Maintenance Management Order

UNITED STATES POSTAL SERVICE™

SUBJECT: Preventive Maintenance Guidelines and Maintenance Staffing Criteria for Time Attendance Collection System (TACS)	**DATE:** August 13, 2008
	NO: MMO-077-08
TO: All Maintenance Capable Offices	**FILE CODE:** E1
	thal:mm06020aq

This Maintenance Management Order (MMO) provides Preventive Maintenance (PM) and Staffing Guidelines for TACS. This MMO supersedes MMO-023-02.

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

The work hours represented in this MMO reflect the estimated work hours required to maintain the equipment. Given local conditions, management may modify task frequencies.

Maintenance Managers are to use these Preventive Maintenance guidelines when preparing the route sheets for local maintenance personnel. It is the responsibility of each Maintenance Manager to ensure all WARNINGS, CAUTIONS, and NOTES are included with each applicable task as part of the preparation of any local route sheets.

Attachment 3 is a master check list to be issued when the Employee Badge Reader (EBR) requires corrective maintenance. Attachment 5 is a master check list to be issued when the Hyper Employee Badge Reader (HEBR) requires corrective maintenance.

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.

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

Earl J. Jones
Manager
Maintenance Technical Support Center
Maintenance Policies and Programs

Attachments: 1. Annual Workload Estimate for TACS Maintenance Staffing Worksheet
              2. TACS EBR Master Checklist, Daily
              3. TACS EBR Master Checklist, As Required
              4. TACS Hyper EBR Master Checklist, Daily
              5. TACS HEBR Master Checklist, As Required

ATTACHMENT 1

ANNUAL WORKLOAD ESTIMATE
FOR
TACS MAINTENANCE STAFFING WORKSHEET

	Equipment Inventory	Multiplication Factor	Results
1	#EBRs	X 4.6 Hours/EBR	
2	#HEBRs	X 4.6 Hours/HEBR	
3	# Networks	X 3 Hours/Network	
Total TACS Maintenance Staffing Hours: Items 1+2+3			

The TACS maintenance staffing worksheet is to be used to establish an estimate of the number of annual maintenance hours required to support the TACS system. The multiplication factors for EBRs in row 1 and HEBRs in row 2 represent estimated system monitoring maintenance and corrective maintenance and is based upon 50 percent of the system monitoring maintenance. The multiplication factor for networks in row 3 is the estimated corrective maintenance.

1. Complete equipment inventory column.

2. Multiply equipment inventory number by equipment multiplication factor and place results in results column.

3. Add all entries in results column to determine total hours.

Definitions

1. # EBRs is the total number of local and remote EBRs supported by the facility.

2. # HEBRs is the total number of local and remote HEBRs supported by the facility.

3. # Networks is the total number of local and remote networks supported by the facility. A network is defined as a string of one or more EBRs connected to a communication device such as a modem or serial server.

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ATTACHMENT 2

TACS MASTER EBR CHECKLIST

03-TACS-AA-001-M

DAILY

DAILY TIME TOTAL:

The TACS daily maintenance checklist is for system monitoring. The amount of time spent performing the system-monitoring task is dependent on the system size. To calculate the appropriate time for this checklist at your facility, multiply the number of local and remote EBRs supported by your facility by .5 minutes or 30 seconds.

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U.S. Postal Service		IDENTIFICATION					
Maintenance Checklist		Work Code	Equipment Acronym		Class Code	Number	Type
		0 3	T A C S		A A	0 0 1	M
Equipment Nomenclature Time Attendance Collection System		Equipment Model	Bulletin Filename MM06020AQ		Frequency Daily		

Part or Component	Item No.	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req'd	Min. Skill Level
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. 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.**	All	
		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 can not be used. Report safety deficiencies to your supervisor immediately upon detection.**		
	2.	**Check with TACS coordinator.** Check for reports of missing clock rings, clock ring rejections, lower network device failures, or other TACS lower network problems.	.1 MIN	PS10
	3.	**Check for malfunctions.** Check for malfunctions as follows:	.4 MIN	PS10

1. Log in to ACE workstation. Open Internet Explorer and connect to the TACS EBR WEB Page http://blue.usps.gov/tacs/tacsebr.htm.

2. Select Consolidated Network Poller (DCI) link.

3. Log in with your ACE ID and your TACS DCI password.

4. Select Poller.

5. Select Full Status and review information.

   a. Check the "Offline Since" column in the Device Status window for abnormal offline dates and times.

   b. Check the Channel Status window for connection errors, devices off line beyond their past polling cycle, channel failures, or any other polling irregularities.

   c. Analyze event data for further investigation or a

U.S. Postal Service	IDENTIFICATION										
Maintenance Checklist	Work Code		Equipment Acronym				Class Code		Number		Type
	0	3	T	A	C	S	A	A	0	0	1	M

Equipment Nomenclature	Equipment Model	Bulletin Filename	Frequency
Time Attendance Collection System		MM06020AQ	Daily

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

corrective action.

6. Fault isolate the network problem. Repair and replace defective TACS hardware. Report network communication failures to the TACS coordinator, district telecommunications coordinator, and or network service provider.

7. Report unresolved TACS Poller operation failures to the TACS coordinator and Eagan CSB. 1-800-USPSHELP (1-800-877-7435)

8. Initiate necessary corrective actions including electronic technician site visits for identified lower network problems and related problems identified during contact with local sites.

9. Log out Consolidated Network Poller Application and close your network browser.

   Update site records as needed and record all activity or lack of activity in TACS equipment logbook.

10. Remove maintenance materials and equipment from the work area. Report all deficiencies to your supervisor.

U.S. Postal Service **Maintenance Checklist**		IDENTIFICATION								
		Work Code	Equipment Acronym			Class Code		Number		Type
		0 3	T A C S			A A		0 0 1		M
Equipment Nomenclature Time Attendance Collection System		Equipment Model		Bulletin Filename MM06020AQ		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

TACS MASTER EBR CHECKLIST

03-TACS-AA-002-M

32 Minutes

To be performed during corrective maintenance.

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<table>
<tr><td rowspan="2" colspan="2">U.S. Postal Service
Maintenance Checklist</td><td colspan="6">IDENTIFICATION</td></tr>
<tr><td>Work
Code</td><td colspan="2">Equipment
Acronym</td><td>Class
Code</td><td colspan="2">Number</td><td>Type</td></tr>
<tr><td colspan="2"></td><td>0 | 3</td><td>T | A | C</td><td>S</td><td>A | A</td><td>0 | 0 | 2</td><td>M</td></tr>
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Equipment Nomenclature	Equipment Model	Bulletin Filename	Frequency
Time Attendance Collection System		MM06020AQ	As Required

Part or Component	Item No.	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req'd	Min. Skill Level
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. 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.** **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 can not be used. Report safety deficiencies to your supervisor immediately upon detection.**	3 MIN	All
EBR DATA COLLECT 20 CABINET	2	**Verify EBR functionality and availability**. 1. Inspect EBR for damaged components. Report discrepancies to management and take appropriate action to correct discrepancies. 2. Inspect EBR status display by simultaneously pressing the lower two numeric keyboard ACC and Enter keys. 3. Note the amount of J.RAM memory to determine if EBR has clock rings stored in memory. If the EBR does not have clock rings stored in the EBR, swipe a test ring using a test badge, to put clock rings in the EBR. 4. Log in to ACE workstation. Open Internet Explorer and connect to the TACS EBR WEB Page http://blue.usps.gov/tacs/tacsebr.htm. 5. Select Consolidated Network Poller (DCI) link. 6. Log in with your ACE ID and your TACS DCI password. 7. Select Poller. 8. Issue a poll override to the EBR network and collect the clock rings.	5 MIN	PS10

U.S. Postal Service **Maintenance Checklist**	IDENTIFICATION					
	Work Code	Equipment Acronym	Class Code	Number		Type
	0 3	T A C S	A A	0 0 2		M

Equipment Nomenclature Time Attendance Collection System	Equipment Model	Bulletin Filename MM06020AQ	Frequency As Required

Part or Component	Item No.	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req'd	Min. Skill Level
		9. Verify that the poller connects to the EBR and collects the EBR clock rings.		
		10. From the EBR status display, verify that the EBR terminator switch is NOT in the terminate position. If the EBR is terminated a T will be displayed in the status display.		
		11. Verify EBR operation key and labeling by pressing each operation key to verify that it is programmed as labeled.		
		12. Inspect EBR power supply date of manufacture and replace if power supply is over eight years old.		
		13. Inspect power cables and the 120 VAC outlet for damage and unsafe conditions.		
		14. Inspect EBR mounting for damage and loose hardware.		
		15. Clean exterior surfaces with a damp, lint-free cloth.		
EBR DATA COLLECT 20 MAGNETIC STRIPE READER	3	**Clean card reader.** Clean magnetic stripe reader by swiping a magnetic head cleaning card moistened with head cleaning fluid back and forth through the card reader slot several times.	5 MIN	PS9
		NOTE		
		Pre-moistened individually packaged read head cleaning cards are available to maintenance personnel from TMDC using NSN 7035-03-000-2481. These cards are available to operational personnel as a general supply item PSIN KIT13. It is recommended that operational personnel clean the EBR read heads on a weekly basis for maximum read head life.		
EBR DATA COLLECT 20 DIAGNOSTICS	4	**Check reader, display, & lamp**. Check EBR reader, keyboard, and lamp operability by entering Test Mode and performing the following tests:	10 MIN	PS9
		1. Test 2, Keypad/Mag Swipe Test. If EBR fails to properly read card, clean mag swipe reader again and retest.		

U.S. Postal Service **Maintenance Checklist**		IDENTIFICATION								
		Work Code	Equipment Acronym			Class Code		Number		Type
		0 3	T A C S			A A		0 0 2		M
Equipment Nomenclature Time Attendance Collection System		Equipment Model		Bulletin Filename MM06020AQ			Frequency As Required			

Part or Component	Item No.	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req'd	Min. Skill Level
		2. Test 3, Display Test. Monitor operation of LCD display. Replace EBR if all characters are not properly displayed.		
		3. Test I, Lamp Test. Monitor operation of all LED lamps. Replace EBR or display, if all lamps are not operating properly.		
EBR DATA COLLECT 20	5	**Return EBR to normal operation.** 1. Press the Exit key twice to bring EBR to normal operation. 2. Enter a test badge swipe using test badge and the move function key. 3. On an ACE workstation, log in to the TACS Consolidated Poller and issue poll override for EBR network from TACS Consolidated Poller (DCI) menu. 4. Verify that EBR ready and on-line indicators light and that test badge clock ring is collected. 5. Log out. Log out Consolidated Network Poller Application and close your network browser. 6. Update records. Update site records as needed and record all activity, including the lack of activity in TACS equipment logbook.	7 MIN	PS10
	6	Remove maintenance materials and equipment from the work area. Report all deficiencies to your supervisor.	2 MIN	All

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ATTACHMENT 4

TACS MASTER HEBR CHECKLIST

03-TACS-AA-003-M

Daily

The TACS daily maintenance check list is for system monitoring. The amount of time spent performing the system-monitoring task is dependent on the system size. To calculate the appropriate time for this check list at your facility, multiply the number of EBRs that your facility supports, both local and remote, by .5 minutes or 30 seconds.

MAINTENANCE MANAGEMENT ORDER

U.S. Postal Service	IDENTIFICATION							
Maintenance Checklist	Work Code	Equipment Acronym			Class Code	Number		Type
	0	3	T	A	C	S	A	A	0	0	3	M
Equipment Nomenclature Time Attendance Collection System	Equipment Model		Bulletin Filename MM06020AQ	Frequency Daily				

Part or Component	Item No.	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req'd	Min. Skill Level
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. 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.** **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 can not be used. Report safety deficiencies to your supervisor immediately upon detection.**		All
	2.	**Check with TACS coordinator.** Check for reports of missing clock rings, clock ring rejections, lower network device failures, or other TACS lower network problems.	.1 MIN	PS 10
	3.	**Check for HEBR and HEBR communication malfunctions.** Check for malfunctions as follows: 1. Log into an ACE workstation, open Internet Explorer, and connect the TACS EBR WEB page located at http://blue.usps.gov/tacs/tacsebr.htm. 2. Link to the Hyper EBR Clock SetUp application to access your HEBR networks. 3. Select the appropriate Poller or district. 4. Select the HEBR Status and review. 5. Review and analyze the following fields: a. The Last Post b. Last Time Sync c. Exceptions field 6. Investigate abnormalities such as HEBRs not posting clock rings, receiving clock syncs, software out of date. Make note of any and all abnormalities. 7. Network communications failures. Fault isolate the	.4 MIN	PS 10

U.S. Postal Service **Maintenance Checklist**	IDENTIFICATION		

Work Code	Equipment Acronym	Class Code	Number	Type
0 3	T A C S	A A	0 0 3	M

Equipment Nomenclature	Equipment Model	Bulletin Filename	Frequency
Time Attendance Collection System		MM06020AQ	Daily

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

network problem. Repair and replace defective TACS hardware. Report network communication failures to the TACS coordinator, district telecommunications coordinator and or network service provider through the 1-800-USPSHELP (1-800-877-7435).

8. Report unresolved TACS HEBR Clock SetUp application failures to the TACS coordinator and Eagan CSB. 1-800-USPSHELP (1-800-877-7435).

9. Initiate and coordinate necessary corrective actions, including site visits for identified problems.

10. Log out TACS HEBR Clock Setup application and close your network browser.

11. Update site records as needed and record all activity including the lack of activity in TACS equipment logbook.

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U.S. Postal Service		IDENTIFICATION								
Maintenance Checklist		Work Code	Equipment Acronym			Class Code		Number		Type
		0 3	T A C S			A A		0 0 3		M
Equipment Nomenclature Time Attendance Collection System		Equipment Model		Bulletin Filename MM06020AQ		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 5

TACS HEBR CHECKLIST

03-TACS-AA-004-M

HEBR Collector

32 Minutes

To be performed during corrective maintenance.

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MAINTENANCE MANAGEMENT ORDER

U.S. Postal Service		IDENTIFICATION							
Maintenance Checklist		Work Code	Equipment Acronym			Class Code	Number		Type
		0	3	T A C S		A A	0 0 4		M
Equipment Nomenclature		Equipment Model		Bulletin Filename		Frequency			
Time Attendance Collection System				MM06020AQ		As Required			

Part or Component	Item No.	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req'd	Min. Skill Level
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. 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.** **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 can not be used. Report safety deficiencies to your supervisor immediately upon detection.**	3 MIN	All
HEBR	2	**Verify HEBR for functionality and availability**. 1. Inspect HEBR for damaged components. Report discrepancies to management and take appropriate action to correct discrepancies. 2. Inspect HEBR status display by simultaneously pressing the lower two numeric keyboard ACC and Enter keys. 3. Inspect the Q value to determine if the HEBR has clock rings stored in memory. If the HEBR has clock rings stored in the HEBR, swipe a test ring using a test badge. The Q value in the HEBR display should be 0, indicating that the rings were posted to Eagan. 4. From the HEBR status display, verify that the HEBR terminator switch is NOT in the terminate position. If the HEBR is terminated, a T will be displayed in the status display. 5. Verify HEBR operation key and labeling by pressing each operation key to verify that it is programmed as labeled. 6. Inspect power cables and the 120 VAC outlet for damage and unsafe conditions. 7. Inspect HEBR mounting for damage and loose	5 MIN	PS9

		IDENTIFICATION				
U.S. Postal Service **Maintenance Checklist**		Work Code	Equipment Acronym	Class Code	Number	Type
		0 3	T A C S	A A	0 0 4	M
Equipment Nomenclature Time Attendance Collection System		Equipment Model	Bulletin Filename MM06020AQ	Frequency As Required		

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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hardware.

8. Clean exterior surfaces with a damp, lint-free cloth.

HEBR MAGNETIC STRIPE READER	3	**Clean card reader.** Clean magnetic stripe reader by swiping a magnetic head cleaning card moistened with head cleaning fluid, back and forth through the card reader slot several times.	5 MIN	PS9

NOTE

Pre-moistened individually packaged read head cleaning cards are available to maintenance personnel from TMDC using NSN 7035-03-000-2481. These cards are available to operational personnel as a general supply item PSIN KIT13. It is recommended that operational personnel clean the HEBR read heads on a weekly basis for maximum read head life.

HEBR DIAGNOSTICS	4	**Check reader, display, & lamp**. Check HEBR reader, keyboard, and lamp operability by entering diagnostic mode and performing the following tests:	10 MIN	PS9

1. Test 2, Keypad/Mag Swipe Test. If HEBR fails to properly read card, clean mag swipe reader again, and retry test with known good test card.

2. Test 3, Display Test. Monitor operation of LCD display. Replace HEBR, if all characters are not properly displayed.

3. Test 8, Lamp Test. Monitor operation of all LED lamps. Replace HEBR or display, if all lamps are not operating properly.

4. Initiate corrective actions. Initiate and coordinate necessary corrective actions, including site visits for identified problems.

HEBR	5	**Return HEBR to normal operation.**	7 MIN	PS9

1. Press the Exit key twice to bring HEBR to normal operation.

2. Enter a test badge swipe using test badge and the

U.S. Postal Service	IDENTIFICATION									
Maintenance Checklist	Work Code	Equipment Acronym				Class Code	Number			Type
	0	3	T	A	C	S	A A	0	0 4	M

Equipment Nomenclature	Equipment Model	Bulletin Filename	Frequency
Time Attendance Collection System		MM06020AQ	As Required

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

move function key.

3. Verify that HEBR ready and on-line indicators light and that test badge clock ring is posted to Eagan.

4. Log out. Log out Consolidated Network Poller Application and close your network browser.

5. Update records. Update site records as needed and record all activity, including the lack of activity in TACS equipment logbook.

| 6 | Remove maintenance materials and equipment from the work area. Report all deficiencies to your supervisor. | 2 MIN | All |

MAINTENANCE MANAGEMENT ORDER