



maintenance management order

SUBJECT: PM Guidelines for Lockheed Martin Loose Mail System (LMS)

DATE: July 10, 2000

NO: MMO-063-00

TO: All Lockheed Martin Loose Mail System Sites.

FILE CODE: J10
mova:M99072AC

Online Change Record		
Change #	Date	Description of Change
1	4/26/2022	Attachments 2, 3, 4, and 5 - corrected skill levels 4 and 5, no longer in use, to level 7.

This Maintenance Management Order (MMO) provides Preventive Maintenance (PM) guidelines for the Lockheed Martin Loose Mail System (LMS). The VMARS acronym for this equipment is "LMS" and the class code is "BA".

The minimum maintenance skill level to perform each task on the various checklists is included in the Minimum Skill Level column. However, this does not preclude higher level employees from performing any of these tasks.

WARNING

Various chemical products may be used while performing tasks outlined in this bulletin. Ensure that current Material Safety Data Sheet (MSDS) for each chemical product is on file and available for all employees.

The preventive maintenance hours outlined in this MMO are based on 16 hours of machine run time each day. There are several configurations of Lockheed Martin LMS machines in the field, therefore, local maintenance management is requested to use these PM guidelines as a reference and prepare a site specific PM schedule. Furthermore, local maintenance management may modify and customize the tasks and frequencies to better fit their site needs.

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

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Manager
Maintenance Technical Support Center
Maintenance Policies and Programs

Attachments:

1. Summary, Workload Estimate for Lockheed Martin LMS
2. Lockheed Martin LMS Master Checklist (Daily)
3. Lockheed Martin LMS Master Checklist (Weekly)
4. Lockheed Martin LMS Master Checklist (Semiannual)
5. Lockheed Martin LMS Master Checklist (Annual)

ATTACHMENT 1

-SUMMARY-

WORKLOAD ESTIMATE

FOR

Lockheed Martin Loose Mail System

SUMMARY WORKLOAD ESTIMATE FOR LOCKHEED MARTIN LMS**LOCKHEED MARTIN LMS USED WITH SIX INDUCTION STATION SPBM**

Service Condition (days/wk)	Routine PM (hrs/yr)	Repair* (hrs/yr)	Total PM and Repair (hrs/yr)	Nonproductive Time** (hrs/yr)	Total Maint. Per Machine (hrs/yr)
6 days	684	137	821	82	903
7 days	773	155	928	92	1020

* Repair maintenance estimates based on 20% of Preventive Maintenance.

** Based on 10% of total preventive maintenance and repair.

NOTE

This PM guideline lists one module of each type in a given LMS. However, it is likely that more than one module of the same type exists on a given LMS. Therefore, if an "*" appears in the time column of a task, then that task must be performed on all modules of the same type. Furthermore, the allocated time in the time column reflects the amount of time required to perform a task per module.

The preventive maintenance hours outlined in this Attachment are based on 16 hours of machine run time each day. There are no standard configurations of Lockheed Martin LMS machine in the field. Therefore, local maintenance management is requested to use these PM guidelines as a reference and prepare a site specific PM schedule. Local maintenance management may modify and customize the tasks and frequencies to better fit their individual needs.

The cumulative time to perform this PM schedule is based on the number of modules listed in the following chart:

Module Name	Number of modules.
Load Module	1
Pallet Unloader Module	2
All Purpose Unloader Module	1
90-Degree Turn Module	6
Incline Module	2
Transport Module	1
Diverter Module	6
Induct Module	6

ATTACHMENT 2**LMSBA MASTER CHECKLIST**

03-LMS-BA-001-M

DAILY

DAILY TIME TOTALS:

102 minutes

The cumulative time to perform this PM schedule is based on the number of modules listed in the following chart:

Module Name	Number of modules.
Load Module	1
Pallet Unloader Module	2
All Purpose Unloader Module	1
90-Degree Turn Module	6
Incline Module	2
Transport Module	1
Diverter Module	6
Induct Module	6

U.S. Postal Service Maintenance Checklist	IDENTIFICATION										
	Work Code		Equipment Acronym			Class Code		Number		Type	
	0	3	L	M	S		B	A	0	0	1
Equipment Nomenclature Lockheed Martin SPBS Feed System		Equipment Model LMS			Bulletin Filename M99072AC		Frequency DAILY				

Part or Component	Item No.	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req'd	Min. Skill Level
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SAFETY STATEMENT	1.	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. Where air pressure is required for cleaning, use a low air pressure (30 psi or less) air source. Eye protection (goggles or face shield) must be used when utilizing compressed air for cleaning. Ensure all employees are clear of the machine. Report safety deficiencies to your supervisor immediately upon detection.	3 min	All
LMS SYSTEM	2.	POWER DOWN AND LOCKOUT POWER. - Power down the machine and lockout its electrical and/or pneumatic power source as prescribed by the current local procedure providing lockout/restore procedures for this equipment.	3 min	All
LOAD MODULE	3.	PERFORM MAIL SEARCH. - Perform mail search as follows: <ol style="list-style-type: none"> 1. Remove covers and panels as necessary. 2. Search for mailpieces. 3. Return all mail found during mail search to the proper mail path. 4. Check conveyor belt for damage. 5. Replace all covers and panels. 6. Check that all equipment guards are in place. 	2 min	7
PALLET UNLOADER MODULE	4.	PERFORM MAIL SEARCH. - Perform mail search as follows: <ol style="list-style-type: none"> 1. Remove covers and panels as necessary. 2. Search for mailpieces. 3. Return all mail found during mail search to the proper mail path. 	2* min	7

* per module

Maintenance Technical Support Center

U.S. Postal Service Maintenance Checklist		IDENTIFICATION									
		Work Code		Equipment Acronym			Class Code		Number		Type
		0	3	L	M	S	B	A	0	0	1
Equipment Nomenclature Lockheed Martin SPBS Feed System		Equipment Model LMS			Bulletin Filename M99072AC			Frequency DAILY			

Part or Component	Item No.	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req'd	Min. Skill Level
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PALLET UNLOADER MODULE (Continued)

4. Check unloader for physical damage.
5. Replace all covers and panels.
6. Check that all equipment guards are in place.

ALL PURPOSE UNLOADER MODULE

- | | | | |
|----|---|----|-------|
| 5. | PERFORM MAIL SEARCH. - Perform mail search as follows: | 2* | 7 min |
|----|---|----|-------|
1. Remove covers and panels as necessary.
 2. Search for mailpieces.
 3. Return all mail found during mail search to the proper mail path.
 4. Check unloader for physical damage.
 5. Replace all covers and panels.
 6. Check that all equipment guards are in place.

90 DEGREE TURN MODULE

- | | | | |
|----|---|----|-------|
| 6. | PERFORM MAIL SEARCH. - Perform mail search as follows: | 2* | 7 min |
|----|---|----|-------|
1. Remove covers and panels as necessary.
 2. Search for mailpieces.
 3. Return all mail found during mail search to the proper mail path.
 4. Check conveyor belt for damage.
 5. Replace all covers and panels.
 6. Check that all equipment guards are in place.

* per module

INCLINE

- | | | | |
|----|---|----|-------|
| 7. | PERFORM MAIL SEARCH. - Perform mail search as follows: | 2* | 7 min |
|----|---|----|-------|

U.S. Postal Service Maintenance Checklist	IDENTIFICATION										
	Work Code		Equipment Acronym			Class Code		Number		Type	
	0	3	L	M	S		B	A	0	0	1
Equipment Nomenclature Lockheed Martin SPBS Feed System		Equipment Model LMS			Bulletin Filename M99072AC		Frequency DAILY				

Part or Component	Item No.	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req'd	Min. Skill Level
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MODULE		follows: 1. Remove covers and panels as necessary. 2. Search for mailpieces. 3. Return all mail found during mail search to the proper mail path. 4. Check conveyor belt for damage. 5. Replace all covers and panels. 6. Check that all equipment guards are in place.	min	
TRANSPORT MODULE	8.	PERFORM MAIL SEARCH. - Perform mail search as follows: 1. Remove covers and panels as necessary. 2. Search for mailpieces. 3. Return all mail found during mail search to the proper mail path. 4. Check conveyor belt for damage. 5. Replace all covers and panels. 6. Check that all equipment guards are in place.	2* min	7

* per module

DIVERTER	9.	PERFORM MAIL SEARCH. - Perform mail search as follows: 1. Remove covers and panels as necessary. 2. Search for mailpieces. 3. Return all mail found during mail search to the proper mail path. 4. Check conveyor belt for damage. 5. Replace all covers and panels. 6. Check that all equipment guards are in place.	5*	7
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Maintenance Technical Support Center

U.S. Postal Service Maintenance Checklist		IDENTIFICATION									
		Work Code		Equipment Acronym			Class Code		Number		Type
		0	3	L	M	S		B	A	0	0
Equipment Nomenclature Lockheed Martin SPBS Feed System		Equipment Model LMS			Bulletin Filename M99072AC			Frequency DAILY			

Part or Component	Item No.	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req'd	Min. Skill Level
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MODULE

follows:

min

WARNING

Be cautious when working around the Divert module. Install orange safety bars to block off each divert module; failure to place the safety bars may result in serious injury or death.

1. Remove covers and panels as necessary.
2. Search for mailpieces.
3. Return all mail found during mail search to the proper mail path.
4. Check conveyor belt for damage.
5. Replace all covers and panels.
6. Check that all equipment guards are in place.

INDUCT
MODULE

10. **PERFORM MAIL SEARCH.** - Perform mail search as follows:

1* 7
min

1. Remove covers and panels as necessary.
2. Search for mailpieces.
3. Return all mail found during mail search to the proper mail path.
4. Check conveyor belt for damage.
5. Replace all covers and panels.
6. Check that all equipment guards are in place.

* per module

WARNING

U.S. Postal Service Maintenance Checklist	IDENTIFICATION										
	Work Code		Equipment Acronym			Class Code		Number		Type	
	0	3	L	M	S		B	A	0	0	1
Equipment Nomenclature Lockheed Martin SPBS Feed System		Equipment Model LMS			Bulletin Filename M99072AC		Frequency DAILY				

Part or Component	Item No.	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req'd	Min. Skill Level
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Be cautious when working around or on equipment when power has been applied.

LMS SYSTEM	11.	RESTORE EQUIPMENT TO SERVICE. - Restore equipment to service as prescribed by the current local procedure providing lockout/restore procedures for this equipment.	2 min	ALL
LMS SYSTEM	12.	PERFORM OPERATIONAL CHECK. - Perform operational check as follows:	20 min	7

WARNING

Be cautious when working around or on equipment when power has been applied.

LMS SYSTEM (Continued)	1.	Ensure that there is no mail loaded on the load module and that the system is empty.		
	2.	Boot the MMI computer by pressing the computer power on button. The LMS application software will load automatically.		
	3.	Ensure all E-stop switches are in the reset position.		
	4.	Place the machine in the Normal mode by clicking Normal mode button (icon) on the MMI screen. Click the Start button (icon) on the MMI screen, this will initiate the start sequence.		
	5.	Ensure that all audible alarms are in working condition.		
	6.	While the system is running, walk around and observe the operation of the entire system.		
	7.	Check for abnormal noises, vibration, and other abnormal conditions.		

Maintenance Technical Support Center

U.S. Postal Service Maintenance Checklist		IDENTIFICATION										
		Work Code		Equipment Acronym			Class Code		Number			Type
		0	3	L	M	S		B	A	0	0	1
Equipment Nomenclature Lockheed Martin SPBS Feed System		Equipment Model LMS			Bulletin Filename M99072AC			Frequency DAILY				

Part or Component	Item No.	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req'd	Min. Skill Level
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		8. Check each conveyor belt for abnormal tension, tracking, and damaged lacing.		
		9. Place few pieces of live mail (or few half trays) into the system. Observe the mail flow through the entire system. Ensure mail pieces reach SPBM induction stations.		
		10. Click the Stop button (icon) on the MMI screen, this will initiate the conveyor stop sequence.		
PALLET UNLOADER MODULE	13.	PERFORM OPERATIONAL CHECK. - Perform operational check as follows: 1. Cycle the Pallet Unloader (from both control locations) and observe for proper operation. 2. Check for abnormal noises, vibration, and other abnormal conditions. 3. Check the hydraulic system for physical damage.	3* min	7
ALL PURPOSE UNLOADER MODULE	14.	PERFORM OPERATIONAL CHECK. - Perform operational check as follows: 1. Cycle the All-Purpose Unloader (from both control locations) and observe for proper operation. 2. Check for abnormal noises, vibration, or other abnormal conditions. 3. Check hydraulic system for physical damage.	3* min	7
LMS SYSTEM	15.	RESTORE SYSTEM TO OPERATIONAL MODE. – Ensure that the system is in the operational mode by verifying the System Computer setup. Place the machine in the Normal mode by clicking Normal mode button (icon) on the MMI screen. Click the Reset button (icon) on the MMI screen, this will reset the system. Now the LMS system is ready.	1 min	ALL
LMS SYSTEM (Continued)	16.	CLEAN-UP. - Ensure all tools, lubricants, rags, etc., are removed from the work area. Report all deficiencies to your supervisor.	2 min	ALL

* per module

U.S. Postal Service Maintenance Checklist		IDENTIFICATION										
		Work Code		Equipment Acronym			Class Code		Number			Type
		0	3	L	M	S		B	A	0	0	1
Equipment Nomenclature Lockheed Martin SPBS Feed System		Equipment Model LMS			Bulletin Filename M99072AC			Frequency DAILY				

Part or Component	Item No.	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req'd	Min. Skill Level
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ATTACHMENT 3**LMSBA MASTER CHECKLIST**

03-LMS-BA-002-M

WEEKLY

WEEKLY TIME TOTALS:

165 minutes

The cumulative time to perform this PM schedule is based on the number of modules listed in the following chart:

Module Name	Number of modules.
Load Module	1
Pallet Unloader Module	2
All Purpose Unloader Module	1
90-Degree Turn Module	6
Incline Module	2
Transport Module	1
Diverter Module	6
Induct Module	6

U.S. Postal Service Maintenance Checklist	IDENTIFICATION										
	Work Code		Equipment Acronym			Class Code		Number		Type	
	0	3	L	M	S		B	A	0	0	2
Equipment Nomenclature Lockheed Martin SPBS Feed System		Equipment Model LMS			Bulletin Filename M99072AC		Frequency WEEKLY				

Part or Component	Item No.	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req'd	Min. Skill Level
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SAFETY STATEMENT	1.	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. Where air pressure is required for cleaning, use a low air pressure (30 psi or less) air source. Eye protection (goggles or face shield) must be used when utilizing compressed air for cleaning. Ensure all employees are clear of the machine. Report safety deficiencies to your supervisor immediately upon detection.	3 min	All
LMS SYSTEM	2.	POWER DOWN AND LOCKOUT POWER. - Power down the machine and lockout its electrical and/or pneumatic power source as prescribed by the current Local procedure providing lockout/restore procedures for this equipment.	3 min	All
LOAD MODULE	3.	CLEAN BELT, ROLLERS, AND BEARINGS. - Clean belt, rollers, and bearings as follows: <ol style="list-style-type: none"> 1. Remove covers and panels as necessary. 2. Clean belt, rollers, and bearings of all debris. 3. Remove strings, wrapping materials, and all foreign objects. 4. Replace all covers and panels. 	5 min	7
PALLET UNLOADER MODULE	4.	CLEAN BELT, ROLLERS, AND BEARINGS. - Clean belt, rollers, and bearings as follows: <ol style="list-style-type: none"> 1. Remove covers and panels as necessary. 2. Clean belt, rollers, and bearings of all debris. 3. Remove strings, wrapping materials, and all foreign objects. 4. Replace all covers and panels. 	4* min	7

* per module

U.S. Postal Service Maintenance Checklist		IDENTIFICATION									
		Work Code		Equipment Acronym			Class Code		Number		Type
		0	3	L	M	S		B	A	0	0
Equipment Nomenclature Lockheed Martin SPBS Feed System		Equipment Model LMS			Bulletin Filename M99072AC			Frequency WEEKLY			

Part or Component	Item No.	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req'd	Min. Skill Level
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ALL PURPOSE UNLOADER MODULE	5.	CLEAN BELT, ROLLERS, AND BEARINGS. - Clean belt, rollers, and bearings as follows: 1. Remove covers and panels as necessary. 2. Clean belt, rollers, and bearings of all debris. 3. Remove strings, wrapping materials, and all foreign objects. 4. Replace all covers and panels.	4* min	7
90 DEGREE TURN MODULE	6.	CLEAN BELT, ROLLERS, AND BEARINGS. - Clean belt, rollers, and bearings as follows: 1. Remove covers and panels as necessary. 2. Clean belt, rollers, and bearings of all debris. 3. Remove strings, wrapping materials, and all foreign objects. 4. Replace all covers and panels.	4* min	7
INCLINE MODULE	7.	CLEAN BELT, ROLLERS, AND BEARINGS. - Clean belt, rollers, and bearings as follows: 1. Remove covers and panels as necessary. 2. Clean belt, rollers, and bearings of all debris. 3. Remove strings, wrapping materials, and all foreign objects. 4. Replace all covers and panels.	5* min	7

* per module

TRANSPORT	8.	CLEAN BELT, ROLLERS, AND BEARINGS. - Clean	4* min	7
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U.S. Postal Service Maintenance Checklist	IDENTIFICATION										
	Work Code		Equipment Acronym			Class Code		Number		Type	
	0	3	L	M	S		B	A	0	0	2
Equipment Nomenclature Lockheed Martin SPBS Feed System		Equipment Model LMS			Bulletin Filename M99072AC		Frequency WEEKLY				

Part or Component	Item No.	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req'd	Min. Skill Level
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MODULE		belt, rollers, and bearings as follows:		
		<ol style="list-style-type: none"> 1. Remove covers and panels as necessary. 2. Clean belt, rollers, and bearings of all debris. 3. Remove strings, wrapping materials, and all foreign objects. 4. Replace all covers and panels 		
DIVERter MODULE	9.	CLEAN BELT, ROLLERS, AND BEARINGS. - Clean belt, rollers, and bearings as follows: <ol style="list-style-type: none"> 1. Remove covers and panels as necessary. 2. Clean belt, rollers, and bearings of all debris. 3. Remove strings, wrapping materials, and all foreign objects. 4. Replace all covers and panels. 	6* min	7
INDUCT MODULES	10.	CLEAN BELT, ROLLERS, AND BEARINGS. - Clean belt, rollers, and bearings as follows: <ol style="list-style-type: none"> 1. Remove covers and panels as necessary. 2. Clean belt, rollers, and bearings of all debris. 3. Remove strings, wrapping materials, and all foreign objects. 4. Replace all covers and panels. 	3* min	7

* per module

U.S. Postal Service		IDENTIFICATION									
Maintenance Checklist		Work Code		Equipment Acronym			Class Code		Number		Type
		0	3	L	M	S		B	A	0	0
Equipment Nomenclature Lockheed Martin SPBS Feed System		Equipment Model LMS			Bulletin Filename M99072AC			Frequency WEEKLY			

Part or Component	Item No.	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req'd	Min. Skill Level
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WARNING

Be cautious when working around or on equipment when power has been applied.

LMS SYSTEM	11.	RESTORE EQUIPMENT TO SERVICE. - Restore equipment to service as prescribed by the current local procedure providing lockout/restore procedures for this equipment.	2 min	ALL
PNEUMATIC SYSTEM	12.	CHECK THE PNEUMATIC SYSTEM. - Check the pneumatic system as follows: 1. Check the air pressure. Adjust as necessary 2. Check the moisture container. Bleed as necessary. 3. Check air pressure at each Diverter module. Adjust as necessary.	4 min	7
SUPERVISOR WORK STATION	13.	CLEAN CRT. - Clean CRT with a lint-free cloth.	1 min	7

U.S. Postal Service Maintenance Checklist	IDENTIFICATION										
	Work Code		Equipment Acronym			Class Code		Number		Type	
	0	3	L	M	S		B	A	0	0	2
Equipment Nomenclature Lockheed Martin SPBS Feed System		Equipment Model LMS			Bulletin Filename M99072AC			Frequency WEEKLY			

Part or Component	Item No.	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req'd	Min. Skill Level
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EMERGENCY STOP SWITCHES	14.	<p>CHECK ALL EMERGENCY STOP SWITCHES. -</p> <ol style="list-style-type: none"> 1. Ensure that there is no mail loaded on the load module and that the system is empty. 2. Boot the MMI computer by pressing the computer power on button. The LMS application software will load automatically. 3. Ensure all E-stop switches are in the reset position. 4. Place the machine in the Normal mode, and click the Start icon on the Computer screen. 5. While the system is running, depress one emergency-stop switch, ensure that the machine stops immediately. Red light on the Light Tree will illuminate and the alarm will sound indicating an e-stop condition. 6. Check all remaining emergency-stop switches by depressing one switch at a time. <p>This task may take two people to perform.</p>	40 min	7
LMS SYSTEM	15.	<p>RESTORE SYSTEM TO OPERATIONAL MODE. –</p> <p>Ensure that the system is in the operational mode by verifying the System Computer setup. Place the machine in the Normal mode by clicking Normal mode button (icon) on the MMI screen. Click the Reset button (icon) on the MMI screen, this will reset the system. Now the LMS system is ready.</p>	1 min	ALL
	16.	<p>CLEAN UP. - Ensure all tools, lubricants, rags, etc., are removed from the work area. Report all deficiencies to your supervisor.</p>	2 min	ALL

ATTACHMENT 4**LMSBA MASTER CHECKLIST**

03-LMS-BA-003-M

SEMIANNUAL

SEMIANNUAL TIME TOTALS:

173 minutes

The cumulative time to perform this PM schedule is based on the number of modules listed in the following chart:

Module Name	Number of modules.
Load Module	1
Pallet Unloader Module	2
All Purpose Unloader Module	1
90-Degree Turn Module	6
Incline Module	2
Transport Module	1
Diverter Module	6
Induct Module	6

U.S. Postal Service Maintenance Checklist	IDENTIFICATION										
	Work Code		Equipment Acronym			Class Code		Number		Type	
	0	3	L	M	S		B	A	0	0	3
Equipment Nomenclature Lockheed Martin SPBS Feed System		Equipment Model LMS			Bulletin Filename M99072AC		Frequency SEMIANNUAL				

Part or Component	Item No.	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req'd	Min. Skill Level
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SAFETY STATEMENT	1.	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. Where air pressure is required for cleaning, use a low air pressure (30 psi or less) air source. Eye protection (goggles or face shield) must be used when utilizing compressed air for cleaning. Ensure all employees are clear of the machine. Report safety deficiencies to your supervisor immediately upon detection.	3 min	All
LOAD MODULE	2.	CHECK DRIVE MECHANISM. – Check drive mechanism as follows: 1. Remove covers and panels as necessary. 2. Check the drive chain and pulley for binding, stretching, and play. Lube and adjust as necessary.	3 min	7
PALLET UNLOADER MODULE	3.	CHECK DRIVE MECHANISM. – Check drive mechanism as follows: 1. Remove covers and panels as necessary. 2. Check the drive mechanism. Adjust as necessary.	3* min	7
ALL PURPOSE UNLOADER MODULE	4.	CHECK DRIVE MECHANISM. – Check drive mechanism as follows: 1. Remove covers and panels as necessary. 2. Check the drive mechanism. Adjust as necessary.	3* min	7

* per module

U.S. Postal Service Maintenance Checklist		IDENTIFICATION											
		Work Code		Equipment Acronym				Class Code		Number		Type	
		0	3	L	M	S		B	A	0	0	3	M
Equipment Nomenclature Lockheed Martin SPBS Feed System		Equipment Model LMS				Bulletin Filename M99072AC		Frequency SEMIANNUAL					

Part or Component	Item No.	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req'd	Min. Skill Level
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90 DEGREE TURN MODULE	5.	CHECK DRIVE MECHANISM. – Check drive mechanism as follows: <ol style="list-style-type: none"> 1. Remove covers and panels as necessary. 2. Check tightness and proper location of each tapered pulley roller. 3. Check each curve's drive system and ensure that it is providing proper tensioning to the belt. 4. Check the drive chain and pulley for binding, stretching, and play. Lube and adjust as necessary. 	3*	7 min
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INCLINE MODULE	6.	CHECK DRIVE MECHANISM. – Check drive mechanism as follows: <ol style="list-style-type: none"> 1. Remove covers and panels as necessary. 2. Check the drive chain and pulley for binding, stretching, and play. Lube and adjust as necessary. 	3*	7 min
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TRANSPORT MODULE	7.	CHECK DRIVE MECHANISM. – Check drive mechanism as follows: <ol style="list-style-type: none"> 1. Remove covers and panels as necessary. 2. Check the drive chain and pulley for binding, stretching, and play. Lube and adjust as necessary. 	3*	7 min
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* per module

U.S. Postal Service Maintenance Checklist	IDENTIFICATION										
	Work Code		Equipment Acronym			Class Code		Number		Type	
	0	3	L	M	S		B	A	0	0	3
Equipment Nomenclature Lockheed Martin SPBS Feed System		Equipment Model LMS			Bulletin Filename M99072AC		Frequency SEMIANNUAL				

Part or Component	Item No.	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req'd	Min. Skill Level
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DIVERter MODULE	8.	CHECK DRIVE MECHANISM. – Check drive mechanism as follows: 1. Remove covers and panels as necessary. 2. Check the drive chains and pulleys for binding, stretching, and play. Lube and adjust as necessary. 3. Check diverter's pneumatic system. Lube and adjust as necessary.	6* min	7
INDUCT MODULES	9.	CHECK DRIVE MECHANISM. – Check drive mechanism as follows: 1. Remove covers and panels as necessary. 2. Check the drive chain and pulley for binding, stretching, and play. Lube and adjust as necessary.	3* min	7
LMS SYSTEM	10.	POWER DOWN AND LOCKOUT POWER. - Power down the machine and lockout its electrical and/or pneumatic power source as prescribed by the current local procedure providing lockout/restore procedures for this equipment.	3 min	ALL
LOAD MODULE	11.	CHECK GEAR MOTOR OIL. – 1. Check gear motor oil level. 2. Replace all covers and panels.	3 min	7

* per module

U.S. Postal Service Maintenance Checklist	IDENTIFICATION										
	Work Code		Equipment Acronym			Class Code		Number		Type	
	0	3	L	M	S		B	A	0	0	3
Equipment Nomenclature Lockheed Martin SPBS Feed System		Equipment Model LMS			Bulletin Filename M99072AC		Frequency SEMIANNUAL				

Part or Component	Item No.	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req'd	Min. Skill Level
PALLET UNLOADER MODULE	12.	CHECK HYDRAULIC OIL. – 1. Check hydraulic oil level. 2. Replace all covers and panels.	1* min	7
ALL PURPOSE UNLOADER MODULE	13.	CHECK HYDRAULIC OIL. – 1. Check hydraulic oil level. 2. Replace all covers and panels.	1* min	7
90 DEGREE TURN MODULE	14.	CHECK GEAR MOTOR OIL. – 1. Check gear motor oil level. 2. Replace all covers and panels.	3* min	7
INCLINE MODULE	15.	CHECK GEAR MOTOR OIL. – 1. Check gear motor oil level. 2. Replace all covers and panels.	3* min	7
TRANSPORT MODULE	16.	CHECK GEAR MOTOR OIL. – 1. Check gear motor oil level. 2. Replace all covers and panels.	3 * min	7
DIVERTER MODULE	17.	CHECK GEAR MOTOR OIL. – 1. Check gear motor oil level. 2. Replace all covers and panels.	3 * min	7
INDUCT MODULES	18.	CHECK GEAR MOTOR OIL. – 1. Check gear motor oil level. 2. Replace all covers and panels.	3 * min	7
LMS SYSTEM	19.	RESTORE EQUIPMENT TO SERVICE. – Restore equipment to service as prescribed by the current Local * per module	2 min	ALL

U.S. Postal Service		IDENTIFICATION									
Maintenance Checklist		Work Code		Equipment Acronym			Class Code		Number		Type
		0	3	L	M	S		B	A	0	0
Equipment Nomenclature		Equipment Model			Bulletin Filename			Frequency			
Lockheed Martin SPBS Feed System		LMS			M99072AC			SEMIANNUAL			

Part or Component	Item No.	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req'd	Min. Skill Level
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procedure providing lockout/restore procedures for this equipment.

LMS SYSTEM	20.	RESTORE SYSTEM TO OPERATIONAL MODE. – Ensure that the system is in the operational mode by verifying the System Computer setup. Place the machine in the Normal mode by clicking Normal mode button (icon) on the MMI screen. Click the Reset button (icon) on the MMI screen, this will reset the system. Now the LMS system is ready.	1 min	ALL
	21.	CLEAN-UP. - Ensure all tools, lubricants, rags, etc., are removed from the work area. Report all deficiencies to your supervisor.	2 min	ALL

* per module

ATTACHMENT 5**LMSBA MASTER CHECKLIST**

03-LMS-BA-005-M

ANNUAL

ANNUAL TIME TOTALS:

281 minutes

The cumulative time to perform this PM schedule is based on the number of modules listed in the following chart:

Module Name	Number of modules.
Load Module	1
Pallet Unloader Module	2
All Purpose Unloader Module	1
90-Degree Turn Module	6
Incline Module	2
Transport Module	1
Diverter Module	6
Induct Module	6

U.S. Postal Service Maintenance Checklist	IDENTIFICATION										
	Work Code		Equipment Acronym			Class Code		Number		Type	
	0	3	L	M	S		B	A	0	0	5
Equipment Nomenclature Lockheed Martin SPBS Feed System		Equipment Model LMS			Bulletin Filename M99072AC		Frequency ANNUAL				

Part or Component	Item No.	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req'd	Min. Skill Level
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SAFETY STATEMENT	1.	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. Where air pressure is required for cleaning, use a low air pressure (30 psi or less) air source. Eye protection (goggles or face shield) must be used when utilizing compressed air for cleaning. Ensure all employees are clear of the machine. Report safety deficiencies to your supervisor immediately upon detection.	3 min	All
LMS SYSTEM	2.	POWER DOWN AND LOCKOUT POWER. - Power down the machine and lockout its electrical and/or pneumatic power source as prescribed by the current Local procedure providing lockout/restore procedures for this equipment.	3 min	All
LOAD MODULE	3.	Lubrication Schedule. - 1. Remove covers and panels as necessary. 2. Drain and replace gear motor oil. 3. Grease each bearing block assembly as necessary. DO NOT OVER GREASE THE BEARING ASSEMBLIES, PREMATURE FAILURE MAY OCCUR. 4. Replace all covers and panels.	15 min	7

U.S. Postal Service Maintenance Checklist	IDENTIFICATION										
	Work Code		Equipment Acronym			Class Code		Number		Type	
	0	3	L	M	S	B	A	0	0	5	M
Equipment Nomenclature Lockheed Martin SPBS Feed System		Equipment Model LMS			Bulletin Filename M99072AC		Frequency ANNUAL				

Part or Component	Item No.	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req'd	Min. Skill Level
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PALLET UNLOADER MODULE	4.	Lubrication Schedule. - 1. Remove covers and panels as necessary. 2. Grease each bearing block assembly as necessary. DO NOT OVER GREASE THE BEARING ASSEMBLIES, PREMATURE FAILURE MAY OCCUR. 3. Replace the Hydraulic oil filter. 4. Replace all covers and panels.	5* min	7
ALL PURPOSE UNLOADER MODULE	5.	Lubrication Schedule. - 1. Remove covers and panels as necessary. 2. Grease each bearing block assembly as necessary. DO NOT OVER GREASE THE BEARING ASSEMBLIES, PREMATURE FAILURE MAY OCCUR. 3. Replace the Hydraulic oil filter. 4. Replace all covers and panels.	5* min	7
90 DEGREE TURN MODULE	6.	Lubrication Schedule. - 1. Remove covers and panels as necessary. 2. Drain and replace gear motor oil. 3. Grease each bearing block assembly as necessary. DO NOT OVER GREASE THE BEARING ASSEMBLIES, PREMATURE FAILURE MAY OCCUR. 4. Replace all covers and panels.	15* min	7

* per module

U.S. Postal Service Maintenance Checklist	IDENTIFICATION										
	Work Code		Equipment Acronym			Class Code		Number		Type	
	0	3	L	M	S		B	A	0	0	5
Equipment Nomenclature Lockheed Martin SPBS Feed System		Equipment Model LMS			Bulletin Filename M99072AC		Frequency ANNUAL				

Part or Component	Item No.	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req'd	Min. Skill Level
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INCLINE MODULE 7. **Lubrication Schedule. -** 10* 7
min

1. Remove covers and panels as necessary.
 2. Drain and replace gear motor oil.
 3. Grease each bearing block assembly as necessary.
- DO NOT OVER GREASE THE BEARING ASSEMBLIES, PREMATURE FAILURE MAY OCCUR.
4. Replace all covers and panels.

TRANSPORT MODULE 8. **Lubrication Schedule. -** 10* 7
min

1. Remove covers and panels as necessary.
 2. Drain and replace gear motor oil.
 3. Grease each bearing block assembly as necessary.
- DO NOT OVER GREASE THE BEARING ASSEMBLIES, PREMATURE FAILURE MAY OCCUR.
4. Replace all covers and panels.

DIVERTER MODULE 9. **Lubrication Schedule. -** 10* 7
min

1. Remove covers and panels as necessary.
 2. Drain and replace gear motor oil.
 3. Grease each bearing block assembly as necessary.
- DO NOT OVER GREASE THE BEARING ASSEMBLIES, PREMATURE FAILURE MAY OCCUR.
4. Replace all covers and panels.

* per module

U.S. Postal Service Maintenance Checklist		IDENTIFICATION									
		Work Code		Equipment Acronym			Class Code		Number		Type
		0	3	L	M	S	B	A	0	0	5
Equipment Nomenclature Lockheed Martin SPBS Feed System		Equipment Model LMS			Bulletin Filename M99072AC			Frequency ANNUAL			

Part or Component	Item No.	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req'd	Min. Skill Level
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INDUCT MODULES	10.	Lubrication Schedule. - 1. Remove covers and panels as necessary. 2. Drain and replace gear motor oil. 3. Grease each bearing block assembly as necessary. DO NOT OVER GREASE THE BEARING ASSEMBLIES, PREMATURE FAILURE MAY OCCUR. 4. Replace all covers and panels.	10* min	7
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WARNING

Be cautious when working around or on equipment when power has been applied.

LMS SYSTEM	11.	RESTORE EQUIPMENT TO SERVICE. - Restore equipment to service as prescribed by the current Local procedure providing lockout/restore procedures for this equipment.	2 min	ALL
LMS SYSTEM	12.	RESTORE SYSTEM TO OPERATIONAL MODE. – Ensure that the system is in the operational mode by verifying the System Computer setup. Place the machine in the Normal mode by clicking Normal mode button (icon) on the MMI screen. Click the Reset button (icon) on the MMI screen, this will reset the system. Now the LMS system is ready.	1 min	ALL
	13.	CLEAN-UP. - Ensure all tools, lubricants, rags, etc., are removed from the work area. Report all deficiencies to your supervisor.	2 min	ALL

* per module