# MAINTENANCE TECHNICAL SUPPORT CENTER HEADQUARTERS MAINTENANCE OPERATIONS UNITED STATES POSTAL SERVICE



## Maintenance Management Order

**SUBJECT:** Flats Sequencing System (FSS) Optical

Character Reader (OCR) Pool Preventive

Maintenance Plan Using eCBM

TO: All FSS Sites

**PUB NO:** MMO-112-20

FILE CODE: H1A

**FILE ID:** mm20022

**DATE:** October 25, 2021

REV LEVEL: ac

This Maintenance Management Order (MMO) **supersedes MMO-087-13** and provides Preventive Maintenance Guidelines for the Flats Sequencing System (FSS) Optical Character Reader (OCR) Pool. This bulletin applies to Acronym FSSOCR, Class Code AA.

The work hours indicated in the workload estimate (Attachment 1) are based on a 24-hour operations window and reflect the maximum annual work hours required to maintain each system. 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 Safety Data Sheets (SDS) may be utilized during the performance of the procedures in this bulletin. Ensure the current SDS for each product used is on file and available to all employees. When reordering such a product, it is suggested that current SDS be requested. Refer to SDS for appropriate personal protective equipment.

Web Access: https://www1.mtsc.usps.gov

#### 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 Electrical Work Plan (EWP) Personal Protective Equipment (PPE). Refer to the current EWP MMO for appropriate EWP PPE and barricade 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.

Frederick L. Jackson III **Executive Manager** 

Maintenance Technical Support Center

Asset Maintenance Planning, Performance and Support

- Attachments 1. Summary of Workload Estimate For FSSOCR System
  - 2. FSSOCR Master Checklist 03-FSSOCR-AA-001-M Preventive Maintenance (PM)

#### **ATTACHMENT 1**

#### **SUMMARY WORKLOAD ESTIMATE**

#### FOR FSSOCR SYSTEM

						Operational				
				Non-		Maintenance + Total				
Operation	Routine	Repair	Routine	Productive	Total		Servicing			
	Servicing	Time	Servicing		Servicing		2	3		
Days	per	per	+	Time per	per	1 Tour	Tours	Tours		
			Repair							
	Machine	Machine	Time	Machine	Machine	Hrs/Yr	Hrs/Yr Hrs/Yr			
		(Hrs/yr)				ОрМ х	ОрМ х	ОрМ х		
	(Hrs/Yr)	*	(Hrs/Yr)	(Hrs/yr) **	(Hrs/Yr)	1	2	3		
5 Days	41.00	12.30	53.30	5.33	58.63	58.63	58.63	58.63		
6 Days	47.93	14.38	62.31	6.23	68.54	68.54	68.54	68.54		
7 Days	54.86	16.46	71.32	7.13	78.45	78.45	78.45	78.45		

Repair maintenance estimates based on 30% of preventive

maintenance.

<sup>\*\*</sup> Based on 10% of total PM and repair.

Repair estimates based on 30% of servicing.

<sup>\*\*</sup> Based on 10% of total servicing and repair.

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## **ATTACHMENT 2**

#### **FSSOCR MASTER CHECKLIST**

#### 03-FSSOCR-AA-001-M

## PREVENTIVE MAINTENANCE (PM)

Time Total: (73) minutes

U.S. Postal Service	IDENTIFICATION															
	WORK		RK EQUIPMENT								CLA	NUMBER			TYPE	
Maintenance Checklist	CO	DE	ACRONYM						CODE			DE				
	0	3	F	S	S	0	С	R			Α	Α	0	0	1	М
Equipment Nomenclature FSS OCR	· · ·			ment Model					Bulletin Filename mm20022				Occurrence Daily			
100001										111112	0022				ally	

Part or Component	Item	Task Statement and Instruction	Est.	Min.		hreshold	ds
	No	(Comply with all current safety precautions)	Time Req (min)	Skill Lev	Run Hours	Pieces Fed (000)	Freq.
SAFETY STATEMENT	1000	COMPLY WITH ALL SAFETY PRECAUTIONS.  Disconnect power and apply lockouts when required by this instruction. Refer to current local lockout procedures to properly shut down and lock out this machine. 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.	1	All			D
	PROHIB When cle methods a damp is or blown on optica methods deficience detection  WARNIN this bulle Plan (EV Refer to	THE USE OF COMPRESSED OR BLOWN AIR IS PROHIBITED. 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.					
		WARNING FOR EWP/PPE: Steps contained in this bulletin may require the use of Electrical Work Plan (EWP) Personal Protective Equipment (PPE). Refer to the current EWP MMO or appropriate EWP PPE and barricade requirements.					
		WARNING: Various products requiring Safety Data Sheets (SDS) may be utilized during the performance of the procedures in this bulletin. Ensure the current SDS for each product used is on file and available to all employees. When reordering such a product, it is suggested that current SDS be requested. Refer to SDS for appropriate personal protective equipment.					

Part or Component	Item	Task Statement and Instruction	Est.	Min.	Т	hreshold	ls
,	No	(Comply with all current safety precautions)	Time	Skill	Run	Pieces	Freq.
			Req	Lev	Hours	Fed	-
FSS OCR POOL	9710		(min) 15	09		(000)	
CABINET ASSEMBLY		<ol> <li>Clean computer cabinet(s) and computer(s) filters.</li> <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:         <ul> <li>AC fans</li> <li>KVM switch</li> <li>OCR computers</li> <li>15-inch monitor with keyboard</li> <li>Junction box assembly</li> </ul> </li> <li>Remove dust and debris from air filter in rear door front fan and in rear fan of OCR computers using vacuum cleaner.</li> <li>Close OCR cabinet rear doors.</li> </ol>					A
		Refer to MS-209 Volume G, Section 7 OCR System Cleaning Procedures					
FSS OCR POOL	9720**	Check OCR WEBUI status screen.	2	10			D
WEB USER INTERFACE		<ol> <li>From the Directory Server Download Address Directories window, select display menu option.</li> <li>Select either Primary Reader Pool WebUI or Secondary Reader Pool WebUI</li> <li>Login with appropriate username and password.</li> <li>Select Diagnostics – System Overview page in the left hand pane. All status icons should be green.</li> <li>Select Diagnostics – Messages page in the left hand pane.         <ol> <li>Select "INFO" in the Log Level drop down box.</li> <li>Select the last 24 hours in the From and To boxes.</li> <li>Select "All" in the Location drop down box.</li> <li>Click Filter button.</li> <li>Analyze results window for recent WARN, ERROR or FATAL messages.</li> </ol> </li> <li>Select Logout to logoff of the WebUI and click on the "X" in the upper right hand corner to exit Firefox.</li> <li>Generate a work order to address any discrepancies found.</li> <li>Refer to MS-209 Volume G, Section 4 Software User Interface Menu Hierarchy.</li> </ol>					

Part or Component	Item	Task Statement and Instruction		Min.	T	hreshold	ls
	No	(Comply with all current safety precautions)		Skill	Run	Pieces	Freq.
			Req	Lev	Hours	Fed	
			,			(000)	
FSS OCR POOL NDSS DIRECTORY FILES	9730**	<ol> <li>Check Status of NDSS Directories.</li> <li>Select display menu option from the Directory Server Download Address Directories window.</li> <li>Select either Primary Reader Pool WebUI or Secondary Reader Pool WebUI.</li> <li>Login with appropriate username and password.</li> <li>Select Operational Control – Directories page in the left hand pane.</li> <li>In the Operational Control – Directories page, ensure the double chevron indicators in the Active column are adjacent to the latest set of directories. One set of double chevrons is present for the parascript directories (MonDDYYYY:MonDDYYYY) and a second set of double chevrons is present for the XAI directories (US_DIRXX_88_YYMMDD:88_YYMMDD).</li> <li>Select Logout to logoff of the WebUI and click on the "X" in the upper right hand corner to exit Firefox.</li> <li>Generate a work order to address any discrepancies found.</li> <li>Refer to MS-209 Volume G, Section 4 Directory Server Computer Software Reference, Download NDSS Directories.</li> </ol>	(min) 5	10	Hours	Fed (000)	W

Part or Component	Item	Task Statement and Instruction	Est.	Min.	Т	hreshold	ds
·	No	(Comply with all current safety precautions)	Time	Skill	Run	Pieces	Freq.
			Req	Lev	Hours	Fed	
FSS OCR POOL	9740	Clean Computer (2).	(min) 30*	10		(000)	Α
WORKFLOW COMPUTERS		Perform OCR Computer shut down procedure.     Disconnect outlet strip from facility outlet.	30	10			^
		CAUTION					
		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.					
		<ol> <li>Set up ESD workstation kit in accordance with current ESD MMO.</li> <li>Remove two screws from sides of cover.</li> <li>Loosen cover screw and remove cover.</li> <li>Clean dust and debris from inside server using an approved HEPA filter shop vacuum cleaner.</li> <li>Reinstall cover.</li> <li>Perform OCR Computer power up procedures.</li> </ol>					
		Refer to MS-209 Volume G, Section 5 Operating Procedures.					
ESS OOD DOOL	0750	*15 minutes per computer	45*	40			
FSS OCR POOL ADDRESS READER COMPUTERS	9750	<ol> <li>Clean Computer(s).</li> <li>Perform OCR Computer shut down procedure.</li> <li>Disconnect outlet strip from facility outlet.</li> </ol> CAUTION	15*	10			A
		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.					
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Part or Component	Item	Task Statement and Instruction		Min.	_	hreshold	ds
	No	(Comply with all current safety precautions)	Time	Skill	Run	Pieces	Freq.
			Req	Lev	Hours	Fed	-
			(min)			(000)	
FINAL-CLEANUP	9990	Clean up.	5	All			
		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.					

The tasks marked with one asterisk, by the time required, are per unit tasks.

The tasks marked with two asterisks, by the item number, are critical tasks.