARY SMS	7120	<p>Clean Computer.</p> <ol style="list-style-type: none"> Open SMS cabinet front and rear doors. Perform Site Manager Server Normal Shutdown. Disconnect outlet strip from facility outlet. <div style="text-align: center; border: 1px solid black; padding: 2px; width: fit-content; margin: 10px auto;"> CAUTION </div> <p>Extreme care should be taken that rules regarding electro-static-discharge (ESD) are strictly followed when handling all printed circuit boards, including those in logic racks, system computers, etc. This includes the use of wrist straps and ESD pads.</p>	10	10			52

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		4. Set up ESD workstation kit in accordance with current ESD MMO. 5. Remove two screws from sides of cover. 6. Loosen cover screw and remove cover. 7. Clean dust and debris from inside server using an approved HEPA filter shop vacuum cleaner. 8. Reinstall cover on SMS Primary. 9. Perform Site Manager Server Normal Startup. Refer to MS-209 Volume E, Section 5 Operation Procedures. Refer to MS-209 Volume E, Section 7 Preventive Maintenance Primary Server Cleaning. Refer to MS-209 Volume E, Section 5 Normal Power Up Procedure.					
SMS SERVER ASSEMBLY: COMPUTER, SECONDARY SMS	7130	Clean Computer. 1. Open SMS cabinet front and rear doors. 2. Perform Site Manager Server Normal Shutdown. 3. Disconnect outlet strip from facility outlet. <div style="border: 1px solid black; padding: 2px; text-align: center; width: fit-content; margin: 0 auto;">CAUTION</div> Extreme care should be taken that rules regarding electro-static-discharge (ESD) are strictly followed when handling all printed circuit boards, including those in logic racks, system computers, etc. This includes the use of wrist straps and ESD pads. 4. Set up ESD workstation kit in accordance with current ESD MMO. 5. Remove two screws from sides of cover. 6. Loosen cover screw and remove cover. 7. Clean dust and debris from inside server using an approved HEPA filter shop vacuum cleaner. a. Reinstall cover on SMS Primary.	10	10			52

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		b. Perform Site Manager Server Normal Startup. 8. Close SMS cabinet front and rear doors. Refer to MS-209 Volume E, Section 5 Operation Procedures. Refer to MS-209 Volume E, Section 7 Preventive Maintenance Primary Server Cleaning. Refer to MS-209 Volume E, Section 5 Normal Power Up Procedure.					
SMS SERVER ASSEMBLY: COMPUTER, PRIMARY SMS	7140 **	Check Promise Array WEBPAM Status. 1. Open Internet Explorer on RMDC and go to the following webpage: http://10.8.10.30 . 2. When the WEBPAM Login Screen appears, log in using current username and password. 3. To access the enclosure, select Enclosure in the left frame then select the Enclosure 1 link in the main frame. 4. Green graphics and icons indicate everything is operating with in normal thresholds. If there is an item in red, then it has exceeded operational thresholds. 5. Generate a work order to address any discrepancies noted.	5	10			D
SMS SERVER ASSEMBLY: COMPUTER, PRIMARY SMS	7150 **	Run SMS Status Check and DGSMS Check. Sites should check the health of their primary and secondary SMS on a regular basis to ensure everything is communicating correctly. On the primary SMS: 1. Login into the operating system and look for a DOS application window running the program "rman.exe". If there is more than one instance of "rman.exe" running, the Oracle Database has an issue which must be addressed by MTSC. Immediately call MTSC and open a log. 2. Double-click the SMS_Status_check.cmd shortcut. 3. After the command runs, an SMS Status Report page will appear.	5	10			D

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		4. If step 2 does not complete, it could indicate a database problem. <ul style="list-style-type: none"> a. Verify this by running DGConfig_Status.bat. b. Contact MTSC and generate a work order to correct all issues. 5. This page has links to the Network Status, SMS01 database, SMS02 database, and the ASM hard drive status. 6. Select each link and verify the correct status is shown as indicated by the information on the SMS status Report page. 7. Close page by selecting the "X" in the upper right hand corner of window. 8. Open the desktop. Double-click the Show DGConfig_Status.bat shortcut. 9. Verify "Primary database" is dgsms01. If primary is dgsms02, then the SMS is currently in failover and proper recovery procedures will need to be performed. 10. Verify "Physical standby database" and "Fast-Start failover target" are shown next to dgsms02. This ensures the secondary database is correctly configured for failover in case the primary SMS fails. 11. Check for Oracle errors. This will be listed under "Current status for dgsms", this should be Success. 12. Press Enter to exit window.					
FINAL-CLEANUP	7990	Clean up. Ensure all tools, lubricants, rags, etc., are removed from the work area. Annotate deficiencies found and repairs performed in the Maintenance logbook. Notify supervisor and/or generate work orders per local SOP to document/initiate corrective maintenance activity for deficiencies found.	5	All			

* --- the tasks marked with an asterisk are per unit tasks.

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**** --- the tasks marked with two asterisk are critical tasks.**