

MAINTENANCE TECHNICAL SUPPORT CENTER  
HEADQUARTERS MAINTENANCE OPERATIONS  
UNITED STATES POSTAL SERVICE



# Maintenance Management Order

**SUBJECT:** Flats Sequencing System (FSS) Optical  
Character Reader (OCR) Pool Preventative  
Maintenance Plan Using eCBM

**DATE:** September 17, 2013

**NO:** MMO-087-13

**TO:** All FSS Offices

**FILE CODE:** H1

wvol:mm13041ag

Item # 9730 changed to reflect the addition of WorkFlow Computers Restart procedure.  
Rollup changed to reflect the additional time.

This Maintenance Management Order (MMO) provides Operational and Preventive Maintenance Guidelines for the Flats Sequencing System (FSS) Optical Character Reader (OCR) Pool. This bulletin applies to Acronym FSSOCR, 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  
Manager  
Maintenance Technical Support Center  
HQ Maintenance Operations

- Attachments
1. Summary of Workload Estimate
  2. Master Checklist 03-FSSOCR-AA-001-M – FSS OCR PM

**ATTACHMENT 1**

**SUMMARY**

**WORKLOAD ESTIMATE**

**FOR**

**FSSOCR SYSTEM**

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**SUMMARY  
WORKLOAD ESTIMATE  
FOR FSSOCR**

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)
5	43.59	13.08	56.67	5.67	62.33
6	50.52	15.16	65.68	6.57	72.24
7	53.12	15.94	69.06	6.91	75.97

**NOTES:**

\*Repair estimates based on 30% of servicing.

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

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**ATTACHMENT 2**

**FSSOCR MASTER CHECKLIST**

03-FSSOCR-AA-001-M

Time Total: See Attachment 1

U.S. Postal Service		IDENTIFICATION										
<b>Maintenance Checklist</b>		WORK CODE		EQUIPMENT ACRONYM						CLASS CODE	NUMBER	TYPE
		0	9	F	S	S	O	C	R	A	A	0 0 1 M
Equipment Nomenclature		Equipment Model						Bulletin Filename mm13041		Occurrence		

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	1000	<p><b>COMPLY WITH ALL SAFETY PRECAUTIONS.</b> 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><b>THE USE OF COMPRESSED OR BLOWN AIR IS PROHIBITED.</b> 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><b>WARNING FOR EWP/PPE:</b> 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			
	FSS OCR POOL CABINET ASSEMBLY	<p><b>9710 Clean computer cabinet(s) and computer(s) filters</b></p> <ol style="list-style-type: none"> <li>Open OCR cabinet rear doors.</li> <li>Remove dust and debris from the interior and exterior of the OCR cabinet and the following components using vacuum cleaner, soft cleaning brush, or lint-free towel:               <ol style="list-style-type: none"> <li>AC fans</li> <li>KVM switch</li> <li>OCR computers</li> <li>15-inch monitor with keyboard</li> <li>junction box assembly</li> </ol> </li> </ol>	15	09			52



U.S. Postal Service <b>Maintenance Checklist</b>		IDENTIFICATION														
		WORK CODE		EQUIPMENT ACRONYM						CLASS CODE		NUMBER			TYPE	
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Equipment Nomenclature		Equipment Model						Bulletin Filename mm13041				Occurrence				

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.

		3. Remove dust and debris from air filter in rear door front fan and in rear fan of OCR computers using vacuum cleaner.  4. Close OCR cabinet rear doors.  Refer to MS-209 Volume G, Section 7 OCR System Cleaning Procedures					
FSS OCR POOL WEB USER INTERFACE	9720**	<b>Check OCR WEBUI status screen</b>  1. Open Internet Explorer on RMDC and login to either workflow OCR PC by entering <a href="http://10.8.10.201:8080/rcwebui/um/Login.do">http://10.8.10.201:8080/rcwebui/um/Login.do</a> or <a href="http://10.8.10.202:8080/rcwebui/um/Login.do">http://10.8.10.202:8080/rcwebui/um/Login.do</a> in the IE address bar.  2. Login with appropriate username and password.  3. On the Diagnostics – System Overview page, select Reader Pool 1.  4. The Device Control – Reader page is displayed. All status icons should be green.  5. Check the Database Control status for failed over conditions: a. Select Device Control in the left pane b. Select Database Control c. Verify the following results: 1) One OCR status should report “Database instances accessible” 2) The other OCR status should report “Standby database instance synchronized”  6. Check the System Message diagnostic screen: a. Select Diagnostics in the left pane. b. Select System Messages. c. Select Log Level in drop-down menu d. Select Dates	2	10			D

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		e. Select Location (ALL) f. Click Filter g. Analyze Results Window looking for recent error messages and take corrective actions as needed.  7. Select Logout to logoff of the WebUI and click on the red "X" in the upper right hand corner to exit Internet Explorer.  8. Select Start - Shutdown and then at the Shutdown Windows screen, select from the dropdown list "Log off <username>". Click on OK to log off windows.  9. Generate a work order to address all discrepancies noted.  Refer to MS-209 Volume G, Section 4 Software User Interface Menu Hierarchy					
FSS OCR POOL NDSS DIRECTORY FILES	9730 **	<b>WorkFlow Computer (OCR 1 and OCR2) Restart and Activate current NDSS Directory</b>  <b>NOTE</b>  This procedure should not be performed while the FSS machines are processing mail.  1. Press computer selection pushbutton on KVM switch to connect selecting Workflow #1 Computer.  2. Log into the computer using maint1 credentials.  3. Perform the following at computer keyboard: a. Click <b>Start</b> on Task bar at bottom of Windows desktop. b. Select <b>Shut Down</b> on Start menu) c. Select <b>Restart</b> from <b>What do you want the computer to do?</b> drop-down menu in Shut Down Windows dialog box d. Select OK.  4. Observe computer software shutdown and	25	10			1

U.S. Postal Service  <b>Maintenance Checklist</b>		IDENTIFICATION													
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Equipment Nomenclature		Equipment Model						Bulletin Filename mm13041				Occurrence			

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		<p>restart sequence. Confirm startup by observing the Windows Operating system splash screen.</p> <p>5. Once the startup is observed on Workflow Computer #1 (OCR #1) perform the restart procedure on WorkFlow #2 (OCR #2).</p> <p>6. Press computer selection pushbutton on KVM switch to connect selecting Workflow #2 Computer</p> <p>7. Log into the computer using maint1 credentials.</p> <p>8. Perform the following at computer keyboard:</p> <ol style="list-style-type: none"> <li>Click <b>Start</b> on Task bar at bottom of Windows desktop.</li> <li>Select <b>Shut Down</b> on Start menu)</li> <li>Select <b>Restart</b> from <b>What do you want the computer to do?</b> drop-down menu in Shut Down Windows dialog box</li> <li>Select OK.</li> </ol> <p>9. Observe computer software shutdown and restart sequence. Confirm startup by observing the Windows Operating system splash screen.</p> <p>10. Wait at least 15 Min after Workflow #2 has restarted before performing Directory Distribution (Step 11).</p> <p>11. Open Internet Explorer (IE) by clicking Start, Programs, and Internet Explorer. Login to the Web UI as maint1 with the appropriate password.</p> <p>12. Click the Operational Control and then Directories links from the left control column.</p> <p>13. In the Operational Control – Directories page, select the radio button adjacent to the latest set of directories and click the Activate button. When the dialog box Are you sure you want to activate the selected directory? Appears, click OK.</p> <p>14. After several minutes, the directories will be activated and the indicator in the Active column will be adjacent to the latest set of</p>					
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		directories. 15. Verify directory dates by selecting Device Control from the left-pane and the Reader. The current directories will be displayed in the column on the far right-hand side. 16. Click Logout and close the IE web page by clicking the X in the upper-right corner. 17. Ensure all computer and computer rack fans are functional.  Refer to MS-209 Volume G, Section 4 Directory Server Computer Software Reference, Download NDSS Directories.					
Final-Cleanup	9990	<b>Clean up.</b>  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.

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