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

## UNITED STATES POSTAL SERVICETM

### Maintenance Management Order

**SUBJECT:** Preventive Maintenance Servicing Guidelines

for Lockheed Martin (LM) Mail Staging Tower (MST) Shooting Star Bulk Staging Unit Phase

3A and 3B

**NO:** MMO-043-14

**DATE:** February 28, 2014

TO: All LM MST Sites FILE CODE: TM2

rorn:mm09077ah

This Maintenance Management Order (MMO) provides Operational and Preventive Maintenance Guidelines for the Lockheed Martin (LM) Mail Staging Tower (MST) Shooting Star Bulk Staging Unit Phase 3A and 3B. This bulletin applies to Acronym MST. Class Code CA.

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.

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.

#### 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.

Web Access: http://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 Personal Protective Equipment (PPE). Refer to the current Electrical Work Plan (EWP) MMO for appropriate PPE requirements.

Direct any questions or comments concerning this bulletin to the MTSC HelpDesk, (800) 366-4123 or (405) 573-2123.

Robert E. Albert

Manager

Maintenance Technical Support Center

**HQ** Maintenance Operations

- Attachments 1. Summary of Workload Estimate
  - 2. LM MST Shooting Star Bulk Staging Unit Phase 3A and 3B Master Checklist: 03-MST-CA-201-M: Daily
  - 3. LM MST Shooting Star Bulk Staging Unit Phase 3A and 3B Master Checklist: 03-MST-CA-202-M: Weekly
  - 4. LM MST Shooting Star Bulk Staging Unit Phase 3A and 3B Master Checklist: 03-MST-CA-203-M: Monthly
  - 5. LM MST Shooting Star Bulk Staging Unit Phase 3A and 3B Master Checklist: 03-MST-CA-204-M: Quarterly
  - 6. LM MST Shooting Star Bulk Staging Unit Phase 3A and 3B Master Checklist: 03-MST-CA-205-M: 3 Year

#### **ATTACHMENT 1**

#### **SUMMARY OF**

#### **WORKLOAD ESTIMATE**

**FOR** 

#### LM MST SHOOTING STAR BULK STAGING UNIT PHASE 3A AND 3B

# SUMMARY OF WORKLOAD ESTIMATE FOR LM MST SHOOTING STAR BULK STAGING UNIT PHASE 3A AND 3B

|           |           |          |             |            | Total     |
|-----------|-----------|----------|-------------|------------|-----------|
|           |           |          | Routine     | Non-       | Servicing |
|           | Routine   |          | Servicing + | productive | Per       |
|           | Servicing | Repair*  | Repair Time | Time**     | Machine   |
| Operation | (Hrs/Yr)  | (Hrs/Yr) | (Hrs/Yr)    | (Hrs/Yr)   | (Hrs/Yr)  |
| 5         | 393.1     | 117.9    | 511.0       | 51.1       | 562.1     |
| 6         | 424.3     | 127.3    | 551.6       | 55.2       | 606.8     |
| 7         | 455.5     | 136.7    | 592.2       | 59.2       | 651.4     |
|           |           |          |             |            |           |

#### **NOTES**

\*Repair estimates based on 30% of servicing.

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

#### **ATTACHMENT 2**

## LM MST SHOOTING STAR BULK STAGING UNIT PHASE 3A AND 3B MASTER CHECKLIST

03-MST-CA-201-M

Daily Time Total: Per Bulk Staging Unit - 36 Minutes

Refer to the MS-238 if additional maintenance information is required.

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| U.S. Postal Service   | WORK EQUIPMENT  | CI                   | ASS          | NU           | MBER                   | TYPE  |
|---|---|----------------------|--------------|--------------|------------------------|-------|
| Maintenance Checkli   | CODE   ACRONYM   0   3   M   S   T  | C                    | ODE A        | 2            | 0 1                    | М     |
| Equipment Nomenclature LM MST   | Equipment Model Bulletin Fi   |                      |              | Occurre      | -   -                  | IVI   |
| Part or Item  | Task Statement and Instruction  | Est.                 | Min.         |              | Threshold              | ls.   |
| Component No  | (Comply with all current safety precautions)  | Time<br>Req<br>(min) | Skill<br>Lev | Run<br>Hours | Pieces<br>Fed<br>(000) | Freq. |
| STATEMENT  Draw in the second | OMPLY WITH ALL SAFETY PRECAUTIONS. isconnect power and apply lockouts when equired by this instruction. Refer to current cal lockout procedures to properly shut own and lock out this machine. Open quipment and inspect dust conditions. heck for suspicious dust or unusual debris. any unusual substance is found notify upervisor prior to proceeding with any unther action on the equipment.  HE USE OF COMPRESSED OR BLOWN AIR is PROHIBITED. Then cleaning is required, an alternative eaning method such as a HEPA filtered accum cleaner or a damp rag must be used a place of compressed or blown air. A lintelection only when other cleaning methods annot be used. Report safety deficiencies to our supervisor immediately upon detection.  VARNING FOR EWP/PPE: teps contained in this bulletin may require use of Personal Protective Equipment PPE). Refer to the current Electrical Work lan (EWP) MMO for appropriate PPE equirements. |                      | All          |              |                        |       |
|   | Be cautious when working around or on equipment when power has been applied.  |                      |              |              |                        |       |
|   | WARNING  Severe injury or death can result if the Vertical Transfer Unit (VTU) falls. Do not walk or work under the VTU unless the long maintenance bar is deployed properly.   |                      |              |              |                        |       |

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|--------------------------------|---------------------------|-------|------|---|-------|------|-----|----------------------|-------|---------------|-----------|-----|-----|--------------------|------|------|
| Maintenance Checklist          | WORK<br>CODE              |       |      | _ |       | ONYN |     |                      |       |               | ASS<br>DE |     | Νl  | JMBE               | ĒR   | TYPE |
|                                | 0 3                       | М     | S    | Т |       |      |     |                      |       | С             | Т         |     | 2   | 0                  | 1    | М    |
| Equipment Nomenclature  LM MST | Equipmer<br>Shoot<br>Unit | ing : | Star |   | s Sta |      |     | Bulletir<br><b>m</b> |       | name<br>077ah |           | Occ | urr | ence<br>D <i>i</i> | AILY |      |

|   |      | Unit Phase 3A and 3B   |                      |               |              |                        |       |
|---|------|--|----------------------|---------------|--------------|------------------------|-------|
| Part or                                 | Item | Task Statement and Instruction   | Est.                 | Min.<br>Skill |              | Threshold              | 3     |
| Component                               | No   | (Comply with all current safety precautions)   | Time<br>Req<br>(min) | Lev           | Run<br>Hours | Pieces<br>Fed<br>(000) | Freq. |
|   |      |  |                      |               |              |                        |       |
|   |      | Eye protection (goggles or face shield) must be worn when releasing fluids from the Filter Regulator Separator (FRS) bowl.   |                      |               |              |                        |       |
| FRS CHECK                               | 2.   | Check the Filter Regulator Separator (FRS) Air Pressure Gauge and Bowl, and Main Control Cabinet Fans.   | 3                    | 9             |              |                        |       |
|   |      | While the BSU is running:  |                      |               |              |                        |       |
|   |      | <ol> <li>Check the FRS air pressure gauge for the<br/>correct air pressure of 90 +5 / -1 PSI. If<br/>necessary, adjust regulator knob located on<br/>top of the FRS to attain proper air pressure.</li> </ol>      |                      |               |              |                        |       |
|   |      | Drain any water in the FRS bowl by turning the release valve at the bottom of the bowl.  |                      |               |              |                        |       |
|   |      | <ol> <li>Check the operation of the two (2) intake fans<br/>located on the left and right (front) sides of<br/>the Main Control Cabinet and (1) exhaust fan<br/>located on top of Main Control Cabinet.</li> </ol> |                      |               |              |                        |       |
|   |      | <ol> <li>Verify the fan vents are free of foreign<br/>matter/debris.</li> </ol>  |                      |               |              |                        |       |
| OVER ALL                                | 3.   | Check Transfer Axis (TA) Air Pressure.   | 3                    | 9             |              |                        |       |
| INSPECTION, TA<br>AIR PRESSURE<br>CHECK |      | Check the TA air pressure gauge, located on the side of the rear TA housing, for correct air pressure of 70 (+5 / -1) PSI.   |                      |               |              |                        |       |
| TA FUNCTION<br>CHECK                    | 4.   | Check TA for Proper Function Moving It by Hand.  | 20                   | 9             |              |                        |       |
|   |      | <ol> <li>Terminate the STAR operation using the Cell<br/>Controller by selecting the CELL OFFLINE<br/>option.</li> </ol>   |                      |               |              |                        |       |
|   |      | At the cell controller, click on MAINT MODE button to display the Machine Control Page.  |                      |               |              |                        |       |
|   |      | <ol> <li>At the Cell Controller Machine Control Page,<br/>click on MAINTENANCE POSITION button.<br/>The VA carriage will move to a pre-set<br/>position on the VTU mast.</li> </ol>                                |                      |               |              |                        |       |

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IDENTIFICATION

| U.S. Postal Servi      | U.S. Postal Service   IDENTIFICATION   WORK   EQUIPMENT   CLASS   CODE   ACRONYM   CODE   COD |   |  |                        |          |          |               |                      | ASS                  | NII       | MBER         | TYPE                   |      |
|------------------------|--|---|--|------------------------|----------|----------|---------------|----------------------|----------------------|-----------|--------------|------------------------|------|
| Maintenance Che        | cklist   |   | CODE   |                        | F        |          |               |                      | С                    |           |              | MDEK                   | 1170 |
| Equipment Nomenclature |  |   |  | ent Model              | Т        |          |               | Bulletin F           |                      | A         | 2<br>Occurre |                        | М    |
| LM MST                 |  |   |  | oting Sta<br>nit Phase |          |          |               | mm(                  | )9077al              | h         |              | Daily                  |      |
| Part or Ite            | m  |   |  | c Statemer             |          |          |               |                      | Est.                 | Min.      |              | Threshol               | ds   |
| Component N            | 0  | (0  | Comply w   | vith all curr          | ent safe | ety pred | cautior       | ns)                  | Time<br>Req<br>(min) | Skill Lev | Run<br>Hours | Pieces<br>Fed<br>(000) | Fred |
|                        | 4.   | Maint   | tenance  |                        |          | n, an    | acce<br>id se | ss the<br>elect the  |                      |           |              |                        |      |
|                        | 5.   |   | t the sete I/O s   |                        | screen   | opti     | on f          | rom the              |                      |           |              |                        |      |
|                        | 6.   |   | iscrete  |                        |          |          |               | layed at<br>Control  |                      |           |              |                        |      |
|                        | 7.   | •   | the aponoten   |                        | te sec   | curity-  | fenc          | ed gate,             |                      |           |              |                        |      |
|                        | 8.   |   | Select the Close option, and return to the Maintenance Mode screen to log off. |                        |          |          |               |                      |                      |           |              |                        |      |
|                        | 9.   |   |  | vs NT S<br>I. Selec    |          |          |               |                      |                      |           |              |                        |      |
|                        | 10.  |   | off the  |                        |          |          |               | s safe to<br>off the |                      |           |              |                        |      |
|                        | 11.  |   |  | ain Con<br>er (CB-1)   |          | abine    | et dis        | sconnect             |                      |           |              |                        |      |
|                        |  |   | [  | WAR                    | NING     |          |               |                      |                      |           |              |                        |      |
|                        |  |   |  | orming t<br>n the ap   |          |          |               | steps                |                      |           |              |                        |      |
|                        | 12.  | Cabin   | net as   |                        | ed by    | the      |               | Control<br>ent local |                      |           |              |                        |      |
|                        | 13.  | Enter the security-fenced area, and engage the long maintenance bar beneath the VA Carriage assembly. Secure the long maintenance bar, so that downward movement of the VA Carriage is prevented. |  |                        |          |          |               |                      |                      |           |              |                        |      |
|                        | 14.  |   |  | eck the                |          |          |               | and TA<br>ge.        |                      |           |              |                        |      |
|                        | 15.  | Perfo   | rm the r   | mail sea               | rch.     |          |               |                      |                      |           |              |                        |      |
|                        | 16.  | Ensur   | re all ma  | aterials a             | and to   | ols ar   | e ren         | noved.               |                      |           |              |                        |      |
|                        | 17.  |   |  | e long<br>ne storaç    |          |          | ce b          | ar, and              |                      |           |              |                        |      |

| U.S. Postal Service           | IDENTIFICATION CONTROL TO A STATE OF THE PERSON OF THE PER |          |  |  |  |  |             |   |                       |  |               |           |       |            |      |      |
|-------------------------------|--|----------|--|--|--|--|-------------|---|-----------------------|--|---------------|-----------|-------|------------|------|------|
| Maintenance Checklist         | _  | RK<br>DE |  |  |  |  | MENT<br>MYM |   |                       |  |               | ASS<br>DE | ١     | IUMB       | ER   | TYPE |
|                               | 0 3 M S T  |          |  |  |  |  |             |   |                       |  | С             | Т         | 2     | 0          | 1    | М    |
| Equipment Nomenclature LM MST | Equipment Model Shooting Star Bulk Staging Unit Phase 3A and 3B  |          |  |  |  |  |             | В | ulletin<br><b>m</b> ı |  | name<br>077ah |           | Occui | rence<br>D | AILY |      |

| Part or              | Item | Task Statement and Instruction  | Est.                 | Min.         |              | Threshold              | S     |
|----------------------|------|---|----------------------|--------------|--------------|------------------------|-------|
| Component            | No   | (Comply with all current safety precautions)  | Time<br>Req<br>(min) | Skill<br>Lev | Run<br>Hours | Pieces<br>Fed<br>(000) | Freq. |
|                      |      | Exit the safety fenced area and close gate(s) and secure interlock switches.  |                      |              |              |                        |       |
|                      |      | WARNING  Be cautious when working around or on equipment when power has been applied.                                       |                      |              |              |                        |       |
| RETURN TO<br>SERVICE | 5.   | Return to Service.  Restore equipment to service as prescribed by the current local lockout/restore procedures.             | 5                    | 9            |              |                        |       |
| CLEAN UP             | 6.   | Clean Up.  Ensure all tools, lubricants, rags, etc., are removed from the work area. Notify supervisor of any deficiencies. | 3                    | ALL          |              |                        |       |

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| Maintenance Checklist         | WO |   |   |   | _ |  | MEN<br>ONYM | -  |  |               | _             | ASS<br>DE | N      | UMBI | ER   | TYPE |  |  |  |
|                               | 0  | 3   | М | S | Т |  |             |  |  |               | С             | Α         | 2      | 0    | 1    | М    |  |  |  |
| Equipment Nomenclature LM MST | Sr | Equipment Model Shooting Star Bulk Staging Unit Phase 3A and 3B |   |   |   |  |             |  |  | Filer<br>m090 | name<br>077ah |           | Occurr |      | aily |      |  |  |  |

| Part or<br>Component | Item<br>No | Task Statement and Instruction (Comply with all current safety precautions) | Est.<br>Time | Min.<br>Skill |              | Threshold              | s     |
|----------------------|------------|---|--------------|---------------|--------------|------------------------|-------|
| Component            |            | (Comply war an outlone salely productions)                                  | Req<br>(min) | Lev           | Run<br>Hours | Pieces<br>Fed<br>(000) | Freq. |

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#### **ATTACHMENT 3**

## LM MST SHOOTING STAR BULK STAGING UNIT PHASE 3A AND 3B MASTER CHECKLIST

03-MST-CA-202-M

Weekly Time Total: Per Bulk Staging Unit - 237 Minutes

Refer to the MS-238 if additional maintenance information is required.

| U.S. Postal S                | Service |  |  |   |   | ID   | ENTIFICAT  | ΓΙΟΝ                 |              |              |                          |       |
|------------------------------|---------|--|--|---|---|--|--|----------------------|--------------|--------------|--------------------------|-------|
| Maintenance (                | Check   | list   | WORK<br>CODE   |   | EQUIPME<br>ACRONY   |  |  |                      | ASS<br>ODE   | NU           | MBER                     | TYPE  |
|                              |         |  | 0 3  | M S T   |   |  |  | С                    | Α            | 2            | 0 2                      | M     |
| Equipment Nomenclature LM MS |         |  | Shoot  | nt Model<br>ting Star Bu<br>it Phase 3A   |   |  | Bulletin File<br>mm09  | ename<br>9077al      | n            | Occurre      | <sup>nce</sup><br>Weekly | ,     |
| Part or                      | Item    |  | Task   | Statement and   | Instruction   |  |  | Est.                 | Min.         | ,            | Threshold                | s     |
| Component                    | No      | (0   | Comply wi  | th all current sa   | afety precau  | itions   | 3)   | Time<br>Req<br>(min) | Skill<br>Lev | Run<br>Hours | Pieces<br>Fed<br>(000)   | Freq. |
| SAFETY<br>STATEMENT          |         | Disconner required local lo shutdown equipmen Check fo If any u supervise further ac THE USE IS PROHI When cl cleaning vacuum in place free clott equipmen cannot b your sup WARNING Steps co the use o (PPE). R Plan (EW requirem  Be can equip applie  Severe Vertic not w VTU | ect pow<br>by this<br>ockout<br>n and I<br>nt and<br>r suspi-<br>inusual<br>or prio<br>ction on<br>E OF CO<br>BITED.<br>leaning<br>metho<br>cleaner<br>of com<br>h or br<br>nt only<br>e used.<br>ervisor<br>G FOR I<br>ntained<br>of Perso<br>efer to to<br>P) MMC<br>ents. | in this bull nal Protect in this bull nal Protect in the current of for appropriate when working when working when working when working work undupported in the current of | ply locked. Refer to somethic dust consumus to the second ment.  DOR Border and the blown are used to cleaning fety definity upon constant prize PP | outs to (  pine. concual und wit  LOV alte A b air. on g me cien lette req b me lette come lette co | when current roperly Open ditions. debris. notify h any VN AIR rnative filtered e used A lintoptical ethods cies to ction. Quire ent ork | 2                    | All          |              |                          |       |

| Maintenance Tec                 | chnica     | l Suppo   | rt Cente   | er  |   |   |  |          |                              |                      | M            | IMO-0                             | )43-14 |
|---------------------------------|------------|---|--|---|---|---|--|----------|------------------------------|----------------------|--------------|-----------------------------------|--------|
| U.S. Postal S                   |            | 1!-4  | WORK   |   |   |   | MENT   | IDENTIFI | С                            | LASS                 | NL           | IMBER                             | TYPE   |
| Maintenance                     | Check      | list  | CODE 0 3   | М   | ST  | ACRO  | NYM  |          | C                            | ODE                  | 2            | 0 2                               | M      |
| Equipment Nomenclature<br>LM MS |            |   |  | ing St  | el<br>ar Bulk<br>se 3A a  |   |  |          | Filename<br>n09077a          | h                    | Occurre      | ence<br>Week                      | ily    |
| Part or<br>Component            | Item<br>No | ((  | Task S<br>Comply wit   |   | ent and I<br>rrent saf  |   |  | ns)      | Est.<br>Time<br>Req<br>(min) | Min.<br>Skill<br>Lev | Run<br>Hours | Thresho<br>Pieces<br>Fed<br>(000) |        |
| CONDITION<br>CHECK              |            | Using Inf<br>a Broad S<br>Fence. V<br>for the M<br>Controlle                                      | Scan of I<br>/erify tha<br>ICC, and                          | BSU,<br>at the<br>Light<br>d DA   | Stayin<br>Fans a<br>ts are (  | g Ou<br>are O<br>on C                                       | tside<br>pera  | of       | 15                           | 9                    |              |                                   |        |
|                                 |            | Crispla runnin performusing an perimeter Note any  1. Using modu vicinit  2. Chec (RA) with opera | while lis<br>discrepa<br>an ultra<br>lle attach<br>ty of the | Tray mum IR an IR gur tening ncies sound ned, co VTU. er Ax eaks nge r air co | Syst<br>of 15 of 15 o | em minum soun entire y und with tor ai uny di an ule an ule | has tes produces produces the local he local r lead screp d Rote trasocached | e e is   |                              |                      |              |                                   |        |

BSU looking for any abnormalities, if found, note the discrepancy. Be sure to scan bearings, motors, and electrical connections.
4. Open all Main Control Cabinet doors; this should turn the fan motors off and the lights

5. Press the Light, Fan On, and Off pushbuttons for the Main Control Cabinets and verify the 2

Carefully, reach behind Cell Controller chassis to feel outward airflow from the fan, and verify fan is operating properly and the

7. Close and secure all cabinet doors with

lights and 3 fans are operational.

on in the cabinets.

vent is not obstructed.

latches/locking handles.

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|--------------------------------|----------------|---|---|---|---|--------------|--|---|---------------|--|---------------|-----------|-------|------|-------|------|--|--|--|
| Maintenance Checklist          |                | RK<br>DE  |   |   | _ | QUIP<br>ACRO |  | - |               |  | CLA<br>CO     | ASS<br>DE | NI    | JMBE | ER    | TYPE |  |  |  |
|                                | 0              | 3   | М | S | Т |              |  |   |               |  | С             | Α         | 2     | 0    | 2     | М    |  |  |  |
| Equipment Nomenclature  LM MST |                | Equipment Model Shooting Star Bulk Staging Unit Phase 3A and 3B |   |   |   |              |  | E | Bulletir<br>M |  | name<br>077ah |           | ccurr |      | eekly | ′    |  |  |  |
|                                |                |   |   |   |   |              |  |   |               |  |               |           |       |      |       |      |  |  |  |

|                           |      | Unit Phase 3A and 3B   |             |              |       |              |       |
|---------------------------|------|--|-------------|--------------|-------|--------------|-------|
| Part or                   | Item | Task Statement and Instruction   | Est.        | Min.         |       | Thresholds   | 3     |
| Component                 | No   | (Comply with all current safety precautions)   | Time<br>Req | Skill<br>Lev | Run   | Pieces       | Freq. |
|                           |      |  | (min)       | 201          | Hours | Fed<br>(000) | ·     |
|                           | 1    | NOTE   | 1           |              |       | (333)        |       |
|                           |      | NOTE   |             |              |       |              |       |
|                           |      | A scissors lift, or other lifting device, may be necessary to access the IA and DA   |             |              |       |              |       |
|                           |      | cabinet.   |             |              |       |              |       |
|                           |      | <ol><li>Verify that the IA Control Cabinet fan is operational.</li></ol>   |             |              |       |              |       |
|                           |      | <ol><li>Verify that the DA Control Cabinet fan is operational.</li></ol>   |             |              |       |              |       |
| CELL COMPUTER<br>CLEANING | 3.   | Check and Clean BSU Cell Controller<br>Computer, Monitor, and Keyboard to Prevent<br>the Buildup of Dust and Dirt.   | 5           | 9            |       |              |       |
|                           |      | NOTE   |             |              |       |              |       |
|                           |      | Prior to performing following, ensure BSU  |             |              |       |              |       |
|                           |      | is empty and reported empty to TMS1 and TMS2 in accordance with local policy/  |             |              |       |              |       |
|                           |      | procedure.   |             |              |       |              |       |
|                           |      | WARNING  |             |              |       |              |       |
|                           |      | Before performing the following steps you must don the appropriate PPE.  |             |              |       |              |       |
|                           |      | Perform a lockout/tagout of the Main Control   |             |              |       |              |       |
|                           |      | Cabinet as prescribed by the current local lockout/restore procedures.   |             |              |       |              |       |
|                           |      | Check the exterior of the cell controller  |             |              |       |              |       |
|                           |      | computer, monitor, and keyboard for cracks, signs of corrosion, or moisture damage.  |             |              |       |              |       |
|                           |      | CAUTION  |             |              |       |              |       |
|                           |      | Do not damage or loosen any of the cables or connectors at rear of the cell controller chassis.  |             |              |       |              |       |
|                           |      | 3. Open cell controller door carefully, pulling the cell controller chassis shelf outward until enough space is available to access rear panel of the chassis. |             |              |       |              |       |
|                           |      | Inspect all interconnect cables for signs of wear or damaged insulation. Ensure all  |             |              |       |              |       |

| U.S. Postal Service    |    |                      |       |      |      |      |      | IDEN | TIFICAT   | ION   |           |        |      |       |          |
|------------------------|----|----------------------|-------|------|------|------|------|------|-----------|-------|-----------|--------|------|-------|----------|
| Maintenance Checklist  |    | RK<br>DE             |       |      | _    |      | MENT |      |           | _     | ASS<br>DE | Z      | UMBE | ĒR    | TYPE     |
|                        | 0  | 3                    | М     | S    | Т    |      |      |      |           | С     | Α         | 2      | 0    | 2     | M        |
| Equipment Nomenclature |    |                      | nt Mo |      |      |      |      | Bul  | etin File | name  |           | Occurr | ence |       |          |
| LM MST                 | SI | hoot                 | ing S | Star | Bulk | Stag | ging |      | mm09      | 077ah |           |        | We   | eekly | <i>'</i> |
|                        |    | Unit Phase 3A and 3B |       |      |      |      |      |      |           |       |           |        |      |       |          |

| Part or<br>Component | Item<br>No | Task Statement and Instruction (Comply with all current safety precautions)  | Est.<br>Time | Min.<br>Skill |              | Thresholds             | 3     |
|----------------------|------------|--|--------------|---------------|--------------|------------------------|-------|
| Component            | 140        | (comply with all current safety precautions)   | Req<br>(min) | Lev           | Run<br>Hours | Pieces<br>Fed<br>(000) | Freq. |
|                      |            | cable connections are firmly secured.  |              |               | I            | 1                      |       |
|                      |            | •  |              |               |              |                        |       |
|                      |            | <ol><li>Clean the exterior of the cell controller<br/>computer, UPS, and monitor chassis with a<br/>clean damp cloth.</li></ol>            |              |               |              |                        |       |
|                      |            | <ol> <li>Clean the face of the monitor using standard<br/>CRT/monitor cleaner and wipe dry with a<br/>clean, dry cloth.</li> </ol>         |              |               |              |                        |       |
|                      |            | <ol> <li>Carefully reposition cell controller chassis<br/>shelf to its original position then close and<br/>latch cabinet door.</li> </ol> |              |               |              |                        |       |
|                      |            | Clean the keyboard using a vacuum cleaner with a brush attachment.   |              |               |              |                        |       |
| IA CABINET           | 4.         | Clean Air Filter in Induction Axis (IA) Cabinet.   | 2            | 9             |              |                        |       |
| FILTER               |            | NOTE   |              |               |              |                        |       |
|                      |            | A scissors lift, or other lifting device, may be necessary to access the IA cabinet.   |              |               |              |                        |       |
|                      |            | <ol> <li>Remove the IA cabinet fan filter grill cover<br/>located on the exterior of the IA Control<br/>Cabinet.</li> </ol>                |              |               |              |                        |       |
|                      |            | <ol><li>Remove the air filter, and clean using a vacuum cleaner.</li></ol>   |              |               |              |                        |       |
|                      |            | 3. Replace the filter and grill cover.   |              |               |              |                        |       |
| DA CABINET<br>FILTER | 5.         | Clean Air Filter in Discharge Axis (DA)<br>Cabinet.  | 2            | 9             |              |                        |       |
|                      |            | NOTE   |              |               |              |                        |       |
|                      |            | A scissors lift, or other lifting device, may be necessary to access the DA cabinet.   |              |               |              |                        |       |
|                      |            | <ol> <li>Remove the DA cabinet fan filter grill cover<br/>located on the exterior of the DA Control<br/>Cabinet.</li> </ol>                |              |               |              |                        |       |
|                      |            | <ol><li>Remove the air filter, and clean using a vacuum cleaner.</li></ol>   |              |               |              |                        |       |
|                      |            | 3. Replace the filter and grill cover.   |              |               |              |                        |       |
|                      |            |  |              |               |              |                        |       |

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|----------------------------|---------|---|---|----------------------------------|-------------|-------------------------|-------------------------|----------------------|--------------|--------------|--------------------------|-------|
| Maintenance                | Check   | list                                      | WORK<br>CODE  |                                  |             | PMENT<br>ONYM           |                         |                      | _ASS<br>ODE  | NU           | MBER                     | TYPE  |
|                            |         |   | 0 3   | M S                              | Т           |                         |                         | С                    | А            | 2            | 0 2                      | М     |
| Equipment Nomenclatur LM M |         |   | Shoot   | nt Model<br>ting Star<br>t Phase |             |                         | Bulletin Fil<br>mm0     | lename<br>)9077a     | h            | Occurre      | <sup>nce</sup><br>Weekly | ,     |
| Part or                    | Item    |   |   | Statement                        |             |                         |                         | Est.                 | Min.         |              | Threshold                | s     |
| Component                  | No      | (   | Comply wi   | th all curre                     | nt safety p | recautio                | ns)                     | Time<br>Req<br>(min) | Skill<br>Lev | Run<br>Hours | Pieces<br>Fed<br>(000)   | Freq. |
| MCC CABINET<br>FILTER      | 6.      | Clean th<br>Main Co<br>Cabinet<br>Main Co | ntrol Ca<br>Filter, B   | binet Do<br>etween               | ors, an     | d the                   | (1) Inner               | 7                    | 9            |              |                          |       |
|                            |         | 1. Open                                   | all Mair  | Control                          | Cabinet     | doors                   |                         |                      |              |              |                          |       |
|                            |         |   | ior of left   |                                  | nt sides    | of Maii                 | n Control               |                      |              |              |                          |       |
|                            |         | 3. Remo                                   |   | exterior<br>ım clean             |             | ers ar                  | nd clean                |                      |              |              |                          |       |
|                            |         | Exerc                                     | cise care   |                                  | nstalling   | Il covers.<br>s so they |                         |                      |              |              |                          |       |
|                            |         |   |   | trol cabir                       |             | er in the<br>ulling out |                         |                      |              |              |                          |       |
|                            |         | 6. Remo                                   | ove the i   |                                  | ir filter a | ınd cle                 | an using                |                      |              |              |                          |       |
|                            |         |   | cise care   |                                  | nstalling   | the c                   | rill cover.<br>overs so |                      |              |              |                          |       |
|                            |         |   |   | secure a<br>g handle             |             | iet do                  | ors with                |                      |              |              |                          |       |
|                            |         |   | [   | WARN                             | ING         |                         |                         |                      |              |              |                          |       |
|                            |         |   | ment v  | vhen wo<br>when p                |             |                         |                         |                      |              |              |                          |       |
|                            |         |   | WARNING   |                                  |             |                         |                         |                      |              |              |                          |       |
|                            |         |   | Before performing the following steps you must don the appropriate PPE. |                                  |             |                         |                         |                      |              |              |                          |       |
|                            |         |   |   | Restore<br>d by the<br>res.      |             |                         |                         |                      |              |              |                          |       |
|                            |         |   |   |                                  |             |                         |                         |                      |              |              |                          |       |

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|-------------------------------|--|----------------------|---|---|---|--|------|-----------------------|-------------------|---|-----------|-----|------------|-------|----|------|
| Maintenance Checklist         | _  | ORK<br>ODE           |   |   |   |  | MENT |                       |                   | _ | ASS<br>DE |     | Νl         | JMBE  | ΞR | TYPE |
|                               | 0  | 3                    | М | S | Т |  |      |                       |                   | С | Α         |     | 2          | 0     | 2  | М    |
| Equipment Nomenclature LM MST | Equipment Model Shooting Star Bulk Staging |                      |   |   |   |  | В    | ulletir<br><b>m</b> ı | <br>name<br>077ah |   | Occ       | urr | ence<br>We | eekly | /  |      |
|                               |  | Unit Phase 3A and 3B |   |   |   |  |      |                       |                   |   |           |     |            |       |    |      |

| Part or<br>Component | Item<br>No | Task Statement and Instruction (Comply with all current safety precautions)   | Est.<br>Time | Min.<br>Skill |              | Threshold              | S     |
|----------------------|------------|---|--------------|---------------|--------------|------------------------|-------|
| Component            | NO         | (Comply with all current salety precautions)  | Req<br>(min) | Lev           | Run<br>Hours | Pieces<br>Fed<br>(000) | Freq. |
|                      |            | Ensure the Transfer Axis (TA) is fully retracted. Failure to comply with this   |              |               |              |                        |       |
|                      |            | precaution may result in BSU equipment damage.  |              |               |              |                        |       |
| TA CHECK             | 7.         | Check TA Alignment and Manifolds.   | 47           | 9             |              |                        |       |
|                      |            | <ol> <li>Terminate the STAR operation using the Cell<br/>Controller by selecting the CELL OFFLINE<br/>option.</li> </ol>  |              |               |              |                        |       |
|                      |            | <ol><li>The green stack lights and the CSSS OK-TO-<br/>ENTER light begin to flash.</li></ol>  |              |               |              |                        |       |
|                      |            | <ol> <li>The cell controller completes all transactions<br/>and comes to a controlled stop. The VTU<br/>returns to the HOME position.</li> </ol>                                    |              |               |              |                        |       |
|                      |            | 4. The green stack lights go Off.   |              |               |              |                        |       |
|                      |            | <ol> <li>Only at Cell Controller, click on MAINT<br/>MODE button to display Machine Control<br/>page.</li> </ol>  |              |               |              |                        |       |
|                      |            | <ol> <li>At Cell Controller Machine Control page, click<br/>on the MAINTENANCE POSITION button.<br/>The VA carriage will move to a pre-set<br/>position on the VTU mast.</li> </ol> |              |               |              |                        |       |
|                      |            | 7. Click on the Status tab to display the Discreet I/O Status screen.   |              |               |              |                        |       |
|                      |            | <ol><li>In the TA section of the Status page, click the<br/>Front Up checkbox. This will raise the front<br/>portion of the TA carriage.</li></ol>                                  |              |               |              |                        |       |
|                      |            | <ol><li>Click the Front Up checkbox again to lower<br/>the front portion of TA carriage.</li></ol>  |              |               |              |                        |       |
|                      |            | <ol> <li>In the TA section of the Status page, click the<br/>Rear Up checkbox. This will raise the rear<br/>portion of the TA carriage.</li> </ol>                                  |              |               |              |                        |       |
|                      |            | <ol> <li>Click the Rear Up checkbox again to lower<br/>rear portion of the TA carriage. Notify<br/>supervisor of any deficiencies found.</li> </ol>                                 |              |               |              |                        |       |
| [                    |            | <ol> <li>At the Cell Controller Machine Control page,<br/>at the MAINTENANCE MODE screen, click<br/>on the Pendant Enable pushbutton.</li> </ol>                                    |              |               |              |                        |       |

| MMO-043-14                          |  | Maintenance Technical Support Center  |  |   |                                 |   |                                  |              |            |         |                |            |
|-------------------------------------|--|---|--|---|---------------------------------|---|----------------------------------|--------------|------------|---------|----------------|------------|
| U.S. Postal                         | Service  |   |  |   |                                 | IDENTIF   | ICATI                            |              |            |         |                |            |
| Maintenance                         | Checklist  | WORK<br>CODE  |  |   | PMENT<br>ONYM                   |   |                                  |              | ASS<br>ODE | NU      | IMBER          | TYPE       |
|                                     |  | 0 3   | M S  | Т   |                                 |   |                                  | С            | Α          | 2       | 0 2            | М          |
| Equipment Nomenclatur<br>LM M       |  |   | nt Model<br>ing Star E<br>t Phase 3                                |   |                                 | Bulletir<br>m   | n Filen<br>m09(                  |              | n          | Occurre | ence<br>Weekly | •          |
| Part or                             | Itom   | Took  | Statement a  | and Instru  | otion                           |   | ı                                | Ect          | Min.       |         | Threshold      | 0          |
| Component                           | Item<br>No   | (Comply wit   |  |   |                                 | ns)   |                                  | Est.<br>Time | Skill      | Run     | Pieces         | s<br>Freq. |
|                                     |  |   |  |   |                                 |   |                                  | Req<br>(min) | Lev        | Hours   | Fed<br>(000)   | 1 164.     |
|                                     |  |   | CAUTIO   | ON  |                                 |   |                                  |              |            |         |                |            |
|                                     | level  | ely obser<br>so the V<br>erference  | ve the for   | orks at   |                                 |   |                                  |              |            |         |                |            |
|                                     | the<br>forks<br>dete   | ng the mar<br>bottom S<br>s into the<br>rmine if a<br>TA forks a                    | A shelf I<br>he botto<br>iny interfe                               | evel.<br>om/top<br>erence                             | Extend<br>SA<br>exists          | ΓA<br>to  |                                  |              |            |         |                |            |
|                                     | VA if a  | ng the mar<br>to the top/<br>ny interfe<br>s and the                                | bottom s   | helf lev  | el to detween                   | etermir<br>the 7  | ne                               |              |            |         |                |            |
|                                     | inte   | ord the<br>ference e<br>SA shelve   | xists betv   |   |                                 |   | -                                |              |            |         |                |            |
|                                     | 16. Retr   | act the TA  | forks.   |   |                                 |   |                                  |              |            |         |                |            |
|                                     | 17. Mov  | e the SA s  | 5 – 10 rad   | cks.  |                                 |   |                                  |              |            |         |                |            |
|                                     | com  | eat steps<br>plete revo<br>is made.   |  |   |                                 |   |                                  |              |            |         |                |            |
|                                     |  | he MAINT<br>he Pendar   |  |   |                                 | ck  |                                  |              |            |         |                |            |
| STAR CLEANING<br>AND<br>LUBRICATION | (VA), Tr<br>Rollers<br>and TA<br>Beam S<br>Mountir<br>the VA | Check, a<br>ansfer Ax<br>and Trac<br>Set Scre<br>Sensors.<br>ng Bolts a<br>, RA, TA | kis (TA),<br>cks, Che<br>ews. Cle<br>Check<br>and TA T<br>, and SA | and Ro<br>ck RA<br>an Lo<br>Cradl<br>rack V<br>A1/SA2 | otary A and T wer S e to /heels | xis (R.<br>FA Bel<br>A Safe<br>Carriaç<br>. Chec<br>o Mot | A)<br>ts<br>ty<br>ge<br>ck<br>or | 30           | 9          |         |                |            |

8 Attachment 3

Exhaust Fans for Proper Operation and the

At the discrete I/O screen, click on the MAINT MODE button to display the Machine Control Page, if it is not already displayed.
 At the Cell Controller; under MAINTENANCE MODE Machine Control tab, in the Manual Move To section, select the Maintenance

Pop-Up Assembly/Bolts for Damage.

position button.

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|-------------------------------|--|---|---|---|---|--------------|---|-----------------------|--|---------------|---|-----------|---|-------|----|------|
| Maintenance Checklist         | WORK<br>CODE   |   |   |   | _ | QUIP<br>ACRO |   | -                     |  |               | _ | ASS<br>DE | N | UMBI  | ER | TYPE |
|                               | 0  | 3 | М | S | Т |              |   |                       |  |               | С | Α         | 2 | 0     | 2  | М    |
| Equipment Nomenclature LM MST | Equipment Model Shooting Star Bulk Staging Unit Phase 3A and 3B  |   |   |   |   |              | В | ulletin<br><b>m</b> ı |  | name<br>077ah |   | Occurr    |   | eekly | ′  |      |

|                        |                |    | Unit Phase 3A and 3B   |                      |              |              |                        |       |
|------------------------|----------------|----|--|----------------------|--------------|--------------|------------------------|-------|
| Part or                | Item           |    | Task Statement and Instruction   | Est.                 | Min.         |              | Threshold              | s     |
| Component              | No             |    | (Comply with all current safety precautions)   | Time<br>Req<br>(min) | Skill<br>Lev | Run<br>Hours | Pieces<br>Fed<br>(000) | Freq. |
|                        | ,              | 3. | Access the MAINTENANCE MODE screen. Select the Discrete I/O screen option on the Miscellaneous section.  |                      |              |              |                        |       |
|                        |                | 4. | At the Discrete I/O screen, select the status screen option.   |                      |              |              |                        |       |
|                        | :              | 5. | Ensure the Enable PLC option is displayed in the Discrete I/O status Screen Safety Controls section. Click on the Disable PLC option to change the Enable PLC if required.   |                      |              |              |                        |       |
|                        | 1              | 6. | Select the UNLOCK THE GATE option. The pneumatic system purge valve is automatically activated removing air pressure from the system. In addition, the KP Main Motor Contactor is opened. This removes the 480 VAC from the servo drive controllers and the motor fans. Control voltage is present at the controllers and sensors. |                      |              |              |                        |       |
|                        |                | 7. | Open the safety gates.   |                      |              |              |                        |       |
|                        |                | 8. | Select the close option. Return to the MAINTENANCE MODE screen to LOG OFF.   |                      |              |              |                        |       |
|                        | ļ              | 9. | Access the Windows NST START button at the lower screen display. Select the SHUTDOWN option. Select YES when prompted. Wait for the software to complete the shutdown process.   |                      |              |              |                        |       |
|                        |                |    | WARNING  |                      |              |              |                        |       |
|                        |                |    | Before performing the following steps you must don the appropriate PPE.  |                      |              |              |                        |       |
|                        | the monitor, a |    | Open the MCC doors; turn Off the computer, the monitor, and the UPS.   |                      |              |              |                        |       |
|                        |                |    | Open the MCC Main Disconnect Circuit Breaker (CB1).  |                      |              |              |                        |       |
|                        |                |    | WARNING  |                      |              |              |                        |       |
| MCC, perfor procedures |                |    | When performing maintenance inside MCC, perform system lockout/tagout procedures as prescribed by current local lockout/ restore procedures.   |                      |              |              |                        |       |

U.S. Postal Service

Maintenance Technical Support Center

|                                 |              |   |  |  |   |  |  | IDENTIFIC/  |                      |                |              |                        |       |
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| Maintenance                     | WORK<br>CODE |   |  | EQUIP<br>ACRO  |   |  |  | _ASS<br>ODE   | NU                   | IMBER          | TYPE         |                        |       |
|                                 |              |   | 0 3  | М  | S T   |  |  |   | С                    | Α              | 2            | 0 2                    | М     |
| Equipment Nomenclature<br>LM MS |              |   |  | ing S  | del<br>Star Bulk<br>ise 3A a  |  |  | Bulletin F<br>mm(   | ilename<br>09077al   | h              | Occurre      | ence<br>Weekly         | 1     |
| Part or                         | Item         |   | Task   | Staten   | nent and  | Instruc  | tion   |   | Est.                 | Min.           |              | Threshold              | ls    |
| Component                       | No           | ((  | Comply wit   |  |   |  |  | ons)  | Time<br>Req<br>(min) | Skill .<br>Lev | Run<br>Hours | Pieces<br>Fed<br>(000) | Freq. |
|                                 |              | device and s Other device S1 usi 12. Close proce locko  480 V CB1 v the C death the li Switcl Circui exteric comp  13. Locat Pane powe 14. Enter maint asser move  Disca mater accord There canno 4 upper | AC is positive the side of the side of the safety-renance mbly, and instance of the side of the safety-renance | in Faith a ith a i | a cility Carlock a a multiple of character of carried and area of | ircuitand s ti-loc onne ed tag form ed by fo | it Breigned igned igned ik locked in control | caker; d tag. ckout witch,  out/tagout current  de of tch in ry or cur if nnect acility MCC t to er.  stribution breaker nd lock. age long carriage ownward ented.  oaked nd in  A that er, the visible |                      |                |              |                        |       |

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|--------------------------------|----------------|---|---|---|---|--|------------|--|-----------------------|--|---------------|-----------|--------|------|-------|------|
| Maintenance Checklist          |                | ORK<br>ODE  |   |   |   |  | MEN<br>NYN |  |                       |  |               | ASS<br>DE | NI     | UMBE | ĒR    | TYPE |
|                                | 0              | 3   | М | S | Т |  |            |  |                       |  | С             | Α         | 2      | 0    | 2     | М    |
| Equipment Nomenclature  LM MST |                | Equipment Model Shooting Star Bulk Staging Unit Phase 3A and 3B |   |   |   |  |            |  | ulletir<br><b>m</b> ı |  | name<br>077ah |           | Occurr |      | eekly | ,    |

|           |      | Unit Phase 3A and 3B  |             |              |       |              |       |
|-----------|------|---|-------------|--------------|-------|--------------|-------|
| Part or   | Item | Task Statement and Instruction  | Est.        | Min.         | -     | Thresholds   | S     |
| Component | No   | (Comply with all current safety precautions)  | Time<br>Req | Skill<br>Lev | Run   | Pieces       | Freq. |
|           |      |   | (min)       |              | Hours | Fed<br>(000) |       |
|           |      | 15. Using a wiping rag or paper wipe with solvent on it, remove lubricant to check:   |             |              |       |              |       |
|           |      | a. Lower VA carriage and RA rollers and tracks.   |             |              |       |              |       |
|           |      | b. All TA rollers and tracks.   |             |              |       |              |       |
|           |      | c. Lower VA carriage and RA rollers and tracks.  16. Check the lower VA, RA, and TA roller assemblies and tracks for signs of wear such as pitting, shavings, sharp edges, or rust. Rust may be removed using Scotch Bright or brass/bronze wool. |             |              |       |              |       |
|           |      | 17. Check TA belts for signs of fraying or cracking.  |             |              |       |              |       |
|           |      | 18. Check all TA pulley set screws (12 ea /6 pulleys).  |             |              |       |              |       |
|           |      | 19. Check TA pop-up assembly for binding or damage.   |             |              |       |              |       |
|           |      | 20. Check all rubber stops (9 total; 4 on rear of the TA, and 4 on the front, 1 on the Pancake cylinder).   |             |              |       |              |       |
|           |      | a. Ensure no rubber stops are missing.  |             |              |       |              |       |
|           |      | b. Ensure that none of the rubber stops have shifted from their proper positions.   |             |              |       |              |       |
|           |      | c. Inspect for excessive wear.  |             |              |       |              |       |
|           |      | 21. Check RA belts for signs of fraying or cracking.  WARNING   |             |              |       |              |       |
|           |      | Chemical proof goggles (with side shields), and rubber gloves must be worn when using CRC 3-36.   |             |              |       |              |       |
|           |      | 22. Using a dry, clean cloth; apply a thin film of oil (CRC Industries 05003 or equivalent) to lower VA, RA, and all TA carriage assembly tracks.   |             |              |       |              |       |
|           |      |   |             |              |       |              |       |

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IDENTIFICATION

| U.S. Posta                   | al Service |                                   | WORK                                      |  | FO                      | UIPMEN                      |        | ENTIFICA           |                      | ASS          | NI           | IMBER                 | Т т      | TYPE |
|------------------------------|------------|-----------------------------------|---|--|-------------------------|-----------------------------|--------|--------------------|----------------------|--------------|--------------|-----------------------|----------|------|
| Maintenanc                   | e Checkl   | ist                               | CODE                                      |  | AC                      | CRONYM                      |        |                    | C                    | ODE          |              |                       |          |      |
| Equipment Nomenclatu<br>LM N |            |                                   | Shoc                                      | M S<br>ent Model<br>oting Star<br>nit Phase  |                         |                             |        | Bulletin File      | C<br>ename<br>9077al | n A          | Occurre      | 0 2<br>ence<br>Weel   | <u> </u> | M    |
| Part or                      | Item       |                                   | Task                                      | c Statemen   | t and Ins               | truction                    |        |                    | Est.                 | Min.         |              | Thresh                | olds     |      |
| Component                    | No         | ((                                |   | rith all curre   |                         |                             | ions   | 3)                 | Time<br>Req<br>(min) | Skill<br>Lev | Run<br>Hours | Piece<br>Fed<br>(000) | s I      | Fred |
|                              |            |                                   |   | NO   | ΓΕ                      |                             |        |                    |                      |              |              |                       |          |      |
|                              |            | VA E<br>Assen<br>specia<br>also b | Brake<br>nbly, P/<br>al tools<br>e requir |  | and<br>46, pa<br>extens | Fan<br>irt of th<br>sion co | Pone B | ower<br>BSU<br>may |                      |              |              |                       |          |      |
|                              |            |                                   | ed 120\                                   | n power<br>/ Fans I<br>the rear o  | ocated                  | on jur                      | ncti   | on box             |                      |              |              |                       |          |      |
|                              |            |                                   | ed Fan                                    | ower cal<br>Power o<br>er assem  | n the \                 | √A bral                     |        |                    |                      |              |              |                       |          |      |
|                              | 2          | 25. Plug<br>recep                 |   | ol into ar<br>conveni  |                         |                             | utle   | t/power            |                      |              |              |                       |          |      |
|                              |            |                                   | ON p                                      | ver switc<br>osition.<br>vitch sho   | The gr                  | een LE                      |        |                    |                      |              |              |                       |          |      |
|                              | 2          |                                   | r to the                                  | vitch on<br>e ON po<br>an Powe   | sition.                 | The g                       | gree   | en LED             |                      |              |              |                       |          |      |
|                              |            | -                                 | the fa                                    | /A; RA;<br>ans are of<br>are free  | operati                 | ng pro                      |        |                    |                      |              |              |                       |          |      |
|                              |            | 29. Turn                          | OFF the                                   | e Fan Po   | wer on                  | the too                     | ol.    |                    |                      |              |              |                       |          |      |
|                              | 3          | 30. Turn                          | OFF the                                   | e power o  | n the                   | rear of t                   | the    | tool.              |                      |              |              |                       |          |      |
|                              |            | 31. Unplu                         | ug the to                                 | ool from t   | he pov                  | ver rece                    | epta   | acle.              |                      |              |              |                       |          |      |
|                              |            | 32. Unplu                         | ug the fa                                 | an power   | cable                   | from th                     | e to   | ool.               |                      |              |              |                       |          |      |
|                              |            |                                   | ed 120                                    | power of the power |                         |                             |        |                    |                      |              |              |                       |          |      |
|                              |            | 34. Move<br>in the                |   | g mainte<br>e positior   |                         | bar and                     | d s    | ecure it           |                      |              |              |                       |          |      |
|                              |            | 35. Remo                          |   | tools and<br>enced ar  |                         | ment fr                     | rom    | n inside           |                      |              |              |                       |          |      |
|                              |            | 36. Exit<br>secur                 |   | fety–fenc<br>ock switc   |                         |                             |        | se and             |                      |              |              |                       |          |      |

| I_I                           |   |          |   |      |   |      |             |     |               |      |               |           |        |      |       |      |
|-------------------------------|---|----------|---|------|---|------|-------------|-----|---------------|------|---------------|-----------|--------|------|-------|------|
| U.S. Postal Service           |   |          |   |      |   |      |             | IDE | NTIF          | CATI | ON            |           |        |      |       |      |
| Maintenance Checklist         |   | RK<br>DE |   |      | _ |      | MENT<br>NYM | -   |               |      | _             | ASS<br>DE | N      | JMBE | ER    | TYPE |
|                               | 0 | 3        | М | S    | Т |      |             |     |               |      | С             | Α         | 2      | 0    | 2     | M    |
| Equipment Nomenclature LM MST |   | hoot     |   | Star |   | Stao |             | В   | ulletin<br>Mı |      | name<br>077ah |           | Occurr |      | eekly | ′    |
|                               |   |          |   |      |   |      |             |     |               |      |               |           |        |      |       |      |

|           |      | Unit Phase 3A and 3B  |                      |              |              |                        |       |
|-----------|------|---|----------------------|--------------|--------------|------------------------|-------|
| Part or   | Item | Task Statement and Instruction  | Est.                 | Min.         |              | Threshold              | s     |
| Component | No   | (Comply with all current safety precautions)  | Time<br>Req<br>(min) | Skill<br>Lev | Run<br>Hours | Pieces<br>Fed<br>(000) | Freq. |
|           |      | Before performing the following steps you must don the appropriate PPE.  WARNING  Be cautious when working around or on equipment when power has been applied.  37. Remove lockout device and lock. Place Main Disconnect Switch, S1 in the ON position.  38. Restore air pressure to Filter Regulator Supply.  39. Reset the Main Facilities STAR circuit breaker, as required.  40. Position the Main Disconnect Switch (CB-1) to apply 480 VAC 3-phase to the MCC. The MCC power supplies and the internal fans will come on.  41. Turn on the UPS and allow the internal self diagnostic routine to complete and the green LED to illuminate.  42. Turn On the monitor and the cell controller. Allow to the cell controller to boot up.  43. When prompted, press Ctrl-Alt-Delete to access the Windows NT Logon box. At the password default prompt, press ENTER and wait one minute for all processes to start.  NOTE  If one minute has not elapsed before the SHORTCULT TO INTERFACE EXE Icon is |                      |              |              | (000)                  |       |
|           |      | SHORTCUT TO INTERFACE.EXE Icon is activated, a prompt screen will appear advising SHORTCUT TO INTERFACE.EXE is terminated due to ORACLE not available.  |                      |              |              |                        |       |
|           |      | 44. Double click on the SHORTCUT TO INTERFACE.EXE Icon. The STAR Console Login screen appears.  |                      |              |              |                        |       |

| U.S. Postal S                | Service |                                 |                                  |  |   | IDENTIFICA                       | TION                 |              |              |                          |       |
|------------------------------|---------|---------------------------------|----------------------------------|--|---|----------------------------------|----------------------|--------------|--------------|--------------------------|-------|
| Maintenance                  | Check   | list                            | WORK<br>CODE                     |  | EQUIPMENT<br>ACRONYM  |                                  |                      | LASS<br>ODE  | NU           | MBER                     | TYPE  |
|                              |         |                                 | 0 3                              | _                                      | Γ   |                                  | С                    | Α            |              | 0 2                      | М     |
| Equipment Nomenclature LM MS |         |                                 |                                  | nt Model<br>ting Star Bu<br>t Phase 3A |   | Bulletin Fil<br>mm0              | ename<br>9077a       | h            | Occurre      | <sup>nce</sup><br>Weekly | ,     |
| Part or                      | Item    |                                 | Task                             | Statement an                           | d Instruction   |                                  | Est.                 | Min.         |              | Threshold                | s     |
| Component                    | No      | (0                              | Comply with                      | th all current s                       | afety precautio   | ons)                             | Time<br>Req<br>(min) | Skill<br>Lev | Run<br>Hours | Pieces<br>Fed<br>(000)   | Freq. |
|                              |         |                                 |                                  | NOTE                                   |   |                                  |                      |              |              |                          |       |
|                              |         | succes<br>appea<br>the LC       | ssfully<br>rs initial<br>DGIN na | logged ir<br>ly in this fi             | ne user who nto the so eld. To reto v, click it wi TAB.     | ystem<br>urn to                  |                      |              |              |                          |       |
|                              |         | 45. Enter                       | the USE                          | ER NAME a                              | and PASSW   | ORD.                             |                      |              |              |                          |       |
|                              |         | succe<br>CONI<br>NETV<br>contro | essful L<br>NECTED<br>VORK       | OGIN. to appea<br>status, i            | creen appe Wait for a r at the rig ndicating to mmunication | a green<br>ht of the<br>the cell |                      |              |              |                          |       |
|                              |         | Revie                           |                                  | ault Desci                             | US screen for iption, and                                   |                                  |                      |              |              |                          |       |
|                              |         | 48. Physi                       | cally clo                        | se the safe                            | ty gates.   |                                  |                      |              |              |                          |       |
|                              |         | 49. Selec                       | t Maint N                        | Mode optio                             | n from main   | screen.                          |                      |              |              |                          |       |
|                              |         | Selec                           | t the Di                         |  | NCE MODE<br>screen option.                                  |                                  |                      |              |              |                          |       |
|                              |         |                                 | e Discre                         |  | en, select th   | ne Status                        |                      |              |              |                          |       |
|                              |         |                                 | the Dis                          |  | button in th  | ne Safety                        |                      |              |              |                          |       |
|                              |         | the U                           | JNLOCK                           |  | ols section,<br>ption to en                                 |                                  |                      |              |              |                          |       |
|                              |         |                                 |                                  | Close butto<br>CE MODE                 | on to return<br>screen.                                     | n to the                         |                      |              |              |                          |       |
|                              |         |                                 |                                  | WARNIN                                 | G   |                                  |                      |              |              |                          |       |
|                              |         |                                 | ment v                           |  | ing around<br>wer has                                       |                                  |                      |              |              |                          |       |
|                              |         | 55. Press                       | E-STO                            | P Reset an                             | d Power ON  | I buttons.                       |                      |              |              |                          |       |
|                              |         |                                 |                                  |  | MODE screethe Homing  |                                  |                      |              |              |                          |       |

| U.S. Postal Service           |  |            |   |   |   |              |  | IDE | NTIFICAT              | ION            |           |        |      |       |      |
|-------------------------------|--|------------|---|---|---|--------------|--|-----|-----------------------|----------------|-----------|--------|------|-------|------|
| Maintenance Checklist         |  | ORK<br>ODE |   |   | _ | QUIF<br>ACRO |  | -   |                       | _              | ASS<br>DE | N      | UMBE | ĒR    | TYPE |
|                               | 0  | 3          | М | S | Т |              |  |     |                       | С              | Α         | 2      | 0    | 2     | М    |
| Equipment Nomenclature LM MST | Equipment Model Shooting Star Bulk Stagin Unit Phase 3A and 3B |            |   |   |   |              |  | В   | Bulletin File<br>mm09 | name<br>1077ah |           | Occurr |      | eekly | ′    |

|           |      | Unit Phase 3A and 3B   |                      |              |              |                        |       |
|-----------|------|--|----------------------|--------------|--------------|------------------------|-------|
| Part or   | Item | Task Statement and Instruction   | Est.                 | Min.         | -            | Threshold              | S     |
| Component | No   | (Comply with all current safety precautions)   | Time<br>Req<br>(min) | Skill<br>Lev | Run<br>Hours | Pieces<br>Fed<br>(000) | Freq. |
|           |      | Click on Home ALL.   |                      |              |              |                        |       |
|           | Ę    | 7. Access the MAINTENANCE MODE screen. Select the Discrete I/O screen option at the Miscellaneous section.   |                      |              |              |                        |       |
|           | į    | 8. At the Discrete I/O screen, select the Status screen option.  |                      |              |              |                        |       |
|           | Ę    | 9. Ensure the Enable PLC option is displayed at the Discrete I/O Status Screen Safety Controls section. Click on the Disable PLC option to change to Enable PLC, if required.  |                      |              |              |                        |       |
|           | 6    | O. Select the UNLOCK THE GATE option. The pneumatic system purge valve is automatically activated removing air pressure from the system. In addition, the KP Main Motor Contactor is opened. This removes the 480 VAC from the servo drive controllers and the power to the motor fans. Control voltage is present at the controllers and sensors. |                      |              |              |                        |       |
|           | e    | 1. Open the safety gates.  |                      |              |              |                        |       |
|           | (    | 2. Select the Close option. Return to the MAINTENANCE MODE screen to LOG OFF.  |                      |              |              |                        |       |
|           |      | 3. Access the Windows NT START button at the lower screen display. Select SHUTDOWN option. Select YES when prompted. Wait for the software to complete the shutdown process.   |                      |              |              |                        |       |
|           |      | WARNING  |                      |              |              |                        |       |
|           |      | Before performing the following steps you must don the appropriate PPE.  |                      |              |              |                        |       |
|           | 6    | 4. Open the MCC doors; turn Off the computer, the monitor, and the UPS.  |                      |              |              |                        |       |
|           | 6    | 5. Open the MCC Main Disconnect Circuit Breaker (CB-1).  |                      |              |              |                        |       |
|           |      | WARNING  |                      |              |              |                        |       |
|           |      | When performing maintenance inside the MCC, perform system lockout/ tagout procedures as prescribed by   |                      |              |              |                        |       |

U.S. Postal Service

Maintenance Technical Support Center

| U.S. Postal Service              |  | 14/05  | <sub>IZ</sub> T  |  |  | -01 !!   |  |  | NTIFIC/   |                   | A C C         |              | INADE | -Б Т              | TVDE  |
|----------------------------------|--|--|--|--|--|--|--|--|---|-------------------|---------------|--------------|-------|-------------------|-------|
| Maintenance Check                | dist   | WOR  |  |  |  |  | MENT   |  |   |                   | _ASS<br>ODE   | N            | JMBE  | K                 | TYPE  |
|                                  |  |  | 3 M  | S  | Т  |  |  |  |   | C                 | A             | 2            | 0     | 2                 | М     |
| Equipment Nomenclature<br>LM MST |  | Sho  | nent Mo<br>ooting<br>Jnit Ph   | odel<br>Star   |  |  |  | В  |   | ilename<br>09077a | h             | Occurr       |       | eekly             |       |
| Dort or Itom                     |  | То   | als Ctats  | mont   | الممما   | notru.   | ation  |  |   | Fot               | Min           |              | Thro  | مامامام           |       |
| Part or Item Component No        | ((   |  | sk State<br>with all   |  |  |  |  | ons)   |   | Est.<br>Time      | Min.<br>Skill |              |       | sholds            |       |
| ·                                | ,  |  |  |  |  |  |  | ,  |   | Req<br>(min)      | Lev           | Run<br>Hours | F     | eces<br>ed<br>00) | Freq. |
|                                  | 480 V CB1 w the Co death the li Switcl Circui exteric compl 67. Locat Panel powe 68. Enter  Chem shield worn  Discar mater accore 69. Using solve a. U | dures lockor it Breas lock it Breas lock nnect d tag.  a thout/tagg urrent  AC is with the from ne sic t Breas loc the lock and the sa  ical ls), and when  rd or ials a dance g a v nt, ren lpper \ l | w. preside of ontace eaker nust remove facilities install afety-feed with the content of the con | tach ice ( i | on the second development of the second of t | he linnectory wise of the linnectory with the linner with the linn | multiain Favith a set atta to a local presse process the local process and the local pro | acil a lo ach Mack a Peribonacil Me crib cedu string in the control of the contro | of in or if ect ity content ity or if ect ity content |                   |               |              |       |                   |       |

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|-------------------------------|----------|----------|--------------------------|------|-------|--------|-------------|------|-------|------|---------------|-----------|--------|-------------|--------|--------|
| U.S. Postal Service           |          |          |                          |      |       |        |             | IDEN | NTIFI | CATI | ON            |           |        |             |        |        |
| Maintenance Checklist         | WC<br>CO | RK<br>DE |                          |      |       |        | MENT<br>NYM |      |       |      | _             | ASS<br>DE | N      | UMBI        | ĒR     | TYPE   |
|                               | 0        | 3        | М                        | S    | Т     |        |             |      |       |      | C             | Α         | 2      | 0           | 2      | М      |
| Equipment Nomenclature LM MST |          | noot     | nt Mod<br>ing S<br>t Pha | Star |       |        |             | Bu   |       |      | name<br>077ah |           | Occurr |             | eekly  | /      |
| Part or Item                  | -        | Γask∶    | State                    | ment | and I | nstruc | tion        |      |       |      | Est.          | Min.      |        | Thre        | esholo | ls     |

|                             |            | Unit Phase 3A and 3B   |              |               |       |                   |       |
|-----------------------------|------------|--|--------------|---------------|-------|-------------------|-------|
| Part or<br>Component        | Item<br>No | Task Statement and Instruction (Comply with all current safety precautions)  | Est.<br>Time | Min.<br>Skill | Run   | Thresholds Pieces | Freq. |
|                             |            |  | Req<br>(min) | Lev           | Hours | Fed<br>(000)      | пец.  |
| IA CLEANING AND LUBRICATION |            | c. All accessible tracks and contact surfaces.  70. Check the RA Dual-V groove rollers to ensure they properly seat on the circular track attached to the VTU. If these dual groove rollers are not seated properly on the circular tracks, adjustment will be required.  71. Using a clean cloth, apply a thin layer of oil (CRC Industries 05003 or equivalent) to the upper VA carriage and RA roller and track assemblies.  72. Using a feather duster or a brush, clean the 3 lower SA safety beam sensors (left, middle, and right).  73. Using a 3/16" Allen wrench, check the cradle-to-carriage connection bolts (1 per side) to verify they are snug.  74. Ensure TA and RA assemblies are in home positions.  Check and Lubricate the Induction Axis (IA) Rollers and Tracks. Check IA 2 Floor Feed, 1 Drive, and 2 Timing Belts. Clean and Check IA Photocells.  WARNING  Damage may occur to safety mats if they are not removed prior to moving lifting device across them, creating degraded E-Stop circuit operation. Remove any sections of safety mat in path of lift prior to moving lift device inside the safety fence area.  WARNING  Discard or dispose of chemical soaked materials according to MSDS and in accordance with local procedures. | 16           | 9             |       |                   |       |

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|----------------------------------|---|--|-------|-----|-------|--------------|------|------|-------|------|---------------|------------|----------|----------|------------|---------|---------|
| U.S. Postal Service              |   |  |       |     |       |              |      | IDEN | TIFIC | CATI | ON            |            |          |          |            |         |         |
| Maintenance Checklist            | 1 | ORK<br>ODE   |       |     |       | QUIF<br>ACRO |      |      |       |      | _             | ASS<br>ODE |          | NU       | JMBI       | ĒR      | TYPE    |
|                                  | 0 | 3  | М     | S   | Т     |              |      |      |       |      | C             | Α          |          | 2        | 0          | 2       | М       |
| Equipment Nomenclature<br>LM MST |   | Equipment Model Shooting Star Bulk Stag Unit Phase 3A and 3E |       |     |       |              |      | -    |       |      | name<br>077ah | า          | Oc       | curre    | ence<br>We | eekly   | /       |
| Part or Item                     |   | Task Statement and Instruction Est. Min. Thresholds          |       |     |       |              |      |      |       | 40   |               |            |          |          |            |         |         |
| Part Of Item                     |   | 1 ask  | State | mem | anu i | HStruc       | JUOH |      |       |      | ⊏Տե.          | IVIII I.   |          |          | HIIIE      | 5511010 | 15      |

|                                   |            | Utilit Pridse SA driu SB  |              |               |              |                        |       |
|-----------------------------------|------------|---|--------------|---------------|--------------|------------------------|-------|
| Part or<br>Component              | Item<br>No | Task Statement and Instruction (Comply with all current safety precautions)   | Est.<br>Time | Min.<br>Skill |              | Thresholds             | 3     |
| Component                         | INO        | (Comply with all current salety precautions)  | Req<br>(min) | Lev           | Run<br>Hours | Pieces<br>Fed<br>(000) | Freq. |
|                                   |            | NOTE  |              |               |              |                        |       |
|                                   |            | A scissors lift, or other lifting device, is necessary to access the IA rollers and tracks.   |              |               |              |                        |       |
|                                   |            | <ol> <li>Using a wiping rag or paper wipe and<br/>solvent, clean IA roller and track assemblies.</li> </ol>   |              |               |              |                        |       |
|                                   |            | <ol><li>Check IA roller and track assemblies for<br/>signs of wear and/or damage such as pitting,<br/>shavings, or sharp edges.</li></ol>               |              |               |              |                        |       |
|                                   |            | WARNING   |              |               |              |                        |       |
|                                   |            | Chemical proof goggles (with side shields), and rubber gloves must be worn when using CRC 3-36.   |              |               |              |                        |       |
|                                   |            | WARNING   |              |               |              |                        |       |
|                                   |            | Discard or dispose of chemical soaked materials according to MSDS and in accordance with local procedures.  |              |               |              |                        |       |
|                                   |            | <ol> <li>Using a clean, dry cloth, apply a thin film of<br/>CRC 3-36 lubricant (or equivalent) to the IA<br/>tracks.</li> </ol>                         |              |               |              |                        |       |
|                                   |            | <ol> <li>Visually check IA floor, drive, and timing belts<br/>for signs of wear such as fraying, cracking, or<br/>excessive wear.</li> </ol>            |              |               |              |                        |       |
|                                   |            | <ol><li>Clean IA photocells and associated reflectors<br/>with a clean cloth or paper wipe.</li></ol>   |              |               |              |                        |       |
|                                   |            | <ol> <li>Ensure all tools, lubricants, rags, and<br/>miscellaneous materials are removed from<br/>the area.</li> </ol>                                  |              |               |              |                        |       |
| DA CLEANING<br>AND<br>LUBRICATION | 10.        | Check and Lubricate Discharge Axis (DA)<br>Rollers and Tracks. Check DA 2 Floor Feed, 1<br>Drive, and 2 Timing Belts. Clean and Check<br>DA Photocells. |              | 9             |              |                        |       |
|                                   |            |   |              |               |              |                        |       |

| Maintenance re                | chnicai Supp |   | enu      | er                      |      |   |  |            |     |       |      |               |            | IN     | /IIVIC | J-U <sup>2</sup> | 13-14 |
|-------------------------------|--------------|---|----------|-------------------------|------|---|--|------------|-----|-------|------|---------------|------------|--------|--------|------------------|-------|
| U.S. Postal                   | Service      |   |          |                         |      |   |  |            | IDE | NTIF  | ICAT | ION           |            |        |        |                  |       |
| Maintenance                   | Checklist    |   | RK<br>DE |                         |      |   |  | MEN<br>NYM |     |       |      | _             | ASS<br>DDE | N      | UMBI   | ĒR               | TYPE  |
|                               |              | 0 | 3        | М                       | S    | Т |  |            |     |       |      | С             | Α          | 2      | 0      | 2                | М     |
| Equipment Nomenclatur<br>LM M |              |   | hoot     | nt Mo<br>ing S<br>t Pha | Star |   |  |            | В   |       |      | name<br>077ah |            | Occurr |        | eekly            | ′     |
| Part or                       | Item<br>No   |   |          |                         |      |   |  |            |     | sholo | ls   |               |            |        |        |                  |       |

|                        |            | Unit Phase 3A and 3B  |              |               |              |                        |       |
|------------------------|------------|---|--------------|---------------|--------------|------------------------|-------|
| Part or<br>Component   | Item<br>No | Task Statement and Instruction (Comply with all current safety precautions)   | Est.<br>Time | Min.<br>Skill |              | Threshold              | S     |
| Component              | NO         | (Comply with all current salety precautions)  | Req<br>(min) | Lev           | Run<br>Hours | Pieces<br>Fed<br>(000) | Freq. |
|                        |            | WARNING   |              |               |              |                        |       |
|                        |            | Discard or dispose of chemical soaked materials according to MSDS and in accordance with local procedures.                              |              |               |              |                        |       |
|                        |            | <ol> <li>Using a rag or paper with solvent, wipe clean<br/>the DA rollers and track assemblies.</li> </ol>                              |              |               |              |                        |       |
|                        |            | <ol><li>Check DA rollers and track assemblies for<br/>signs of wear or damage such as pitting,<br/>shavings, or sharp edges.</li></ol>  |              |               |              |                        |       |
|                        |            | WARNING   |              |               |              |                        |       |
|                        |            | Chemical proof goggles (with side shields), and rubber gloves must be worn when using CRC 3-36.   |              |               |              |                        |       |
|                        |            | <ol> <li>Using a clean, dry cloth, apply a thin film of<br/>CRC 3-36 lubricant (or equivalent) to the DA<br/>tracks.</li> </ol>         |              |               |              |                        |       |
|                        |            | <ol> <li>Visually check DA floor, drive, and timing<br/>belts for signs such as fraying, cracking, or<br/>excessive wear.</li> </ol>    |              |               |              |                        |       |
|                        |            | 5. Clean DA photocells and associated reflectors with a clean cloth or paper wipe.  |              |               |              |                        |       |
|                        |            | <ol> <li>Ensure all tools, lubricants, rags, and<br/>miscellaneous materials are removed from<br/>the area.</li> </ol>                  |              |               |              |                        |       |
| ESD SHOES<br>CHECK SA1 |            | Verify Proper Operation of ESD Shoes. Check<br>Condition of Lower and Upper SA Drives<br>Belts and Spreader Shoe Gaps (SA1).            | 32           | 9             |              |                        |       |
|                        |            | WARNING   |              |               |              |                        |       |
|                        |            | Ensure VA Carriage is in lowest position.   |              |               |              |                        |       |
|                        |            | NOTE  |              |               |              |                        |       |
|                        |            | A scissors lift, or other lifting device, is necessary to access Shelf Axis (SA) upper drive belts and to check operation of ESD shoes. |              |               |              |                        |       |

| MMO-043-14                   | l O a maior a | Maintenance Technical Support |   |                |                          |         |              |       |                  |              |              |                      |                        |       |  |  |
|------------------------------|---------------|-------------------------------|---|----------------|--------------------------|---------|--------------|-------|------------------|--------------|--------------|----------------------|------------------------|-------|--|--|
| U.S. Posta  Maintenance      |               | st                            | WORK<br>CODE                                |                |                          |         | MENT<br>ONYM | IDENT | IFICAT           | CI           | _ASS<br>ODE  | N                    | JMBER                  | TYPE  |  |  |
|                              |               |                               | 0 3   | М              | S                        |         |              |       |                  | С            | A            | 2                    | 0 2                    | М     |  |  |
| Equipment Nomenclatu<br>LM N |               |                               |   | ting S         | del<br>Star Bu<br>ase 3A |         |              |       | tin File<br>mm09 |              | h            | Occurrence<br>Weekly |                        |       |  |  |
| Part or                      | Item          |                               | Task Statement and Instruction              |                |                          |         |              |       |                  | Est.<br>Time | Min.         |                      | Thresholds             |       |  |  |
| Component                    | No            | (1                            | Comply with all current safety precautions) |                |                          |         |              |       |                  |              | Skill<br>Lev | Run<br>Hours         | Pieces<br>Fed<br>(000) | Freq. |  |  |
|                              |               | racks                         | letion c                                    | f thi          | d. All                   | sites s | should       | have  | ;                |              |              |                      |                        |       |  |  |
|                              |               | shelve<br>purpos              | red the es disables on a safety fer         | ed in<br>daily | PMA0<br>basis            | for m   | nainte       | nance | •                |              |              |                      |                        |       |  |  |
|                              |               |                               |   |                | RNIN                     |         |              | , 0   |                  |              |              |                      |                        |       |  |  |
|                              |               |                               | e perfo<br>nust dor                         | the            |                          | priate  |              |       | 3                |              |              |                      |                        |       |  |  |
|                              |               |                               |   |                | worki                    | ng ar   |              |       |                  |              |              |                      |                        |       |  |  |
|                              | 2. Remo       |                               |   |                |                          |         |              |       | 1                |              |              | 1                    | 1                      |       |  |  |

3. Place Main Disconnect Switch S1 in the ON

4. Restore air pressure to Filter Regulator

5. Reset the Main Facilities STAR circuit

6. Position the Main Disconnect Switch (CB-1) to apply 480 VAC 3-phases to the MCC. The MCC power supplies and the internal fans

7. Turn On the UPS and allow the internal self diagnostic routine to complete and the green

8. Turn On the monitor and the cell controller. Allow to the cell controller to boot up.

9. When prompted, press Ctrl-Alt-Delete to access the Windows NT Logon box. At the password default prompt, press ENTER and wait one minute for all processes to start.

(up) position.

will come on.

LED to illuminate.

breaker, as required.

Supply

| U.S. Postal Service            |   |   |   |   |   |  |  | IDEI | NTIFI         | CATI | ION           |   |        |      |      |   |
|--------------------------------|---|---|---|---|---|--|--|------|---------------|------|---------------|---|--------|------|------|---|
| Maintenance Checklist          |   | PRK EQUIPMEN<br>DE ACRONYN                                      |   |   |   |  |  |      | CLASS<br>CODE |      |               |   | N      | JMBE | TYPE |   |
|                                | 0 | 3   | М | S | Т |  |  |      |               |      | С             | Α | 2      | 0    | 2    | М |
| Equipment Nomenclature  LM MST |   | Equipment Model Shooting Star Bulk Staging Unit Phase 3A and 3B |   |   |   |  |  |      |               |      | name<br>077ah |   | Occurr |      | ekly | , |

|              | Unit Phase 3A and 3B  |                      |              |              |                        |       |
|--------------|---|----------------------|--------------|--------------|------------------------|-------|
| Part or Item | Task Statement and Instruction  | Est.                 | Min.         |              | Thresholds             | 3     |
| Component No | (Comply with all current safety precautions)  | Time<br>Req<br>(min) | Skill<br>Lev | Run<br>Hours | Pieces<br>Fed<br>(000) | Freq. |
|              | NOTE  |                      |              |              |                        |       |
|              | If one minute has not elapsed before the SHORTCUT TO INTERFACE.EXE Icon is activated, a prompt screen will appear advising SHORTCUT TO INTERFACE.EXE is terminated due to ORACLE not available.                   |                      |              |              |                        |       |
|              | 10. Double click on the SHORTCUT TO INTERFACE.EXE Icon. The STAR Console Login screen appears.  |                      |              |              |                        |       |
|              | NOTE  |                      |              |              |                        |       |
|              | The LOGIN name of the user who last successfully logged into the system appears initially in this field. To return to the LOGIN name window, click it with the trackball or press SHIFT-TAB.                      |                      |              |              |                        |       |
|              | 11. Enter the USER NAME and PASSWORD.   |                      |              |              |                        |       |
|              | 12. The CELL STATUS screen appears after successful LOGIN. Wait for a green CONNECTED to appear at the right of the NETWORK status, indicating the cell controller established communication with the TMS system. |                      |              |              |                        |       |
|              | 13. Review the CELL STATUS screen for errors. Review the Fault Description and note any discrepancies.  |                      |              |              |                        |       |
|              | 14. Physically close the safety gates.  |                      |              |              |                        |       |
|              | 15. Select Maint Mode option from main screen.  |                      |              |              |                        |       |
|              | <ol> <li>Access the MAINTENANCE MODE screen.<br/>Select the Discrete I/O screen option under<br/>the Miscellaneous section.</li> </ol>  |                      |              |              |                        |       |
|              | 17. At the Discrete I/O screen, select the Status screen option.  |                      |              |              |                        |       |
|              | 18. Click the Disable PLC button in the Safety Controls section.  |                      |              |              |                        |       |
|              | <ol> <li>Under the Safety Controls section, uncheck<br/>the UNLOCK GATE option to ensure the<br/>safety gates are locked.</li> </ol>  |                      |              |              |                        |       |

U.S. Postal Service

Maintenance Technical Support Center

CLASS NUMBER TYPE

IDENTIFICATION

| Maintenance Checkl            | ist WORK CODE  | EQUIPMEN<br>ACRONYN   |   |                      | ASS<br>ODE     | NU           | MBER                     | TYPE  |
|-------------------------------|--|---|---|----------------------|----------------|--------------|--------------------------|-------|
|                               | 0 3  | M S T   | С   | Α                    | 2              | 0 2          | М                        |       |
| Equipment Nomenclature LM MST |  | <sup>nt Model</sup><br>ting Star Bulk Staging<br>t Phase 3A and 3B  | Bulletin File<br>mm09                               |                      | h              | Occurre      | <sup>nce</sup><br>Weekly | ,     |
| Part or Item                  |  | Statement and Instruction   |   | Est.                 | Min.           |              | Threshold                | S     |
| Component No                  | (Comply wit  | th all current safety precau  | tions)  | Time<br>Req<br>(min) | Skill L<br>Lev | Run<br>Hours | Pieces<br>Fed<br>(000)   | Freq. |
|                               |  | Close button to retu<br>CE MODE screen.   | irn to the  |                      |                |              |                          |       |
|                               |  | WARNING   |   |                      |                |              |                          |       |
|                               |  | vhen working aroun<br>when power has  |   |                      |                |              |                          |       |
|                               | 21. Press the E-S<br>On button.                                    | Stop reset, and then th   | e Power   |                      |                |              |                          |       |
|                               | 22. Home ALL to<br>to the Home p                                   | get one of the ESD s<br>position.   | hoes close  |                      |                |              |                          |       |
|                               |  | ENANCE MODE scree<br>Pendent button.  | en, click   |                      |                |              |                          |       |
|                               | so ESD sho using Penda transition int conductor stri conductor str | sors lift outside the sames may be observed int, rotate SA so so one and out of end prail, then into and copy in the could be repeated for the same of the could be repeated for the same of the same | d. While the shoes d of one but of other e of BSU). |                      |                |              |                          |       |
|                               |  | ates, visually check th<br>signs of wear such as  |   |                      |                |              |                          |       |
|                               |  | A so that the rack who<br>been removed is loca<br>celt.   |   |                      |                |              |                          |       |
|                               | [  | WARNING   |   |                      |                |              |                          |       |
|                               | Ensure the V its lowest pos  | A Carriage assemb sition.   | ly is in  |                      |                |              |                          |       |
|                               | 27. Select the CE main screen h                                    | LL OFFLINE option on the control of | n any   |                      |                |              |                          |       |
|                               | 28. The green sta<br>ENTER light b                                 | nck lights and the CSS<br>pegin to flash.   | SS OK-TO-   |                      |                |              |                          |       |
|                               | and comes to   | oller completes all tra<br>a controlled stop. The<br>HOME position.   |   |                      |                |              |                          |       |

| U.S. Postal Service            |   |   |   |   |   |  |  | IDEI | NTIFI         | CATI | ION           |   |        |      |      |   |
|--------------------------------|---|---|---|---|---|--|--|------|---------------|------|---------------|---|--------|------|------|---|
| Maintenance Checklist          |   | PRK EQUIPMEN<br>DE ACRONYN                                      |   |   |   |  |  |      | CLASS<br>CODE |      |               |   | N      | JMBE | TYPE |   |
|                                | 0 | 3   | М | S | Т |  |  |      |               |      | С             | Α | 2      | 0    | 2    | М |
| Equipment Nomenclature  LM MST |   | Equipment Model Shooting Star Bulk Staging Unit Phase 3A and 3B |   |   |   |  |  |      |               |      | name<br>077ah |   | Occurr |      | ekly | , |

|           |      |   | Unit Phase   | 3A and 3B  |  |                      |                |              |                        |       |
|-----------|------|---|--|--|--|----------------------|----------------|--------------|------------------------|-------|
| Part or   | Item |   |  | nt and Instruction   |  | Est.                 | Min.           | -            | Thresholds             | 3     |
| Component | No   | (0  | Comply with all curr   | ent safety precaution  | is)  | Time<br>Req<br>(min) | Skill .<br>Lev | Run<br>Hours | Pieces<br>Fed<br>(000) | Freq. |
|           |      | 30. The o   | reen stack light   | s ao Off.  |  |                      |                |              |                        |       |
|           |      | _   | _  | otion from main s  | screen.  |                      |                |              |                        |       |
|           |      | Selec   |  | NANCE MODE<br>/O screen optio<br>n.  |  |                      |                |              |                        |       |
|           |      |   | e Discrete I/O s<br>n option.  | creen, select the  | e Status   |                      |                |              |                        |       |
|           |      | the<br>Contr  | Discrete I/O ols section. C  | LC option is disp<br>Status Screen<br>lick on the Disal<br>nable PLC if req  | Safety<br>ble PLC                                  |                      |                |              |                        |       |
|           |      | pneur<br>auton<br>press<br>KP M<br>remov<br>contro<br>Contr | matic system active from the solain Motor Conves the 480 VADIIIers and the p | THE GATE option  The purge value vated, removing vistem. In additionation the series of the most resent at the contract of the contrac | lve is ng air tion, the d. This vo drive tor fans. |                      |                |              |                        |       |
|           |      | 36. Open  | the safety gate  | s.   |  |                      |                |              |                        |       |
|           |      |   | t the Close of TENANCE MO  | option. Return<br>DE screen to LO  | to the<br>G OFF.                                   |                      |                |              |                        |       |
|           |      | the<br>SHUT<br>promp  | lower screen<br>FDOWN option   | and select YE he software to c   | ect the<br>S when                                  |                      |                |              |                        |       |
|           |      |   | WAR  | NING   |  |                      |                |              |                        |       |
|           |      |   |  | the following s<br>propriate PPE.  | steps  |                      |                |              |                        |       |
|           |      |   | the MCC doors  | s; turn Off the co<br>UPS.   | omputer,   |                      |                |              |                        |       |
|           |      |   | the MCC M<br>ker (CB-1).   | ain Disconnect   | Circuit  |                      |                |              |                        |       |
|           |      |   |  |  | _  |                      |                |              |                        |       |

| U.S. Postal Service              | e  | IDENTIFIC   | ATION                |              |              |                          |       |  |  |
|----------------------------------|--|---|----------------------|--------------|--------------|--------------------------|-------|--|--|
| Maintenance Che                  | cklist   | WORK EQUIPMENT CODE ACRONYM   |                      | LASS<br>ODE  | NU           | MBER                     | TYPE  |  |  |
|                                  |  | 0 3 M S T   | С                    | А            |              | 0 2                      | М     |  |  |
| Equipment Nomenclature<br>LM MST |  | Equipment Model Shooting Star Bulk Staging Unit Phase 3A and 3B  Bulletin F mm  | Filename<br>09077a   | h            | Occurre      | <sup>nce</sup><br>Weekly | ,     |  |  |
| Part or Ite                      | m  | Task Statement and Instruction  | Est.                 | Min.         |              | Threshold                | s     |  |  |
| Component No.                    | ) (  | (Comply with all current safety precautions)  | Time<br>Req<br>(min) | Skill<br>Lev | Run<br>Hours | Pieces<br>Fed<br>(000)   | Freq. |  |  |
|                                  | the tagou curre proce hasp Circu and multi-Disco signer 41. Close proce locked 480 M CB1 M the C | edures. Attach a red multi-lock lockout device on the Main Facility it Breaker; and secure with a lock signed tag. Otherwise, attach a clock lockout device to the Main bonnect Switch S1 using a lock and ed tag.  Be MCC doors. Perform lockout/tagou edures as prescribed by the current local bout/restore procedures.  WARNING  WARNING |                      |              |              |                          |       |  |  |

| U.S. Postal Service           |              | IDE   |     |      |      |       |                       | IDENTIFICATION |               |  |     |               |            |       |      |   |   |
|-------------------------------|--------------|---|-----|------|------|-------|-----------------------|----------------|---------------|--|-----|---------------|------------|-------|------|---|---|
| Maintenance Checklist         | WORK<br>CODE |   |     |      |      |       | MENT                  |                | _             |  |     | CLASS<br>CODE |            | Νl    | TYPE |   |   |
|                               | 0            | 3   | М   | S    | Т    |       |                       |                |               |  | С   | Α             |            | 2     | 0    | 2 | М |
| Equipment Nomenclature LM MST |              | Equipment Model Shooting Star Bulk Staging Unit Phase 3A and 3B |     |      |      | В     | ulletir<br><b>m</b> ı |                | name<br>077ah |  | Occ | urr           | ence<br>We | eekly | /    |   |   |
|                               |              | Uni   | ιPn | ase. | SA 8 | ina s | D                     |                |               |  |     |               |            |       |      |   |   |

|                        |            | <u>'</u>   |              |               |              |                        |       |
|------------------------|------------|--|--------------|---------------|--------------|------------------------|-------|
| Part or<br>Component   | Item<br>No | Task Statement and Instruction (Comply with all current safety precautions)                      | Est.<br>Time | Min.<br>Skill |              | Thresholds             | 3     |
| Component              | 140        | (Comply with all current safety precautions)   | Req<br>(min) | Lev           | Run<br>Hours | Pieces<br>Fed<br>(000) | Freq. |
|                        |            | 45. Enter the gated area.  |              |               |              |                        |       |
|                        |            | •  |              |               |              |                        |       |
|                        |            | <ol> <li>Remove covers over the SA1 lower belt<br/>drive.</li> </ol>                             |              |               |              |                        |       |
|                        |            | 47. Visually check the SA1 lower drive belt for signs of wear such as fraying or cracking.       |              |               |              |                        |       |
|                        |            | NOTE   |              |               |              |                        |       |
|                        |            | Insert the feeler gauge as close to the center of the rack as possible.                          |              |               |              |                        |       |
|                        |            | 48. Check the lower SA1 spreader shoe gap with a 5/32" feeler gauge.                             |              |               |              |                        |       |
|                        |            | 49. Reinstall all lower SA1 drive belt covers previously removed.                                |              |               |              |                        |       |
|                        |            | 50. Repeat steps 47 and 48 for the upper SA1 belt and spreader shoes gap.                        |              |               |              |                        |       |
|                        |            | 51. Clean up and remove all tool and equipment from inside the safety fence area.                |              |               |              |                        |       |
| ESD SHOES<br>CHECK SA2 | 12.        | Verify Proper Operation of the ESD Shoes and Check Condition of Lower and Upper SA2 Drive Belts. | 38           | 9             |              |                        |       |
|                        |            | WARNING  |              |               |              |                        |       |
|                        |            | Before performing the following steps you must don the appropriate PPE.                          |              |               |              |                        |       |
|                        |            | WARNING  |              |               |              |                        |       |
|                        |            | Be cautious when working around or on equipment when power has been applied.                     |              |               |              |                        |       |
|                        |            | NOTE   |              |               |              |                        |       |
|                        |            | The following task may require two people to complete depending on length of the BSU.            |              |               |              |                        |       |
|                        |            | Exit safety gate area and close safety gate.   |              |               |              |                        |       |
|                        |            | Remove the lock and lockout device on the handle of Main Disconnect Switch, S1.                  |              |               |              |                        |       |

|                                 |      | Service IDENTIFICATION   |   |                      |               |              |                        |          |  |  |  |
|---------------------------------|------|--|---|----------------------|---------------|--------------|------------------------|----------|--|--|--|
| U.S. Posta<br><b>Maintenanc</b> |      |  | UIPMENT                                 | CI                   | _ASS<br>ODE   | NU           | JMBER                  | TYPE     |  |  |  |
| Equipment Nomenclati            |      | 0 3 M S T  | CRONYM Bulletin Fi                      | С                    | A             | 2<br>Occurre | 0 2<br>ence            | М        |  |  |  |
| LM N                            |      | Shooting Star Bulk S<br>Unit Phase 3A an   | 0 0                                     | )9077a               | h             |              | Weekly                 | <i>!</i> |  |  |  |
| Part or                         | Item | Task Statement and Ins   |   | Est.                 | Min.<br>Skill |              | Threshold              | ls       |  |  |  |
| Component                       | No   | (Comply with all current safet   | , precautions)                          | Time<br>Req<br>(min) | Lev           | Run<br>Hours | Pieces<br>Fed<br>(000) | Freq.    |  |  |  |
|                                 | 3.   | Place Main Disconnect Swit (up) position.  | ch, S1 in the ON                        |                      |               |              |                        |          |  |  |  |
|                                 | 4.   | Remove the lockout device Valve and rotate the air sup to the SUP position.  |   |                      |               |              |                        |          |  |  |  |
|                                 | 5.   | Reset the Main Facilitie<br>breaker, as required.  | s STAR circuit                          |                      |               |              |                        |          |  |  |  |
|                                 | 6.   | Position the Main Disconner<br>to apply 480 VAC 3-phases<br>MCC power supplies and<br>will come on.  | to the MCC. The                         |                      |               |              |                        |          |  |  |  |
|                                 | 7.   | Turn On the UPS and allow diagnostic routine to comple LED to illuminate.  |   |                      |               |              |                        |          |  |  |  |
|                                 | 8.   | Turn On the monitor and t<br>Allow to the cell controller to   |   |                      |               |              |                        |          |  |  |  |
|                                 | 9.   | When prompted, press (access the Windows NT Lopassword default prompt, pwait one minute for all proce  | ogon box. At the ress ENTER and         |                      |               |              |                        |          |  |  |  |
|                                 |      | NOTE   |   |                      |               |              |                        |          |  |  |  |
|                                 |      | f one minute has not elaps<br>SHORTCUT TO INTERFAC<br>activated, a prompt scree<br>advising SHORTCU<br>NTERFACE.EXE is termin<br>DRACLE not available. | E.EXE Icon is<br>n will appear<br>IT TO |                      |               |              |                        |          |  |  |  |
|                                 | 10.  | Double click on the SINTERFACE.EXE Icon. Th<br>Login screen appears.   |   |                      |               |              |                        |          |  |  |  |
|                                 |      | NOTE   |   |                      |               |              |                        |          |  |  |  |
|                                 |      | The LOGIN name of the uuccessfully logged into uppears initially in this field.  | the system                              |                      |               |              |                        |          |  |  |  |

26 Attachment 3

Wait for a green

the LOGIN name window, click it with the

12. The CELL STATUS screen appears after

11. Enter the USER NAME and PASSWORD.

trackball or press SHIFT-TAB.

successful LOGIN.

| U.S. Postal Service           |   |          |                          |      |   |                 | IDE | NTIFI                 | CAT | ON            |           |       |      |      |      |
|-------------------------------|---|----------|--------------------------|------|---|-----------------|-----|-----------------------|-----|---------------|-----------|-------|------|------|------|
| Maintenance Checklist         | _ | RK<br>DE |                          |      | _ | <br>MENT<br>NYM | •   |                       |     | _             | ASS<br>DE | N     | JMBE | R    | TYPE |
|                               | 0 | 3        | М                        | S    | Т |                 |     |                       |     | C             | Α         | 2     | 0    | 2    | М    |
| Equipment Nomenclature LM MST |   | hoot     | nt Mod<br>ing S<br>t Pha | Star |   |                 | Ві  | ulletin<br><b>m</b> ı |     | name<br>077ah | -         | ccurr |      | ekly | /    |

|                      |            | Unit Phase 3A and 3B  |              |               |              |                        |       |
|----------------------|------------|---|--------------|---------------|--------------|------------------------|-------|
| Part or<br>Component | Item<br>No | Task Statement and Instruction (Comply with all current safety precautions)   | Est.<br>Time | Min.<br>Skill |              | Threshold              | s     |
| Сотроноп             | 140        | (comply with an outlont salety probabilities)   | Req<br>(min) | Lev           | Run<br>Hours | Pieces<br>Fed<br>(000) | Freq. |
|                      |            | CONNECTED to appear at the right of the NETWORK status, indicating the cell controller established communication with TMS system.   |              |               |              |                        |       |
|                      |            | 13. Review the CELL STATUS screen for errors. Review the Fault Description and note any discrepancies.  |              |               |              |                        |       |
|                      |            | 14. Physically close the safety gates.  |              |               |              |                        |       |
|                      |            | 15. Select Maint Mode option from main screen.  |              |               |              |                        |       |
|                      |            | <ol> <li>Access the MAINTENANCE MODE screen.</li> <li>Select the Discrete I/O screen option under<br/>the Miscellaneous section.</li> </ol>   |              |               |              |                        |       |
|                      |            | 17. At the Discrete I/O screen, select the Status screen option.  |              |               |              |                        |       |
|                      |            | 18. Click the Disable PLC button in the Safety Controls section.  |              |               |              |                        |       |
|                      |            | <ol> <li>Under the Safety Controls section, uncheck<br/>the UNLOCK GATE option to ensure the<br/>safety gates are locked.</li> </ol>  |              |               |              |                        |       |
|                      |            | 20. Select the Close button to return to the MAINTENANCE MODE screen.   |              |               |              |                        |       |
|                      |            | WARNING   |              |               |              |                        |       |
|                      |            | Be cautious when working around or on equipment when power has been applied.  |              |               |              |                        |       |
|                      |            | 21. At the Main Control Cabinet, press E-Stop reset button, then the Power ON button.   |              |               |              |                        |       |
|                      |            | 22. Home ALL to get one of the ESD shoes close to the Home position.  |              |               |              |                        |       |
|                      |            | 23. At the MAINTENANCE MODE screen, under the Machine control tab, click on the Pendent Enable button.  |              |               |              |                        |       |
|                      |            | 24. Position the scissors lift outside of the safety fence near SA2 end of the BSU so that the ESD shoes may be observed. While using the Pendant, rotate SA so shoes transition into and out of end of one conductor strip rail, then into and out the other conductor |              |               |              |                        |       |

| U.S. Postal            | Service |                                |                                      |            |         |         |               | IDENTI | FICAT |                |              |         |              |       |
|------------------------|---------|--------------------------------|--------------------------------------|------------|---------|---------|---------------|--------|-------|----------------|--------------|---------|--------------|-------|
| Maintenance            | Check   | list                           | WORK<br>CODE                         |            | E       |         | PMENT<br>ONYM |        |       |                | _ASS<br>ODE  | NU      | JMBER        | TYPE  |
| mamtonanoo             | Onoon   |                                | 0 3                                  | M S        | Т       | ACK     | ואודאוכ       |        |       | C              | A            | 2       | 0 2          | М     |
| Equipment Nomenclature |         |                                | Equipmer<br>Shooti                   |            | r Bull  |         |               |        |       | ename<br>9077a |              | Occurre |              |       |
| Part or                | Item    |                                | Task S                               | Statemer   | nt and  | Instru  | ction         |        |       | Est.           | Min.         |         | Thresho      | olds  |
| Component              | No      | (0                             | Comply with                          | h all curr | ent sat | fety pr | ecautio       | ns)    |       | Time<br>Rea    | Skill<br>Lev | Run     | Pieces       | Freq. |
|                        |         |                                |                                      |            |         |         |               |        |       | (min)          | Lev          | Hours   | Fed<br>(000) |       |
|                        |         |                                | rail (on c                           |            |         | BSU     | J). Re        | peat t | this  |                |              |         |              |       |
|                        |         | •                              | for all 3 I                          |            |         |         |               |        |       |                |              |         |              |       |
|                        |         | 25. As the drive crack         | belt for s                           |            |         |         |               |        |       |                |              |         |              |       |
|                        |         | 26. Positi                     | J                                    | Λ co th    | o rac   | k wh    | oro th        | 10     |       |                |              |         |              |       |
|                        |         | shelv                          | es have l<br>2 drive b               | been re    |         |         |               |        | xt    |                |              |         |              |       |
|                        |         | 27. Selec<br>main              | t the CEI<br>screen h                |            |         |         | on on         | any    |       |                |              |         |              |       |
|                        |         | 28. The g<br>ENTE              | reen sta<br>R light b                |            |         |         | CSSS          | OK-T   | ГО-   |                |              |         |              |       |
|                        |         |                                | ell contro<br>omes to<br>as to the l | a contr    | olled   | stop    |               |        | ns    |                |              |         |              |       |
|                        |         | 30. The g                      | reen sta                             | ck light   | s go    | Off.    |               |        |       |                |              |         |              |       |
|                        |         | 31. Selec                      | t Maint M                            | lode o     | otion   | from    | main          | scree  | n.    |                |              |         |              |       |
|                        |         |                                | ss the M<br>t the Dis<br>ellaneous   | screte     | I/O s   |         |               |        |       |                |              |         |              |       |
|                        |         | 33. At the scree               | e Discret<br>n option.               |            | creei   | n, se   | lect th       | ne Sta | tus   |                |              |         |              |       |
|                        |         | 34. Ensur<br>Discre<br>section | ete I/O S                            |            | Scre    | en S    | afety         | Contr  | ols   |                |              |         |              |       |

28 Attachment 3

change to Enable PLC if required.

system

pneumatic

and sensors.

36. Open the safety gates.

37. Select the Close option.

the lower screen display.

automatically

35. Select the UNLOCK THE GATE option. The

activated, pressure from the system. In addition, the KP Main Motor Contactor is opened. This removes the 480 VAC from the servo drive controllers and the power to the motor fans. Control voltage is present at the controllers

MAINTENANCE MODE screen to LOG OFF. 38. Access the Windows NT START button at

purge

valve

Return to the

Select

removing

| Maintenance Te               | echnica    | al Sup                                     | port (  | Cent  | er   |   |   |  |  |   |      |                |               | Λ            | 1MO-04                 | 13-14 |
|------------------------------|------------|--|---|---|--|---|---|--|--|---|------|----------------|---------------|--------------|------------------------|-------|
| U.S. Posta                   | al Service |  | 10/   | ODK   |  |   |   | OL HDM   |  | DENTI   | FICA |                | 1 4 0 0       | L NII        | IMPED                  | TVDE  |
| Maintenanc                   | e Check    | list                                       |   | ORK<br>ODE  |  |   |   | QUIPM  |  |   |      |                | LASS<br>ODE   | N            | JMBER                  | TYPE  |
| 1                            |            |  | 0   | 3   | М  | S   | Т   |  |  |   |      | С              | А             | 2            | 0 2                    | М     |
| Equipment Nomenclate<br>LM N |            |  |   |   | ing S  | odel<br>Star B<br>ase 3 <i>i</i>                              |   |  |  |   |      | ename<br>9077a | h             | Occurr       | ence<br>Weekly         | /     |
| Doubles                      | 11         | 1  |   | T1  | 01-1-  |   |   |  |  |   |      | L = -1         | L N A' :-     |              | Th l l.                | I-    |
| Part or<br>Component         | Item<br>No |  | (Com  |   |  | ment a current  |   |  |  | ns)   |      | Est.<br>Time   | Min.<br>Skill |              | Threshold              |       |
|                              |            |  |   |   |  |   |   |  |  |   |      | Req<br>(min)   | Lev           | Run<br>Hours | Pieces<br>Fed<br>(000) | Freq. |
|                              |            | pı<br>sł                                   | HUTDC<br>compted<br>nutdown   | d. V<br>n prod  | Vait<br>cess<br>W                                  | for s<br>s.<br><b>ARNII</b>                                   | soft<br>NG  | ware   | to o   | compl   | ete  |                |               |              |                        |       |
|                              |            | уо   | fore p<br>u mus   | t don   | the  | appr  | opr   | iate F   | PPE.   |   |      |                |               |              |                        |       |
|                              |            |  | pen the<br>e moni   |   |  |   |   | Off t  | he c   | ompu  | ter, |                |               |              |                        |       |
|                              |            |  | pen th<br>reaker  |   |  | Mair  | n [   | Discor   | nec  | t Cire  | cuit |                |               |              |                        |       |
|                              |            |  |   |   | WA   | ARNII   | NG  |  |  |   |      |                |               |              |                        |       |
|                              |            | the<br>loc<br>pre<br>loc<br>Fa<br>a<br>att | nen po<br>kkout/t<br>escribe<br>store p<br>k has<br>cility O<br>lock a<br>ach a<br>in Dis<br>d sign | MCC<br>agou<br>ed by<br>proce<br>p loo<br>ircui<br>and<br>multi<br>conn | t<br>the<br>dure<br>kou<br>it Bro<br>sigr<br>-lock | per<br>proper<br>curr<br>es. A<br>ut dev<br>eaker<br>ned tock | fori<br>oce<br>ent<br>ttac<br>vice<br>; ar<br>tag.<br>kou | m<br>dures<br>local<br>ch a r<br>on<br>nd se<br>O<br>t dev | sy<br>l loc<br>red r<br>the<br>cure<br>ther<br>ice t | stem<br>as<br>kout/<br>nulti-<br>Main<br>with<br>wise,<br>o the |      |                |               |              |                        |       |
|                              |            | pı   | lose M<br>ocedur<br>ckout/r   | es as   | s pre  | escribe   | ed b  | y the  |  |   |      |                |               |              |                        |       |
|                              |            |  |   |   | WA   | ARNII   | NG  |  |  |   |      |                |               |              |                        |       |
|                              |            | CE<br>the<br>de<br>the<br>Sv               | O VAC 31 with B OFF ath from B line Vitch is  | the poson e side  | Mair<br>sition<br>lect<br>of<br>ntact              | n Disc<br>n. S<br>rocut<br>the<br>ted.                        | con<br>Sev<br>ion<br>Mai<br>The                           | nect i<br>ere i<br>will<br>in Di<br>Mai                    | Swit<br>injur<br>occ<br>scor<br>scor                 | ch in<br>y or<br>ur if<br>nnect<br>cility                       |      |                |               |              |                        |       |

Attachment 3 29

exterior must be locked out to completely remove all system power.

42. Locate the facility Main Power Distribution Panel. Disconnect STAR circuit breaker power, and install lockout device and lock.

U.S. Postal Service

Maintenance Technical Support Center IDENTIFICATION

| U.S. Postal                | Service    |                        | WOR                | κT     |          | FOI                 | JIPMENT                | IDENTII | FICAT    |               | ASS           | NI           | IMBER         | TYPE    |
|----------------------------|------------|------------------------|--------------------|--------|----------|---------------------|------------------------|---------|----------|---------------|---------------|--------------|---------------|---------|
| Maintenance                | Check      | list                   | COD                | E      |          |                     | RONYM                  |         | •        |               | ODE           |              | MIDEIX        |         |
|                            |            |                        |                    | 3 N    |          | Т                   |                        |         |          | С             | Α             | 2            | 0 2           | M       |
| Equipment Nomenclatur LM M |            |                        |                    | ment M |          | Bulk S              | taging                 |         | in Filei | name<br>077al | h             | Occurre      | nce<br>Week   | dv      |
|                            | 01         |                        |                    |        |          | 3A and              |                        | ''      | 111100   | orra          | ''            |              | VVCCI         | ary .   |
|                            | · .        |                        | _                  | 1.0    |          |                     |                        |         | 1        | <i></i>       |               |              | <b>-</b>      |         |
| Part or<br>Component       | Item<br>No | ((                     |                    |        |          | and Inst            | truction<br>precaution | ns)     |          | Est.<br>Time  | Min.<br>Skill |              | Thresho       |         |
| ·                          |            | ,                      |                    |        |          |                     |                        |         |          | Req<br>(min)  | Lev           | Run<br>Hours | Piece:<br>Fed | s Freq. |
|                            |            |                        |                    |        |          |                     |                        |         |          | (11111)       |               |              | (000)         |         |
|                            |            |                        |                    | V      | VARN     | IING                |                        |         |          |               |               |              |               |         |
|                            |            |                        |                    |        |          |                     |                        |         |          |               |               |              |               |         |
|                            |            |                        |                    |        |          |                     | vice and<br>Air Val    |         |          |               |               |              |               |         |
|                            |            |                        |                    |        |          |                     | or inj                 |         |          |               |               |              |               |         |
|                            |            | perso                  | nnel.              |        |          |                     |                        |         |          |               |               |              |               |         |
|                            |            | 43. Rotat<br>EXH       | e the a            |        | pply s   | shut-of             | f valve to             | o the   |          |               |               |              |               |         |
|                            |            | 44. Instal             | l locko            | out de | vice a   | and loc             | k as pre               | scribe  | ed       |               |               |              |               |         |
|                            |            |                        |                    | ent lo | cal lo   | ckout/re            | estore                 |         |          |               |               |              |               |         |
|                            |            | proce<br>45. Enter     |                    | l area | near     | · SA2 d             | rive are               | a       |          |               |               |              |               |         |
|                            |            | 46. Remo               | •                  |        |          |                     |                        |         |          |               |               |              |               |         |
|                            |            | belt.                  | ove co             | veis   | iioiii i | ine iow             | ei SAZ                 | unve    |          |               |               |              |               |         |
|                            |            | 47. Chec<br>wear       |                    |        |          | drive b<br>or cracl |                        | gns of  |          |               |               |              |               |         |
|                            |            | 48. Chec<br>a 5/3      | k the l<br>2" feel |        |          | spread              | er shoe                | gap w   | vith     |               |               |              |               |         |
|                            |            | 49. Reins              | stall S/           | _      | •        | elt cove            | rs previ               | ously   |          |               |               |              |               |         |
|                            |            | remo                   |                    |        |          |                     |                        |         |          |               |               |              |               |         |
|                            |            | 50. Repe<br>belt a     |                    |        |          | 48 for t<br>es gap  |                        | r SA2   |          |               |               |              |               |         |
|                            |            | 51. Clear              |                    |        |          |                     |                        |         |          |               |               |              |               |         |
|                            |            |                        | motor<br>e gate    |        | of sec   | urity fe            | nce area               | a and   |          |               |               |              |               |         |
| SA BEARING<br>CLEANING AND |            | Clean an<br>Plate at E |                    |        |          |                     |                        | ring    |          | 14            | 9             |              |               |         |
| LUBRICATION                |            | . Idio at L            | Jour L             | 3      | J. J.    | · Juluo             | .u. 0.                 |         |          |               |               |              |               |         |
|                            |            |                        |                    | ٧      | VARN     | IING                |                        |         |          |               |               |              |               |         |
|                            |            | Disca                  | rd or              | disp   | ose o    | of cher             | nical so               | oaked   |          |               |               |              |               |         |
|                            |            | mater                  | ials a             | accor  | ding     | to M                | SDS a                  |         |          |               |               |              |               |         |
|                            |            | accor                  | dance              | with   | loca     | l proc              | edures.                |         |          |               |               |              |               |         |
|                            |            | 1. Enter               | gated              | l area | at tu    | rn end              | closest                | to SA2  | 2.       |               |               |              |               |         |
|                            |            | 2. Using               |                    |        |          |                     |                        |         |          |               |               |              |               |         |
|                            |            |                        |                    |        |          |                     | turn-arc               | und     |          |               |               |              |               |         |
|                            |            | bearii                 | ng pia             | ies 10 | 1080     | d whee              | 15.                    |         |          |               |               |              |               |         |

| U.S. Postal Service           |   |          |   |      |   |              | IDE   | NTIF                  | ICATI | ON            |           |        |      |       |      |
|-------------------------------|---|----------|---|------|---|--------------|-------|-----------------------|-------|---------------|-----------|--------|------|-------|------|
| Maintenance Checklist         |   | RK<br>DE |   |      | _ | QUIF<br>ACRO | <br>- |                       |       | _             | ASS<br>DE | N      | UMBI | R     | TYPE |
|                               | 0 | 3        | М | S    | Т |              |       |                       |       | С             | Α         | 2      | 0    | 2     | М    |
| Equipment Nomenclature LM MST |   | hoot     |   | Star |   | Stag         |       | ulletin<br><b>m</b> ı |       | name<br>077ah |           | Occurr |      | eekly | ′    |

| Part or   | Item | Task Statement and Instruction   | Est.                 | Min.         |              | Thresholds             | s     |
|-----------|------|--|----------------------|--------------|--------------|------------------------|-------|
| Component | No   | (Comply with all current safety precautions)   | Time<br>Req<br>(min) | Skill<br>Lev | Run<br>Hours | Pieces<br>Fed<br>(000) | Freq. |
|           |      |  | Time<br>Req          | Skill        | Run          | Pieces<br>Fed          |       |
|           |      | <ul><li>5. Rotate the air supply shut-off valve to the SUP position.</li><li>6. Verify the air pressure gauge on the FRS is indicating 90 +5/-1 PSI. Adjust if required.</li></ul> |                      |              |              |                        |       |

| U.S. Postal Service           | Э                                 |                                    | _  |                                  |                               | IDENTIFIC <i>A</i>    |                      |              |              |                        | •     |
|-------------------------------|-----------------------------------|------------------------------------|--|----------------------------------|-------------------------------|-----------------------|----------------------|--------------|--------------|------------------------|-------|
| Maintenance Chec              | klist                             | WORK<br>CODE                       |  |                                  | UIPMENT<br>CRONYM             |                       |                      | LASS<br>ODE  | NU           | IMBER                  | TYPE  |
|                               |                                   | 0 3                                | M S  | Т                                |                               |                       | С                    | Α            | 2            | 0 2                    | М     |
| Equipment Nomenclature LM MST |                                   | Shoo                               | ent Model<br>ting Star<br>it Phase                         |                                  |                               | Bulletin Fi<br>mm(    | lename<br>)9077a     | h            | Occurre      | weekly                 | ,     |
| Part or Item                  |                                   |                                    | Statemen   |                                  |                               |                       | Est.                 | Min.         |              | Threshold              | S     |
| Component No                  | (                                 | Comply wi                          | ith all curre  | ent safety                       | y precautic                   | ons)                  | Time<br>Req<br>(min) | Skill<br>Lev | Run<br>Hours | Pieces<br>Fed<br>(000) | Freq. |
|                               |                                   |                                    | ols, mate<br>d from th                                     |                                  |                               | is has                |                      |              |              |                        |       |
|                               | 8. Resto                          |                                    | ressure t  | o the F                          | Filter Re                     | gulator               |                      |              |              |                        |       |
|                               | 9. Rese                           | t the Ma<br>ker, as re             |  | ies ST                           | AR circu                      | ıit                   |                      |              |              |                        |       |
|                               | MCC                               | ply 480 \                          | VAC 3-pl<br>supplies                                       | hases                            | to the M                      | CC. The               |                      |              |              |                        |       |
|                               |                                   |                                    | utine to c   |                                  |                               |                       |                      |              |              |                        |       |
|                               | 12. Turn<br>Allow                 |                                    | nonitor a  |                                  |                               |                       |                      |              |              |                        |       |
|                               | pass                              | ss the W<br>word def               | ted press<br>/indows I<br>fault pror<br>ute for all        | NT Log<br>npt, pr                | gon box.<br>ess ENT           | At the ER and         |                      |              |              |                        |       |
|                               |                                   |                                    | NOT  | ΓΕ                               |                               |                       |                      |              |              |                        |       |
|                               | SHOF<br>activa<br>advisi<br>INTEF | RTCUT 1<br>ted, a<br>ng<br>RFACE.E | has not<br>TO INTE<br>prompt<br>SHO<br>EXE is<br>available | RFAC<br>screer<br>RTCU<br>termin | E.EXE le<br>n will a<br>T     | con is<br>ppear<br>TO |                      |              |              |                        |       |
|                               |                                   | RFACE.                             | on the SI<br>EXE Ico<br>appears                            | n. The                           |                               |                       |                      |              |              |                        |       |
|                               |                                   |                                    | NO   | ΓΕ                               |                               |                       |                      |              |              |                        |       |
|                               | succe<br>appea<br>the L0          | ssfully<br>irs initial<br>OGIN na  | name of<br>logged<br>lly in this<br>ame wind<br>ess SHIF   | into<br>s field.<br>dow, c       | the s<br>To ret<br>lick it wi | ystem<br>urn to       |                      |              |              |                        |       |
|                               | 15. Enter                         | the USI                            | ER NAM   | E and                            | PASSW                         | ORD.                  |                      |              |              |                        |       |

32 Attachment 3

16. The CELL STATUS screen appears after

| U.S. Postal Service            |   |            |       |   |      |                |     | IDENTIF | ICAT | ION           |           |        |      |       |      |
|--------------------------------|---|------------|-------|---|------|----------------|-----|---------|------|---------------|-----------|--------|------|-------|------|
| Maintenance Checklist          | _ | ORK<br>ODE |       |   | _    | QUIPN<br>ACROI |     |         |      |               | ASS<br>DE | Z      | UMBE | ĒR    | TYPE |
|                                | 0 | 3          | М     | S | Т    |                |     |         |      | С             | Α         | 2      | 0    | 2     | М    |
| Equipment Nomenclature  LM MST |   | •          | nt Mo |   | Bulk | Stag           | ina | Bulleti |      | name<br>077ah |           | Occurr |      | eekl  | I    |
|                                |   |            |       |   |      | ind 3E         |     |         |      | orran         |           |        | ***  | JOINI |      |

|           |      | Unit Phase 3A and 3B  |                      |              |              |                        |       |
|-----------|------|---|----------------------|--------------|--------------|------------------------|-------|
| Part or   | Item | Task Statement and Instruction  | Est.                 | Min.         |              | Threshold              | S     |
| Component | No   | (Comply with all current safety precautions)  | Time<br>Req<br>(min) | Skill<br>Lev | Run<br>Hours | Pieces<br>Fed<br>(000) | Freq. |
|           |      | successful LOGIN. Wait for a green CONNECTED to appear at the right of the NETWORK status indicating the cell controller established communication with the TMS system. |                      |              |              |                        |       |
|           |      | <ol> <li>Review the CELL STATUS screen for errors.<br/>Review the Fault Description and note any<br/>discrepancies.</li> </ol>  |                      |              |              |                        |       |
|           |      | 18. Physically close the safety gates.  |                      | l            |              |                        |       |
|           |      | 19. Select Maint Mode option from main screen.  |                      | l            |              |                        |       |
|           |      | 20. Access the MAINTENANCE MODE screen. Select the Discrete I/O screen option under the Miscellaneous section.  |                      |              |              |                        |       |
|           |      | 21. At the Discrete I/O screen, select the Status screen option.  |                      | l            |              |                        |       |
|           |      | 22. Click the Disable PLC button in the Safety Controls section.  |                      | ļ            |              |                        |       |
|           |      | 23. Under the Safety Controls section, uncheck the UNLOCK GATE option to ensure the safety gates are locked.  |                      |              |              |                        |       |
|           |      | WARNING   |                      | 1            |              |                        |       |
|           |      | Be cautious when working around or on equipment when power has been applied.  |                      |              |              |                        |       |
|           |      | 24. Select the Close button to return to the MAINTENANCE MODE screen.   |                      | 1            |              |                        |       |
|           |      | 25. Press the yellow E-Stop RESET pushbutton to reset the E-Stop circuitry.   |                      | ļ            |              |                        |       |
|           |      | NOTE  |                      | l            |              |                        |       |
|           |      | The system pneumatics will pressurize, signifying the K1 E-Stop relay and the K19 Safety Mat relay have been reset.   |                      |              |              |                        |       |
|           |      | 26. Press the green POWER ON pushbutton to apply power to the KP mainline contactor.  |                      |              |              |                        |       |
|           | <br> | 27. Click on the CELL ONLINE button to place the STAR in the ONLINE mode of operation.  |                      | 1            |              |                        |       |

U.S. Postal Service

Maintenance Technical Support Center

IDENTIFICATION

| Maintenance Ch  Equipment Nomenclature | heck | list                | WORK                                     |                       |               | EQUIP    | ⋈⊨NT    |        |           | ı Cl        | ASS          | ı NII  | JMBER     |       |
|--|------|---------------------|--|-----------------------|---------------|----------|---------|--------|-----------|-------------|--------------|--------|-----------|-------|
| Equipment Nemanolature                 |      |                     | CODE                                     |                       |               | ACRO     |         |        |           |             | ODE          | INC    | JIVIDLIN  | TYPE  |
| Equipment Nemonelature                 |      |                     | 0 3                                      | M S                   | T             |          | Ì       |        |           | С           | A            | 2      | 0 2       | М     |
|  |      |                     |  | ent Model             |               |          |         | Bul    | letin Fil |             | 1            | Occurr |           |       |
| LM MST                                 | -    |                     |  | ting Sta              |               |          |         |        | mm0       | 9077al      | า            |        | Week      | ly    |
|  |      |                     | Un                                       | it Phase              | 3A 8          | and 3    | В       |        |           |             |              |        |           |       |
|  | Item |                     |  | Stateme               |               |          |         |        |           | Est.        | Min.         |        | Thresho   | lds   |
| Component                              | No   | (                   | Comply w                                 | ith all cur           | ent sa        | fety pro | ecautio | ns)    |           | Time<br>Req | Skill<br>Lev | Run    | Pieces    | Freq. |
|  |      |                     |  |                       |               |          |         |        |           | (min)       |              | Hours  | Fed (000) |       |
| <u> </u>                               |      |                     |  |                       |               |          |         |        |           |             |              |        | (000)     |       |
|  |      | The f               | ollowing                                 | events                | are o         | compl    | eted:   |        |           |             |              |        |           |       |
|  |      |                     | ın audib                                 |                       |               |          |         |        |           |             |              |        |           |       |
|  |      |                     | econd fo                                 |                       | by a          | quiet    | perio   | d of   | five      |             |              |        |           |       |
|  |      | S                   | econds.                                  |                       |               |          |         |        |           |             |              |        |           |       |
|  |      |                     | اا start-ر                               |                       |               |          |         |        |           |             |              |        |           |       |
|  |      |                     | 0 secon<br>wo amb                        |                       |               |          |         |        |           |             |              |        |           |       |
|  |      |                     | amp, an                                  |                       |               |          |         |        |           |             |              |        |           |       |
|  |      |                     | amps.                                    |                       |               |          | ,       |        |           |             |              |        |           |       |
|  |      | c) A                | t the to                                 | of the                | CELL          | STA      | TUS     | scre   | en        |             |              |        |           |       |
|  |      |                     | nessage                                  |                       |               |          |         |        |           |             |              |        |           |       |
|  |      |                     | ONLINE omed a                            |                       |               |          |         |        |           |             |              |        |           |       |
|  |      |                     | hecked,                                  |                       |               |          |         |        |           |             |              |        |           |       |
|  |      |                     | STAR is                                  |                       |               |          |         |        |           |             |              |        |           |       |
|  |      |                     | t the co<br>hite sta                     |                       |               |          |         |        | ie        |             |              |        |           |       |
|  |      |                     | he STA<br>creen d                        |                       |               |          | p of th | ne     |           |             |              |        |           |       |
|  |      |                     |  | NC                    | TE            |          |         |        |           |             |              |        |           |       |
|  |      | STAR<br>to Se       | vhite sta<br>encour<br>ervo Dr<br>enance | iters a S             | Servo<br>otor | Drive    | e Con   | trolle | er        |             |              |        |           |       |
|  |      |                     |  | NC                    | TE            |          |         |        |           |             |              |        |           |       |
|  |      | The S               | ervo Dr                                  |                       |               | r S1 r   | eset h  | outto  | n         |             |              |        |           |       |
|  |      |                     | be depr                                  | essed to              | o atte        | mpt t    | o res   | et th  | ne        |             |              |        |           |       |
|  |      |                     | code.                                    |                       |               |          | powe    |        |           |             |              |        |           |       |
|  |      | Reset               | nce ag<br>button                         |                       |               |          |         |        |           |             |              |        |           |       |
|  |      | ON bu               |  |                       |               |          |         |        |           |             |              |        |           |       |
|  |      | 28. Wher            |  |                       |               |          |         |        | J         |             |              |        |           |       |
|  |      |                     | er lights<br>stack li                    |                       |               |          |         |        |           |             |              |        |           |       |
|  |      |                     | NE ope                                   |                       |               |          | ,       |        |           |             |              |        |           |       |
| CLEANLID                               | 1.5  | Clean III           |  |                       |               |          |         |        |           |             | ΛIJ          |        |           |       |
| CLEAN UP                               |      | Clean Up            |  |                       |               |          |         |        |           | 3           | All          |        |           |       |
|  |      | Ensure<br>miscellan |  | -                     | ubric         | -        | rag     |        | and       |             |              |        |           |       |
|  |      |                     |  | iateriais<br>/ superv |               |          |         |        |           |             |              |        |           |       |

### **ATTACHMENT 4**

# LM MST SHOOTING STAR BULK STAGING UNIT PHASE 3A AND 3B MASTER CHECKLIST

03-MST-CA-203-M

Monthly Time Total:

Per Bulk Staging Unit - 113 Minutes

Refer to the MS-238 if additional maintenance information is required.

| U.S. Posta                   | al Service |   |  |   |   |                                  |                             |  | IDE                                | NT                                 | IFICA <sup>-</sup>                    | TION                 |              |            |      | •    |                   |      |
|------------------------------|------------|---|--|---|---|----------------------------------|-----------------------------|--|------------------------------------|------------------------------------|---------------------------------------|----------------------|--------------|------------|------|------|-------------------|------|
| Maintenanc                   | e Check    | list  | WORK<br>CODE   |   |   |                                  |                             | MEN <sup>*</sup>   | Т                                  |                                    |                                       | CI                   | _ASS<br>ODE  |            | NU   | MBE  | R                 | TYPE |
|                              |            |   | 0 3  | М   | S   | Т                                |                             |  |                                    |                                    |                                       | С                    | Α            | . 2        | 2    | 0    | 3                 | М    |
| Equipment Nomenclati<br>LM N |            |   | Equipme<br>Shoo<br>Un  |   | Star  |                                  |                             |  | В                                  |                                    |                                       | ename<br>9077a       | h            | Оссі       | ırre |      | nthly             | 1    |
| Part or                      | Item       |   |  | State   |   |                                  |                             |  | \                                  |                                    |                                       | Est.                 | Min.         |            |      | Thre | shold             | s    |
| Component                    | No         | (1  | Comply w   | ith all (   | curre   | nt saf                           | ety pi                      | ecauti   | ons)                               |                                    |                                       | Time<br>Req<br>(min) | Skill<br>Lev | Rui<br>Hou |      | F    | eces<br>ed<br>00) | Freq |
| SAFETY<br>STATEMENT          | 1.         | COMPLY<br>Disconn<br>required<br>local lo<br>down a<br>equipme<br>Check for<br>If any<br>supervisifurther a | ect pover the section of the section | wer as insome process in the second process | and<br>structedu<br>ut t<br>nspe<br>us d<br>ubsta | appetion res this ect ust ance   | oly to ma dust or ue is eed | ocko<br>efer<br>prop<br>chine<br>st o<br>inusu<br>fou<br>ing | to coerly<br>e.<br>condual cond    | cui<br>y<br>C<br>diti<br>de<br>n   | then rent shut open ons. bris. otify  |                      | All          |            |      |      |                   |      |
|                              |            | THE US<br>IS PROH<br>When of<br>cleaning<br>vacuum<br>or brus<br>compres<br>deficiend<br>upon de            | IIBITED cleaning methor cleane sh, mossed occions to   | j is<br>od s<br>r, a d<br>ust<br>r ble<br>you   | rec<br>such<br>dam<br>be<br>own                   | quire<br>as<br>p cl<br>us<br>aii | ed,<br>a<br>oth,<br>ed      | an a<br>HEP<br>lint-<br>in<br>Rep                            | alter<br>A f<br>free<br>pla<br>ort | rna<br>filte<br>c<br>c<br>ce<br>sa | ative<br>ered<br>loth,<br>of<br>afety |                      |              |            |      |      |                   |      |
|                              |            | WARNIN<br>Steps co  | ontaine  | d in t  | his   | bulle                            |                             |  |                                    |                                    | е                                     |                      |              |            |      |      |                   |      |

## WARNING

(PPE). Refer to the current Electrical Work Plan (EWP) MMO for appropriate PPE

requirements.

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

#### WARNING

Severe injury or death can result if the VTU falls. Do not walk or work under the VTU unless supported by the long maintenance bar.

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|-------------------------------|---|----------|---|---|---|--|------------------|-----|-----------------------|-----|---------------|-----------|--------|------|-------|------|
| Maintenance Checklist         |   | RK<br>DE |   |   | _ |  | MEN <sup>*</sup> | -   |                       |     | _             | ASS<br>DE | N      | UMBI | ĒR    | TYPE |
|                               | 0   | 3        | М | S | Т |  |                  |     |                       |     | С             | Α         | 2      | 0    | 3     | М    |
| Equipment Nomenclature LM MST | Equipment Model Shooting Star Bulk Staging Unit Phase 3A and 3B |          |   |   |   |  |                  |     | ulletir<br><b>m</b> ı |     | name<br>077ah |           | Occuri |      | onthl | /    |

|                      |            | Utilit Priase 3A and 3B  |              |               |              |                        |       |
|----------------------|------------|--|--------------|---------------|--------------|------------------------|-------|
| Part or<br>Component | Item<br>No | Task Statement and Instruction (Comply with all current safety precautions)  | Est.<br>Time | Min.<br>Skill |              | Threshold              | s     |
| Component            | 110        | (comply war all carron carety presentations)   | Req<br>(min) | Lev           | Run<br>Hours | Pieces<br>Fed<br>(000) | Freq. |
|                      |            | NOTE   |              |               |              | <u> </u>               |       |
|                      |            | The completion of this task will require some of the racks to be removed. All sites should have had these racks removed previously, and the shelves disabled in PMAC for maintenance purposes on a daily basis.                                      |              |               |              |                        |       |
|                      |            | NOTE   |              |               |              |                        |       |
|                      |            | Prior to performing following route, the BSU should be emptied and reported empty to TMS1 and TMS2 in accordance with local policy/procedure. This procedure should be performed by the shift prior to this route being assigned.                    |              |               |              |                        |       |
| ESTOP CHECK          | 2.         | Check the Emergency Stop Switch, Emergency Stop Switch Light; Stack Lights, and Audible Alarm.   |              | 9             |              |                        |       |
|                      |            | <ol> <li>On the cell controller screen, click on CELL<br/>OFFLINE.</li> </ol>  |              |               |              |                        |       |
|                      |            | <ol> <li>Verify that the green stack lights blink as the<br/>BSU completes all current transactions, and<br/>then go out while the audible alarm sounds.<br/>Also verify the white stack lights remain<br/>illuminated.</li> </ol>                   |              |               |              |                        |       |
|                      |            | <ol><li>Press the red EMERGENCY STOP button<br/>located on the door of the Main Control<br/>Cabinet.</li></ol>   |              |               |              |                        |       |
|                      |            | 4. Verify the red EMERGENCY STOP switch<br>and the red stack lights are illuminated. The<br>red ERROR indicator lights on the mail<br>personnel alert stations (MPAS) and on the<br>cycle stop switch stations (CSSS) should also<br>be illuminated. |              |               |              |                        |       |
|                      |            | <ol><li>Deactivate the red EMERGENCY STOP<br/>switch by pulling the button back to the<br/>outward position.</li></ol>   |              |               |              |                        |       |
|                      |            | <ol><li>Press the yellow E-STOP RESET switch on<br/>the door of the Main Control Cabinet.</li></ol>  |              |               |              |                        |       |
|                      |            | <ol> <li>Verify that the red stack lights and the red<br/>ERROR lights on the MPAS/CSSS go out.<br/>Wait at least 10 seconds before proceeding to</li> </ol>   |              |               |              |                        |       |

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|--------------------------------|---|----------|---|------|---|-------------|------------------|-----|-----------------------|------|---------------|-----------|-------|------|------|------|
| Maintenance Checklist          |   | RK<br>DE |   |      |   |             | MEN <sup>*</sup> |     |                       |      |               | ASS<br>DE | Ζ     | UMBI | ĒR   | TYPE |
|                                | 0 | 3        | М | S    | Т |             |                  |     |                       |      | С             | Α         | 2     | 0    | 3    | М    |
| Equipment Nomenclature  LM MST |   | hoot     |   | Star |   | Sta<br>nd 3 | ging<br>B        | В   | ulletir<br><b>m</b> ı |      | name<br>077ah |           | Occur |      | nthl | /    |

|                       |      | Office thase she and sb  |                      |              |              |                        |       |
|-----------------------|------|--|----------------------|--------------|--------------|------------------------|-------|
| Part or               | Item | Task Statement and Instruction   | Est.                 | Min.         |              | Threshold              | S     |
| Component             | No   | (Comply with all current safety precautions)   | Time<br>Req<br>(min) | Skill<br>Lev | Run<br>Hours | Pieces<br>Fed<br>(000) | Freq. |
|                       |      | the next step  |                      |              |              |                        |       |
|                       |      | the next step.   |                      |              |              |                        |       |
|                       |      | 8. Press the green POWER ON switch on the door of the Main Control Cabinet   |                      |              |              |                        |       |
|                       |      | <ol> <li>Verify the stack lights cycle quickly for a short<br/>duration (the audible alarm will sound in<br/>sequence with the cycling of lights), and that<br/>the white stack lights then illuminate steadily.</li> </ol>  |                      |              |              |                        |       |
| LANYARD CHECK         | 3.   | Check the Emergency Stop Lanyards Circuit.   | * 2                  | 9            |              |                        |       |
|                       |      | * Minutes per gate   |                      |              |              |                        |       |
|                       |      | NOTE   |                      |              |              |                        |       |
|                       |      | The equipment functions should stop, but have power applied.   |                      |              |              |                        |       |
|                       |      | <ol> <li>Pull any one of the E-Stop lanyards attached<br/>to the safety fence surrounding the BSU.</li> </ol>  |                      |              |              |                        |       |
|                       |      | <ol> <li>Verify the red stack lights illuminate. All red<br/>MPAS/CSSS ERROR lights should also<br/>illuminate.</li> </ol>   |                      |              |              |                        |       |
|                       |      | <ol><li>Reset the blue E-Stop lanyard switch, located<br/>on the appropriate lanyard control box, to the<br/>RUN position.</li></ol>   |                      |              |              |                        |       |
|                       |      | 4. Press the yellow E-STOP RESET switch on<br>the Main Control Cabinet door. The E-Stop<br>circuitry will reset and the red stack lights and<br>red MPAS/CSSS ERROR lights will go out. If<br>not, notify your supervisor. Wait 10 seconds<br>before pressing the red POWER ON button. |                      |              |              |                        |       |
|                       |      | <ol><li>Repeat steps 1 thru 4 above for each<br/>remaining E-Stop lanyard segment.</li></ol>   |                      |              |              |                        |       |
|                       |      | <ol><li>Press the green POWER ON switch on the<br/>Main Control Cabinet. Verify that the stack<br/>lights cycle quickly, and then the white stack<br/>lights illuminate steadily.</li></ol>  |                      |              |              |                        |       |
| SAFETY FENCE<br>CHECK | 4.   | Check Safety Fence Gate/Door Safety Interlock Switches.  | 6                    | 9            |              |                        |       |
|                       |      | NOTE   |                      |              |              |                        |       |
|                       |      | This procedure does not involve entering into the safety fence area.   |                      |              |              |                        |       |

MMO-043-14

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|--------------------------------|---|-----------|---|------|---|--------------|-----|-------------------------|----|-----------|--------|------|-------|------|
| Maintenance Checklist          |   | DRK<br>DE |   |      | _ | QUIP<br>ACRC |     |                         | _  | ASS<br>DE | N      | JMBE | ĒR    | TYPE |
|                                | 0 | 3         | М | S    | Т |              |     |                         | С  | Α         | 2      | 0    | 3     | M    |
| Equipment Nomenclature  LM MST |   | hoot      |   | Star |   | Stag         | В   | Bulletin Filer<br>mm090 |    |           | Occurr |      | nthly | /    |

| Part or        | Item | Task Statement and Instruction  | Est.         | Min.  |       | Threshold | c     |
|----------------|------|---|--------------|-------|-------|-----------|-------|
| Component      | No   | (Comply with all current safety precautions)  | Time         | Skill | Run   | Pieces    | Freq. |
|                |      |   | Req<br>(min) | Lev   | Hours | Fed       | гтец. |
|                |      |   |              |       |       | (000)     |       |
|                |      | . Open one sliding safety fence panel at a time to activate the E-STOP circuitry.   |              |       |       |           |       |
|                |      | <ol> <li>Verify the red stack lights and MPAS/CSSS<br/>ERROR lights all illuminate.</li> </ol>  |              |       |       |           |       |
|                |      | <ol> <li>Press the yellow E-STOP RESET button on<br/>the Main Control Cabinet. The E-STOP<br/>circuitry should NOT reset due to the open<br/>sliding fence panel.</li> </ol>  |              |       |       |           |       |
|                |      | <ol> <li>Verify the E-STOP circuitry does not reset<br/>and the red stack lights and red MPAS/CSSS<br/>ERROR lights remain illuminated.</li> </ol>  |              |       |       |           |       |
|                |      | 5. Close and secure sliding safety fence panel.   |              |       |       |           |       |
|                |      | <ol> <li>Press the yellow E-STOP RESET button on<br/>the Main Control Cabinet. The E-Stop<br/>circuitry should now reset as expected. Wait<br/>10 seconds before proceeding to next step.</li> </ol>                  |              |       |       |           |       |
|                |      | <ol> <li>Press the green POWER ON button on the<br/>Main Control Cabinet.</li> </ol>  |              |       |       |           |       |
|                |      | <ol> <li>Verify that the stack lights cycle quickly, and<br/>then the white stack lights illuminate steadily.</li> </ol>  |              |       |       |           |       |
|                |      | <ol> <li>Steps 1 thru 8 should be repeated for all<br/>gates.</li> </ol>  |              |       |       |           |       |
| VA BRAKE CHECK | 5.   | Check VA Motor Brake.   | 15           | 9     |       |           |       |
|                |      | . On the BSU cell controller, click on the MAINT MODE push button.  |              |       |       |           |       |
|                |      | <ol> <li>The Maintenance Mode Machine Control<br/>display screen should appear. If necessary,<br/>click on the Machine Control tab to display the<br/>Maintenance Mode Machine Control display<br/>screen.</li> </ol> |              |       |       |           |       |
|                |      | CAUTION   |              |       |       |           |       |
|                |      | Ensure the TA is fully retracted before moving the VA.  |              |       |       |           |       |
|                |      | <ol> <li>At the MAINTENANCE MODE screen, click<br/>on the Home VA push button.</li> </ol>   |              |       |       |           |       |

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|                               |                   |                              |   |                    | DENTIFICAT    |              |            |              |                        |      |
|-------------------------------|-------------------|------------------------------|---|--------------------|---------------|--------------|------------|--------------|------------------------|------|
| Maintenance C                 | Checklist         | WORK<br>CODE                 |   | PMENT<br>ONYM      |               |              | ASS<br>ODE | NU           | MBER                   | TYPE |
|                               |                   | 0 3 M                        |   | CINTIVI            |               | C            | A          | 2            | 0 3                    | М    |
| uipment Nomenclature<br>LM MS | Т                 | Equipment Mo                 |   |                    | Bulletin File | _            |            | Occurre      |                        |      |
| Part or                       | Item              | Tack State                   | ement and Instr   | ıction             |               | Est.         | Min.       |              | Threshold              | lc.  |
| Component                     |                   |                              | current safety p  |                    | ns)           | Time         | Skill      |              |                        |      |
|                               |                   |                              |   |                    |               | Req<br>(min) | Lev        | Run<br>Hours | Pieces<br>Fed<br>(000) | Fred |
|                               | 4. Press          | s EMERGE                     | NCY STOP s  | witch.             |               |              |            |              |                        |      |
|                               | temp<br>EME       | orary "DO                    | safety preca<br>NOT OPE<br>STOP switch                    | RATE"              | sign to       |              |            |              |                        |      |
|                               |                   | oush button                  | ous section,<br>to display                                |                    |               |              |            |              |                        |      |
|                               |                   | on the Stat<br>Status screer | us tab to dis<br>า.                                       | play the           | e Discrete    |              |            |              |                        |      |
|                               | Safet             |                              | e I/O Status<br>section, click                            |                    |               |              |            |              |                        |      |
|                               |                   | V                            | VARNING   |                    |               |              |            |              |                        |      |
|                               | Do no             | ot open an                   | y safety fer  | ce do              | ors or        |              |            |              |                        |      |
|                               | gates             | <b>.</b>                     | -   |                    |               |              |            |              |                        |      |
|                               | will i            |                              | OCK GATE<br>tor power a                                   |                    |               |              |            |              |                        |      |
|                               |                   | the Windov<br>e screen.      | vs Start butt   | on at th           | ne bottom     |              |            |              |                        |      |
|                               | 11. Selec         | ct Programs                  |   |                    |               |              |            |              |                        |      |
|                               |                   | ct Pewin32.                  |   |                    |               |              |            |              |                        |      |
|                               |                   |                              | on the next p   | anun m             | anı.          |              |            |              |                        |      |
|                               | To. Gelec         | oti ewiiioz (                | NOTE  | орир п             | ieriu.        |              |            |              |                        |      |
|                               |                   |                              | _   |                    |               |              |            |              |                        |      |
|                               |                   |                              | al screen is r<br>n Terminal" d                           |                    |               |              |            |              |                        |      |
|                               |                   | M82 in the Enter.            | e black term  | inal so            | reen and      |              |            |              |                        |      |
|                               |                   |                              | NOTE  |                    |               |              |            |              |                        |      |
|                               | not lis<br>buttor | sted in the Wan, type in     | w is displaye<br>/atch window<br>M82 and c<br>DONE button | , press<br>lick on | Insert        |              |            |              |                        |      |

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|-------------------------------|---|----------|---|---|---|--|-------------|-----|---------------|-----|---------------|-----------|-------|------|------|------|
| Maintenance Checklist         | _   | RK<br>DE |   |   | _ |  | MENT<br>NYM | •   |               |     | _             | ASS<br>DE | N     | UMBE | R    | TYPE |
|                               | 0   | 3        | М | S | Т |  |             |     |               |     | С             | Α         | 2     | 0    | 3    | М    |
| Equipment Nomenclature LM MST | Equipment Model Shooting Star Bulk Staging Unit Phase 3A and 3B |          |   |   |   |  |             |     | ulletin<br>Mı |     | name<br>077ah | -         | ccurr |      | nthl | /    |

|           |      | Office Thase 3A and 3B  |                      |                |              |                        |       |
|-----------|------|---|----------------------|----------------|--------------|------------------------|-------|
| Part or   | Item | Task Statement and Instruction  | Est.                 | Min.           |              | Threshold              | s     |
| Component | No   | (Comply with all current safety precautions)  | Time<br>Req<br>(min) | Skill L<br>Lev | Run<br>Hours | Pieces<br>Fed<br>(000) | Freq. |
|           |      |   |                      |                |              |                        |       |
|           |      | <ul><li>15. Record the M82 value listed in the Watch window.</li><li>16. Leave Pewin32 with the Watch window</li></ul>  |                      |                |              |                        |       |
|           |      | displayed on the monitor screen.  |                      |                |              |                        |       |
|           |      | WARNING   |                      |                |              |                        |       |
|           |      | Be cautious when working around or on equipment when power has been applied.  |                      |                |              |                        |       |
|           |      | <ol> <li>Open the appropriate safety fence gate and<br/>enter the safety fence area.</li> </ol>   |                      |                |              |                        |       |
|           |      | <ol><li>Place one mail tray weighing 50 pounds in<br/>each nest on the VA.</li></ol>  |                      |                |              |                        |       |
|           |      | NOTE  |                      |                |              |                        |       |
|           |      | Do not close gate.  |                      |                |              |                        |       |
|           |      | 19. Exit the safety-fenced area.  |                      |                |              |                        |       |
|           |      | 20. Record the M82 value in the Watch Window.   |                      |                |              |                        |       |
|           |      | a. If this M82 value is less than the M82<br>value recorded prior to placing one 50-<br>pound tray in each nest, the VA motor<br>brake is slipping, and the VA motor must<br>be replaced. |                      |                |              |                        |       |
|           |      | <ul> <li>If this M82 value is the same as the M82 value recorded prior to placing one 50-pound tray in each nest, the brake is functioning correctly.</li> </ul>                          |                      |                |              |                        |       |
|           |      | c. Exit PMAC Executive.   |                      |                |              |                        |       |
|           |      | WARNING   |                      |                |              |                        |       |
|           |      | Do not go inside the BSU safety fence.  |                      |                |              |                        |       |
|           |      | 21. Press Close push button in the lower right corner of the screen.  |                      |                |              |                        |       |
|           |      | 22. At the MAINTENANCE MODE-Machine Control screen, press the LOG OFF push button at the bottom of the screen.  |                      |                |              |                        |       |

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|--------------------------------|----|---|---|---|---|--|-------------|-----|------|------|---------------|---|--------|------|-------|------|
| Maintenance Checklist          | CO |   |   |   |   |  | MENT<br>NYM |     |      |      | CLA<br>CO     |   | N      | JMBE | ΞR    | TYPE |
|                                | 0  | 3   | М | S | Т |  |             |     |      |      | С             | Α | 2      | 0    | 3     | М    |
| Equipment Nomenclature  LM MST |    | Equipment Model Shooting Star Bulk Staging Unit Phase 3A and 3B |   |   |   |  |             |     |      |      | name<br>077ah | C | Occurr |      | nthly | /    |
|                                |    |   |   |   |   |  |             |     |      |      |               |   |        |      |       |      |

| Part or   | Item | Task Statement and Instruction  | Est.                 | Min.      |              | Threshold              | S     |
|-----------|------|---|----------------------|-----------|--------------|------------------------|-------|
| Component | No   | (Comply with all current safety precautions)  | Time<br>Req<br>(min) | Skill Lev | Run<br>Hours | Pieces<br>Fed<br>(000) | Freq. |
|           |      |   |                      |           |              | (000)                  |       |
|           |      | <ol> <li>Click right mouse button (right-click) on the<br/>Windows taskbar to activate the Windows NT<br/>Task Manager.</li> </ol>                          |                      |           |              |                        |       |
|           |      | 24. Left-click on Task Manager.   |                      |           |              |                        |       |
|           |      | 25. Click on the Processes tab to view the list of processes.   |                      |           |              |                        |       |
|           |      | 26. Terminate the Interface.exe, Rengine.exe, and Motion.exe processes (if listed). By performing the following for each process:                           |                      |           |              |                        |       |
|           |      | <ul> <li>a. Highlight the individual process<br/>(Interface.exe, Rengine.exe, or<br/>Motion.exe processes).</li> </ul>                                      |                      |           |              |                        |       |
|           |      | b. Click the End Process push button.   |                      |           |              |                        |       |
|           |      | c. Click YES to confirm.  |                      |           |              |                        |       |
|           |      | <ul> <li>d. Repeat sub-steps a-c above until the<br/>Interface.exe, Rengine.exe, and<br/>Motion.exe processes are terminated (if<br/>listed).</li> </ul>    |                      |           |              |                        |       |
|           |      | 27. Press the Windows Start button at the bottom of the screen and select Shut Down.  |                      |           |              |                        |       |
|           |      | 28. Select "Shutdown the Computer?" and press Yes button.   |                      |           |              |                        |       |
|           |      | 29. When the message "It is safe to turn Off computer" is displayed, turn the power switch on the cell controller computer and monitor to the OFF position. |                      |           |              |                        |       |
|           |      | WARNING   |                      |           |              |                        |       |
|           |      | Before performing the following steps you must don the appropriate PPE.   |                      |           |              |                        |       |
|           |      | 30. Turn the power switch on the cell controller's uninterruptible power supply (UPS), located in the Main Control Cabinet, to the OFF position.            |                      |           |              |                        |       |
|           |      | 31. Place the handle of Main Disconnect Switch, S1, located on the door of the Main Control Cabinet, in the OFF (down) position.                            |                      |           |              |                        |       |
|           |      | 32. Attach a lockout device and padlock to the handle of Main Disconnect Switch, S1.  |                      |           |              |                        |       |

MMO-043-14

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| Maintenance Checklist         |   | RK<br>DE |   |   | _ | QUIF<br>ACRO |  | -   |                       |       | _             | ASS<br>DE | N      | UMBI | ĒR    | TYPE |
|                               | 0   | 3        | М | S | Т |              |  |     |                       |       | С             | Α         | 2      | 0    | 3     | М    |
| Equipment Nomenclature LM MST | Equipment Model Shooting Star Bulk Staging Unit Phase 3A and 3B |          |   |   |   |              |  |     | ulletin<br><b>m</b> ı |       | name<br>077ah |           | Occurr |      | nthly | /    |

|                      |            | Office Thase SA and SB   |              |               |              |                        |       |
|----------------------|------------|--|--------------|---------------|--------------|------------------------|-------|
| Part or<br>Component | Item<br>No | Task Statement and Instruction (Comply with all current safety precautions)  | Est.<br>Time | Min.<br>Skill |              | Threshold              | S     |
| Сотронен             | NO         | (Comply with all current safety precautions)   | Req<br>(min) | Lev           | Run<br>Hours | Pieces<br>Fed<br>(000) | Freq. |
|                      |            | WARNING  |              |               |              |                        |       |
|                      |            | Ensure the VA carriage assembly is in its lowest position.   |              |               |              |                        |       |
|                      |            | 33. Enter the safety-fenced area.  |              |               |              |                        |       |
|                      |            | 34. Remove the weighted tray from each nest on the VA carriage assembly and place them outside the BSU safety fence. |              |               |              |                        |       |
|                      |            | 35. Ensure RA is rotated such that nest number 2 is adjacent to the SA.  |              |               |              |                        |       |
|                      |            | 36. Visually check RA gearbox for any oil leaks; if any leaks are present, replace RA gearbox.                       |              |               |              |                        |       |
|                      |            | 37. Exit the safety-fenced area and close the safety gate.   |              |               |              |                        |       |
|                      |            | WARNING  |              |               |              |                        |       |
|                      |            | Before performing the following steps you must don the appropriate PPE.  |              |               |              |                        |       |
|                      |            | WARNING  |              |               |              |                        |       |
|                      |            | Be cautious when working around or on equipment when power has been applied.   |              |               |              |                        |       |
|                      |            | 38. Remove padlock and lockout device from the handle of Main Disconnect Switch, S1.                                 |              |               |              |                        |       |
|                      |            | 39. Place the Main Disconnect Switch, S1, in the ON (up) position.   |              |               |              |                        |       |
|                      |            | 40. Remove the temporary sign "DO NOT OPERATE" from EMERGENCY STOP switch.   |              |               |              |                        |       |
|                      |            | 41. Deactivate the EMERGENCY STOP switch by pulling button to its outward position.                                  |              |               |              |                        |       |
|                      |            | 42. Press the yellow E-STOP RESET push button on the Main Control Panel.   |              |               |              |                        |       |
|                      |            | 43. Turn ON the cell controller UPS.   |              |               |              |                        |       |
|                      |            | 44. Turn ON cell controller computer and monitor.  |              |               |              |                        |       |

| U.S. Postal Service           |   |   |   |   |   |  |            | IDE | NTIF           | CATI | ON            |   |        |      |       |      |
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| Maintenance Checklist         |   | RK<br>DE  |   |   | _ |  | MEN<br>NYM | -   |                |      | CLA<br>CO     |   | N      | UMBE | ₽R    | TYPE |
|                               | 0 | 3   | М | S | Т |  |            |     |                |      | С             | Α | 2      | 0    | 3     | М    |
| Equipment Nomenclature LM MST |   | Equipment Model Shooting Star Bulk Staging Unit Phase 3A and 3B |   |   |   |  |            |     | Bulletin<br>Mi |      | name<br>077ah |   | )ccurr |      | nthly | /    |

| Part or<br>Component | Item<br>No | Task Statement and Instruction (Comply with all current safety precautions)  | Est.<br>Time | Min.<br>Skill |              | Threshold              | S     |
|----------------------|------------|--|--------------|---------------|--------------|------------------------|-------|
| Сотронен             | 140        | (Comply with all current safety precautions)   | Req<br>(min) | Lev           | Run<br>Hours | Pieces<br>Fed<br>(000) | Freq. |
|                      |            | 45. Allow the cell controller to boot up completely.   |              |               |              |                        |       |
|                      |            | 46. Press the Ctrl-Alt-Delete keys to log on.  |              |               |              |                        |       |
|                      |            | 47. Log on or press OK button at log on screen.  |              |               |              |                        |       |
|                      |            | NOTE   |              |               |              |                        |       |
|                      |            |  |              |               |              |                        |       |
|                      |            | If the blue SSTAR icon is not available, the program may be accessed from the Windows Start button, using the RUN option, select Browse, select SS_Software.   |              |               |              |                        |       |
|                      |            | 48. Initiate the BSU software program by double-<br>clicking the blue BSU icon labeled<br>INTERFACE.EXE.   |              |               |              |                        |       |
|                      |            | 49. Log in to the cell controller when the login screen appears.   |              |               |              |                        |       |
|                      |            | 50. Press the green POWER ON button on the Main Control Cabinet.   |              |               |              |                        |       |
|                      |            | 51. Click on MAINT MODE push button.   |              |               |              |                        |       |
|                      |            | 52. At the MAINTENANCE MODE screen, click on:  |              |               |              |                        |       |
|                      |            | a. Home VA button.   |              |               |              |                        |       |
|                      |            | <ul> <li>After the VA has finished homing, click on<br/>Home RA button.</li> </ul>   |              |               |              |                        |       |
| VA DRIVE BELT        | 6.         | Check the Tension of the Vertical Axis (VA) Drive Belt.  | 5            | 9             |              |                        |       |
|                      |            | <ol> <li>On BSU Cell Controller, click on the MAINT<br/>MODE control button to display the<br/>Maintenance Mode display screen. The<br/>Maintenance Mode Machine Control display<br/>screen should appear. If necessary, click on<br/>Machine Control tab to display Maintenance<br/>Mode Machine Control display screen.</li> </ol> |              |               |              |                        |       |
|                      |            | WARNING  Severe injury or death can result if the VTU falls. Do not walk or work under the VTU, unless supporting it with the long maintenance bar.  |              |               |              |                        |       |

| Maintenance Le                | aintenance Technical Support Center |   |      |   |      |   |      |             |     |      |      |                |            | N      | /IIVIC | <i>)-</i> () <sup>2</sup> | 13-14 |
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| U.S. Postal                   | Service                             |   |      |   |      |   |      |             | IDE | NTIF | ICAT | ION            |            |        |        |                           |       |
| Maintenance                   | Maintenance Checklist               |   |      |   |      |   |      | MENT<br>NYM | •   |      |      | _              | ASS<br>DDE | N      | JMBE   | ΞR                        | TYPE  |
|                               | quipment Nemanalatura               |   |      | М | S    | Т |      |             |     |      |      | С              | Α          | 2      | 0      | 3                         | М     |
| Equipment Nomenclature LM MST |                                     |   | hoot |   | Star |   | Stag |             | В   |      |      | name<br>1077ah |            | Occurr |        | onthly                    | /     |
| Part or<br>Component          | Item<br>No                          | Task Statement and Instruction Est. Min. Thresholds (Comply with all current safety precautions) Time Skill |      |   |      |   |      |             |     |      |      |                | 1          |        |        |                           |       |
| (11)                          |                                     |   |      |   |      |   |      |             |     |      | Pog  | Lov            | Run        | I Pie  | eces   | Frea.                     |       |

|           |      | Office Thase SA and SD   |                      |              |              |                        |       |
|-----------|------|--|----------------------|--------------|--------------|------------------------|-------|
| Part or   | Item | Task Statement and Instruction   | Est.                 | Min.         |              | Threshold              | S     |
| Component | No   | (Comply with all current safety precautions)   | Time<br>Req<br>(min) | Skill<br>Lev | Run<br>Hours | Pieces<br>Fed<br>(000) | Freq. |
|           |      | CAUTION  |                      |              |              |                        |       |
|           |      | Ensure the TA is fully retracted before moving the VA. Failure to comply may result in BSU equipment damage.   |                      |              |              |                        |       |
|           |      | <ol><li>Click on the Maintenance Position button.<br/>This places the VA Carriage at the pre-set<br/>maintenance position on the VTU mast.</li></ol>   |                      |              |              |                        |       |
|           |      | <ol> <li>Access the MAINTENANCE MODE screen.<br/>Select the Discrete I/O screen option at the<br/>Miscellaneous section.</li> </ol>  |                      |              |              |                        |       |
|           |      | 4. At the Discrete I/O screen, select the Status screen option.  |                      |              |              |                        |       |
|           |      | <ol> <li>Ensure the Enable PLC option is displayed at<br/>the Discrete I/O Status Screen Safety<br/>Controls section. Click on the Disable PLC<br/>option to change to Enable PLC, if required.</li> </ol>   |                      |              |              |                        |       |
|           |      | Select the UNLOCK THE GATE option. The pneumatic system purge valve is automatically activated, removing air pressure from the system. In addition, the KP Main Motor Contactor is opened. This removes the 480 VAC from the servo drive controllers and the power to the motor fans. Control voltage is present at the controllers and sensors. |                      |              |              |                        |       |
|           |      | 7. Open the safety gates.  |                      |              |              |                        |       |
|           |      | <ol><li>Select the Close option. Return to the MAINTENANCE MODE screen to LOG OFF.</li></ol>   |                      |              |              |                        |       |
|           |      | <ol> <li>Access Windows NT START button at lower<br/>screen display. Select SHUTDOWN option,<br/>and select YES when prompted. Wait for the<br/>software to complete the shutdown process.</li> </ol>  |                      |              |              |                        |       |
|           |      | WARNING  |                      |              |              |                        |       |
|           |      | Before performing the following steps you must don the appropriate PPE.  |                      |              |              |                        |       |
|           |      | <ol><li>Open the MCC doors; turn Off the computer,<br/>the monitor, and the UPS.</li></ol>   |                      |              |              |                        |       |
|           |      |  |                      |              |              |                        |       |

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| U.S. Postal Service                     |                                      |                      |       |      |       |       |             | IDENTIF       | ICAT | ION           |            |        |     |       |      |
| Maintenance Checklist                   |                                      | DRK<br>DDE           |       |      |       |       | MENT<br>NYM |               |      | _             | ASS<br>DDE | N      | UMB | ER    | TYPE |
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| Equipment Nomenclature LM MST           |                                      | ipmei<br>hoot<br>Uni | ing S | Star |       | Sta   |             | Bulletir<br>m |      | name<br>077ah |            | Occuri |     | onthl | y    |
| Part or Item                            |                                      | Tack                 | State | ment | and I | netru | tion        |               |      | Ect           | Min        |        | Thr | achal | de   |

|                      | <u> </u>   |   | Unit Phase 3A  |  |  | 3011ai       | •             |              | Wichting               | •    |
|----------------------|------------|---|--|--|--|--------------|---------------|--------------|------------------------|------|
| Part or<br>Component | Item<br>No | (0  | Task Statement ar<br>Comply with all current   |  | ne)  | Est.<br>Time | Min.<br>Skill |              | Threshold              | s    |
| Сотронен             | NO         |   | Somply with all currents   | salety precaution  | 113)   | Req<br>(min) | Lev           | Run<br>Hours | Pieces<br>Fed<br>(000) | Free |
|                      |            | When the M proce local Attack device Break signe lock Disco | WARNII  performing ma CC, perform syste lockout/restor h a red multi-loc e on the Main ker; and secure d tag. Otherwis lockout device mnect Switch, S1 d tag.  | nintenance em lockout/o ed by the cook hasp lock Facility ( with a lock e, attach a  | inside<br>tagout<br>urrent<br>dures.<br>ockout<br>Circuit<br>k and<br>multi-<br>Main |              |               |              |                        |      |
|                      |            | curre<br>Instal<br>on th                                    | WARNII I a lockout/tagou ne pneumatic Mant equipment date  |  |  |              |               |              |                        |      |
|                      |            | CB1 vithe O from side conta Break be located syste          | cer listed on the Mocked out to composer.  The contract of the facility of the | n the line s<br>connect Swi<br>ere injury or<br>l occur if th<br>connect Swi<br>n Facility (<br>ICC exterior<br>oletely remo | itch in death he line itch is Circuit must ove all                                   |              |               |              |                        |      |
|                      |            | Pane<br>powe  | el. Disconnect S<br>er, and install locko  |  |  |              |               |              |                        |      |

| U.S. Postal Service           |   |          |   |      |   |                | <br>DENTIFIC     | CATI | ON            |           |        |      |      |      |
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| Maintenance Checklist         | _ | RK<br>DE |   |      | _ | QUIPM<br>ACRON |                  |      | _             | ASS<br>DE | Z      | UMBI | ĒR   | TYPE |
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|               |      | Unit Phase 3A and 3B   |             |              |       |              |       |
|---------------|------|--|-------------|--------------|-------|--------------|-------|
| Part or       | Item | Task Statement and Instruction   | Est.        | Min.         |       | Threshold    | s     |
| Component     | No   | (Comply with all current safety precautions)   | Time<br>Req | Skill<br>Lev | Run   | Pieces       | Freq. |
|               |      |  | (min)       |              | Hours | Fed<br>(000) |       |
|               |      | WARNING  |             |              |       |              |       |
|               |      | WARNING  |             |              |       |              |       |
|               |      | Severe injury or death can result if the VTU falls. Do not walk or work under  |             |              |       |              |       |
|               |      | the VTU, unless supporting it with the   |             |              |       |              |       |
|               |      | long maintenance bar.  |             |              |       |              |       |
|               |      | <ol> <li>Enter the safety fenced area. Engage the<br/>long maintenance bar beneath VA Carriage<br/>and secure.</li> </ol>  |             |              |       |              |       |
|               |      | 15. Set the force gauge, with a mid-range of 30 to 40 pounds, to the compression setting.  |             |              |       |              |       |
|               |      | 16. Place the sensing element of the force gauge against the center of the VA belt lower segment, at the point 37 1/2" above the top of the mast base plate, or 37 1/2" below the bottom of the VA carriage.   |             |              |       |              |       |
|               |      | <ol><li>Press inward to deflect the belt until it just<br/>touches the mast.</li></ol>   |             |              |       |              |       |
|               |      | 18. Verify that the displayed value on the force gauge is 35 lbs +0 /–1/2 pound.   |             |              |       |              |       |
| TA DRIVE BELT | 7.   | Check Tension on the TA Drive Belts.   | 4           | 9            |       |              |       |
|               |      | 1. Set a force gauge, with a mid-range of 8 to 12 pounds, to its compression setting.  |             |              |       |              |       |
|               |      | 2. Determine the midpoint of the bottom segment of the left TA Drive belt.   |             |              |       |              |       |
|               |      | <ol><li>Place a measuring tape or ruler at the<br/>midpoint of the left TA Drive Belt such that an<br/>inch marker on the tape aligns with the lower<br/>segment of the belt.</li></ol>  |             |              |       |              |       |
|               |      | 4. Press the sensing element of the force gauge<br>upward against the lower segment of the left<br>TA Drive Belt at the midpoint. When the<br>distance between the upper and lower loops<br>of the belt is exactly 1" (from top of tooth to<br>top of tooth), record the displayed reading<br>from the force gauge. The reading should be<br>6 +0 / -1/2 pounds. |             |              |       |              |       |
|               |      | <ol><li>Repeat steps 1 through 4 above for the right<br/>TA Drive Belt.</li></ol>  |             |              |       |              |       |

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| Maintenance Checklist          |  | RK<br>DE  |   |   | _ | QUIF<br>ACRO |  | - |                     |  | CLA<br>CO     | ASS<br>DE | NI    | UMBI | ER    | TYPE |
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| Equipment Nomenclature  LM MST |  | Equipment Model Shooting Star Bulk Staging Unit Phase 3A and 3B |   |   |   |              |  |   | ulletir<br><b>m</b> |  | name<br>077ah |           | ccurr |      | nthly | /    |

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| Part or<br>Component | Item<br>No | Task Statement and Instruction (Comply with all current safety precautions)  | Est.<br>Time | Min.<br>Skill |              | Threshold              | S     |
| Component            | NO         | (Comply with all current safety precautions)   | Req<br>(min) | Lev           | Run<br>Hours | Pieces<br>Fed<br>(000) | Freq. |
| TA TIMING BELT       | 8.         | Check Tension on TA Timing Belt.   | 2            | 9             |              |                        |       |
| TACTION OF BEET      | 0.         | <ol> <li>Set the special tool (P/N 241A801) at the<br/>midpoint of the timing belt between the<br/>pulleys.</li> </ol>   |              |               |              |                        |       |
|                      |            | NOTE   |              |               |              |                        |       |
|                      |            | Placing the tool so that the edge touches the bottom of the frame correctly positions the tool between the pulleys.  |              |               |              |                        |       |
|                      |            | <ol><li>Check that the pointer on the tool is between<br/>the two lines on the tool.</li></ol>   |              |               |              |                        |       |
|                      |            | NOTE   |              |               |              |                        |       |
|                      |            | This verifies the belt tension is set at $3 \pm 0.5$ lbs with a $1/16$ " belt deflection.  |              |               |              |                        |       |
|                      |            | <ol><li>If the pointer is not between the two lines,<br/>notify supervisor.</li></ol>  |              |               |              |                        |       |
| RA DRIVE BELT        | 9.         | Check Tension on the RA Drive Belt.  | 2            | 9             |              |                        |       |
|                      |            | NOTE   |              |               |              |                        |       |
|                      |            | A ladder may be required to perform this check.  |              |               |              |                        |       |
|                      |            | <ol> <li>Set a push/pull type tension gauge, with a<br/>mid-range of 8-16 pounds, to its compression<br/>setting.</li> </ol>   |              |               |              |                        |       |
|                      |            | <ol> <li>Using a straight edge and tape measure,<br/>determine the midpoint of either free segment<br/>of the RA drive belt. This is measured from<br/>the points at which the belt segment joins<br/>either pulley.</li> </ol>                                    |              |               |              |                        |       |
|                      |            | <ol> <li>Make a temporary mark on the RA bottom<br/>plate so that 1/8" of belt compression can be<br/>observed.</li> </ol>   |              |               |              |                        |       |
|                      |            | 4. Press the sensing element of the force gauge against the midpoint of either free segment of the RA Drive Belt. When the sensing element has been compressed 1/8", record the displayed reading from the force gauge. The reading should be $12 \pm 1/2$ pounds. |              |               |              |                        |       |

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| U.S. Postal Service    |                      |                            |       |   |   |              |  | IDE | NTIFICATI      | ON    |           |        |      |       |      |
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| Maintenance Checklist  | _                    | RK<br>DE                   |       |   | _ | QUIP<br>ACRO |  | -   |                | _     | ASS<br>DE | N      | UMBE | ₽R    | TYPE |
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| Equipment Nomenclature |                      |                            | nt Mo |   |   |              |  | В   | Bulletin Filer | name  | (         | Occurr | ence |       |      |
| LM MST                 | SI                   | Shooting Star Bulk Staging |       |   |   |              |  |     | mm09           | 077ah |           |        | Mc   | nthly | /    |
|                        | Unit Phase 3A and 3B |                            |       |   |   |              |  |     |                |       |           |        |      |       |      |

| Est.<br>Time<br>Req<br>(min) | Min.<br>Skill<br>Lev | Run<br>Hours | Pieces<br>Fed<br>(000) | Freq.  |
|------------------------------|----------------------|--------------|------------------------|--------|
| Time<br>Req<br>(min)         | Skill<br>Lev         |              | Pieces<br>Fed          |        |
| (min)                        |                      |              | Fed                    | r req. |
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| U.S. Posta                   | Service    |   |                                |   |   |   |              |  | IDE                                | NTIF | ICAT | ION  |               |       |                       |        |      |
| Maintenance                  | Checklist  | _   | RK<br>DE                       |   |   |   | QUIF<br>ACRO |  |                                    |      |      |      | ASS<br>DDE    | N     | JMBE                  | ĒR     | TYPE |
|                              |            | 0   | 3                              | М | S | Т |              |  |                                    |      |      | С    | Α             | 2     | 0                     | 3      | М    |
| Equipment Nomenclatu<br>LM N |            | Equipment Model Bul<br>Shooting Star Bulk Staging<br>Unit Phase 3A and 3B |                                |   |   |   |              |  | Bulletin Filename Occ<br>mm09077ah |      |      |      |               |       | Occurrence<br>Monthly |        |      |
| Part or<br>Component         | Item<br>No |   | Task Statement and Instruction |   |   |   |              |  | ions)                              |      |      | Est. | Min.<br>Skill |       | Thre                  | esholo | ds   |

|                      |            | Unit Phase 3A and 3B  |              |               |              |                        |       |
|----------------------|------------|---|--------------|---------------|--------------|------------------------|-------|
| Part or<br>Component | Item<br>No | Task Statement and Instruction (Comply with all current safety precautions)   | Est.<br>Time | Min.<br>Skill |              | Threshold              | S     |
|                      |            |   | Req<br>(min) | Lev           | Run<br>Hours | Pieces<br>Fed<br>(000) | Freq. |
| VA AIR               | 13.        | Check the VA Stop Cushion Air Pressures.  | 3            | 9             |              |                        |       |
| PRESSURE             |            | NOTE  |              |               |              |                        |       |
|                      |            | The stop cushion air pressure is specified to be $8 \pm 1/2$ PSI. Ensure the air gauge, used for this task is designed to accurately measure the stop cushion air pressure. |              |               |              |                        |       |
|                      |            | <ol> <li>With a standard air gauge, check air pressure<br/>of both VA stop cushions for 8 ± 1/2 PSI.</li> </ol>   |              |               |              |                        |       |
|                      |            | 2. If pressure is low, add air with a standard tire air pump. If air pressure is too high, reduce air pressure to $8 \pm 1/2$ PSI.  |              |               |              |                        |       |
|                      |            | <ol><li>Ensure all tools, materials, and debris are<br/>removed from the work area.</li></ol>   |              |               |              |                        |       |
|                      |            | <ol> <li>Exit the safety fence area and close the<br/>safety gate.</li> </ol>   |              |               |              |                        |       |
|                      |            | WARNING   |              |               |              |                        |       |
|                      |            | Before performing the following steps you must don the appropriate PPE.   |              |               |              |                        |       |
|                      |            | 5. Remove the lock and lockout device from the handle of Main Disconnect Switch S1.   |              |               |              |                        |       |
|                      |            | 6. Move the handle of Main Disconnect Switch S1, located on the door of the Main Control Cabinet, to the (ON) position.   |              |               |              |                        |       |
|                      |            | 7. In the Manual Move To section, enter 1.  |              |               |              |                        |       |
|                      |            | <ol><li>Click on Move VA button to move it to its lowest position.</li></ol>  |              |               |              |                        |       |
|                      |            | <ol> <li>Select the CELL OFFLINE option on any<br/>main screen header panel.</li> </ol>   |              |               |              |                        |       |
|                      |            | <ol><li>The green stack lights and the CSSS OK-TO-<br/>ENTER light begin to flash.</li></ol>  |              |               |              |                        |       |
|                      |            | <ol> <li>The cell controller completes all transactions<br/>and comes to a controlled stop. The VTU<br/>returns to the HOME position.</li> </ol>                            |              |               |              |                        |       |
|                      |            | 12. The green stack lights go Off.  |              |               |              |                        |       |
|                      |            | 13. Select Maint Mode option from main screen.  |              |               |              |                        |       |

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| Maintenance Checklist         | WORK<br>CODE  |   |   | EQUIPMENT<br>ACRONYM |   |  |   |                                | CLASS<br>CODE |  |   |   | N          | UMBE | R | TYPE |
|                               | 0   | 3 | М | S                    | Т |  |   |                                |               |  | С | Α | 2          | 0    | 3 | М    |
| Equipment Nomenclature LM MST | Equipment Model Shooting Star Bulk Staging Unit Phase 3A and 3B |   |   |                      |   |  | В | Bulletin Filename<br>mm09077ah |               |  |   |   | ence<br>Mc | nthl | / |      |

|           |      | Office Thase SA and SB  |                      |              |              |                        |       |
|-----------|------|---|----------------------|--------------|--------------|------------------------|-------|
| Part or   | Item | Task Statement and Instruction  | Est.                 | Min.         |              | Threshold              | s     |
| Component | No   | (Comply with all current safety precautions)  | Time<br>Req<br>(min) | Skill<br>Lev | Run<br>Hours | Pieces<br>Fed<br>(000) | Freq. |
|           |      |   |                      |              |              | (000)                  |       |
|           |      | 14. Access the MAINTENANCE MODE screen. Select the Discrete I/O screen option at the Miscellaneous section.   |                      |              |              |                        |       |
|           |      | 15. At the Discrete I/O screen, select the Status screen option.  |                      |              |              |                        |       |
|           |      | 16. Ensure the Enable PLC option is displayed at the Discrete I/O Status Screen Safety Controls section. Click on the Disable PLC option to change to Enable PLC if required.   |                      |              |              |                        |       |
|           |      | 17. Select the UNLOCK THE GATE option. The pneumatic system purge valve is automatically activated removing air pressure from the system. In addition, the KP Main Motor Contactor is opened. This removes the 480 VAC from the servo drive controllers and the power to the motor fans. Control voltage is present at the controllers and sensors. |                      |              |              |                        |       |
|           |      | 18. Open the safety gates.  |                      |              |              |                        |       |
|           |      | <ol> <li>Select the Close option. Return to the<br/>MAINTENANCE MODE screen to LOG OFF.</li> </ol>  |                      |              |              |                        |       |
|           |      | <ol> <li>Access the Windows NT START button at the<br/>lower screen display. Select SHUTDOWN<br/>option, and select YES when prompted. Wait<br/>for software to complete shutdown process.</li> </ol>   |                      |              |              |                        |       |
|           |      | WARNING   |                      |              |              |                        |       |
|           |      | Before performing the following steps you must don the appropriate PPE.   |                      |              |              |                        |       |
|           |      | 21. Open the MCC doors; turn Off computer, monitor, and UPS.  |                      |              |              |                        |       |
|           |      | 22. Open the MCC's Main Disconnect Circuit Breaker (CB-1).  |                      |              |              |                        |       |
|           |      | WARNING   |                      |              |              |                        |       |
|           |      | When performing maintenance inside the MCC, perform system lockout/tagout procedures as prescribed by the current local lockout/ restore procedures. Attach a red multi-lock hasp lockout   |                      |              |              |                        |       |

| U.S. Postal Service           |   |   |   |   |   |              |  | IDEI | NTIF | ICAT | ION   |           |   |      |    |      |
|-------------------------------|---|---|---|---|---|--------------|--|------|------|------|-------|-----------|---|------|----|------|
| Maintenance Checklist         |   | RK<br>DE  |   |   |   | QUIF<br>ACRO |  |      |      |      |       | ASS<br>DE | N | JMBI | ER | TYPE |
|                               | 0 | 3   | М | S | Т |              |  |      |      |      | С     | Α         | 2 | 0    | 3  | M    |
| Equipment Nomenclature LM MST |   | Equipment Model Shooting Star Bulk Staging Unit Phase 3A and 3B |   |   |   |              | Bulletin Filename Occurrence mm09077ah Monthly |      |      |      |       |           | y |      |    |      |
|                               |   |   |   |   |   |              |  |      |      |      | - · I |           |   |      |    |      |

|           |      | Unit Phase 3A and 3B  |                      |              |              |                        |       |
|-----------|------|---|----------------------|--------------|--------------|------------------------|-------|
| Part or   | Item | Task Statement and Instruction  | Est.                 | Min.         |              | Threshold              | S     |
| Component | No   | (Comply with all current safety precautions)  | Time<br>Req<br>(min) | Skill<br>Lev | Run<br>Hours | Pieces<br>Fed<br>(000) | Freq. |
| IA BELTS  | 14.  | device on the Main Facility Circuit Breaker; and secure with a lock and signed tag. Otherwise, attach a multi- lock lockout device to the Main Disconnect Switch S1 using a lock and signed tag.  23. Close MCC doors. Perform lockout/tagout procedures as prescribed by the current local lockout/restore procedures.  WARNING  480 VAC is present on the line side of CB1 with the Main Disconnect Switch in the OFF position. Severe injury or death from electrocution will occur if the line side of the Main Disconnect Switch is contacted. The main facility circuit breaker listed on the MCC exterior must be locked out to completely remove all system power.  24. Locate the facility Main Power Distribution Panel. Disconnect STAR circuit breaker power, and install lockout device and lock.  25. Attach a lockout device to the handle of Disconnect Switch S1, and secure the lockout device with padlock.  Check the Tension of the Induction Axis (IA) Feed Floor Belts and Drive Belt. | 2                    | 9            |              |                        |       |
|           |      | WARNING  Damage may occur to the safety mats if they are not removed prior to moving the lifting device across them, creating degraded E-Stop circuit operation. Remove any sections of the safety mat in the path of the lift prior to moving the lift device inside the safety fence area.  |                      |              |              |                        |       |

| U.S. Postal Service           |   |   |       |  |   |                |  | IDENTIFICAT   | ION            |           |        |      |        |      |
|-------------------------------|---|---|-------|--|---|----------------|--|---------------|----------------|-----------|--------|------|--------|------|
| Maintenance Checklist         |   | RK<br>DE  |       |  | _ | QUIPN<br>ACRON |  |               | _              | ASS<br>DE | Z      | UMBE | ĒR     | TYPE |
|                               | 0 | 3   | M S T |  |   |                |  | C A           |                | 2         | 0      | 3    | M      |      |
| Equipment Nomenclature LM MST |   | Equipment Model Shooting Star Bulk Staging Unit Phase 3A and 3B |       |  |   |                |  | Bulletin File | name<br>9077ah |           | Occurr |      | onthly | /    |

| Part or<br>Component | Item<br>No | Task Statement and Instruction (Comply with all current safety precautions)  | Est.<br>Time | Min.<br>Skill |              | Threshold              | S     |
|----------------------|------------|--|--------------|---------------|--------------|------------------------|-------|
| Component            | 110        | (comply man an our on early productions)   | Req<br>(min) | Lev           | Run<br>Hours | Pieces<br>Fed<br>(000) | Freq. |
|                      |            | NOTE   |              |               |              |                        |       |
|                      |            | A scissors lift, or other lift device, may be required to access the IA to perform these checks.   |              |               |              |                        |       |
|                      |            | <ol> <li>Check the tension of each of the two belts on<br/>the IA feed floor. There is no specific tension<br/>measurement for the feed floor belts.<br/>Optimally, the belts should be taut, but not<br/>tight, and each of the two belts on the feed<br/>floor should be similarly tensioned.</li> </ol>   |              |               |              |                        |       |
|                      |            | <ol> <li>Check tension of the IA lift station drive belt.         There is no specific tension measurement for the lift station drive belt. Optimally, the belt should be taut, but not tight. The lift station should be able to be moved easily by hand without any noticeable belt slack when the drive belt is correctly adjusted.     </li> </ol> |              |               |              |                        |       |
| DA BELTS             | 15.        | Check the Tension of the Discharge Axis (DA) Feed Floor Belts and Drive Belt.  | 2            | 9             |              |                        |       |
|                      |            | NOTE   |              |               |              |                        |       |
|                      |            | A scissors lift, or other lift device, may be required to access the DA to perform these checks.   |              |               |              |                        |       |
|                      |            | <ol> <li>Check the tension of each of the two belts on<br/>the DA feed floor. There is no specific<br/>tension measurement for the feed floor belts.<br/>Optimally, the belts should be taut, but not<br/>tight, and each of the two belts on the feed<br/>floor should be similarly tensioned.</li> </ol>   |              |               |              |                        |       |
|                      |            | <ol> <li>Check tension of the DA lift station drive belt. There is no specific tension measurement for the lift station drive belt. Optimally, the belt should be taut, but not tight. The lift station should be able to be moved easily by hand without any noticeable belt slack when the drive belt is correctly adjusted.</li> </ol>              |              |               |              |                        |       |
|                      |            |  |              |               |              |                        |       |

| MMO-043-14                   |           |          | Maintenance Technical Support Center   |   |   |   |   |  |             |         |       |                      |              |              |                        |       |
|------------------------------|-----------|----------|--|---|---|---|---|--|-------------|---------|-------|----------------------|--------------|--------------|------------------------|-------|
| U.S. Posta                   | l Service |          |  |   |   |   |   |  |             | IDENTII | FICAT |                      |              |              |                        |       |
| Maintenance                  | e Check   | list     | _  | RK<br>DE                                    |   |   | _ |  | MENT<br>NYM |         |       |                      | LASS<br>ODE  | NU           | JMBER                  | TYPE  |
|                              |           |          | 0  | 3   | М | S | Т |  |             |         |       | С                    | Α            | 2            | 0 3                    | М     |
| Equipment Nomenclatu<br>LM N |           |          | Equipment Model Shooting Star Bulk Staging Unit Phase 3A and 3B  Task Statement and Instruction  Bulletin Filename mm09077ah Monthly  Est. Min. Thresholds |   |   |   |   |  |             |         |       | y                    |              |              |                        |       |
| Part or                      | Item      | ,        | Task Statement and Instruction (Comply with all current safety precautions)  |   |   |   |   |  |             |         |       |                      | Min.         |              | Threshold              | ds    |
| Component                    | No        | (1       | Comp   | comply with all current safety precautions) |   |   |   |  |             |         |       | Time<br>Req<br>(min) | Skill<br>Lev | Run<br>Hours | Pieces<br>Fed<br>(000) | Freq. |
| SA WHEEL<br>LUBRICATION      | 16.       | Lubricat | te Sh  | elf /                                       |   | ` |   |  | Whee        | els.    |       | 50                   | 9            |              |                        |       |
|                              |           | equip    | WARNING e cautious when working around or on quipment when power has been oplied.  WARNING   |   |   |   |   |  |             |         |       |                      |              |              |                        |       |

Open the appropriate turn-end safetyfenced gate, but do not enter.

#### **NOTE**

A bypass key will need to be installed into one of the turn-end safety fence locks to gain access prior to performing this task.

1. Restore the air pressure to the Filter Regulator Supply.

#### WARNING

Before performing the following steps you must don the appropriate PPE.

- 2. Reset the Main Facilities STAR circuit breaker, as required.
- 3. Position the Main Disconnect Switch (CB-1) to apply 480 VAC 3-phases to the MCC. The MCC's power supplies and the internal fans will come on.
- Turn on the UPS and allow the internal self diagnostic routine to complete and the green LED to illuminate.
- Turn On the monitor and the cell controller. Allow to the cell controller to boot up.
- When prompted, press Ctrl-Alt-Delete to access the Windows NT Logon box. At the password default prompt, press ENTER and wait one minute for all processes to start.

MMO-043-14

| U.S. Postal Service            | IDENTIFICATION |   |   |   |   |                 |                        |  |           |        |   |       |    |      |
|--------------------------------|----------------|---|---|---|---|-----------------|------------------------|--|-----------|--------|---|-------|----|------|
| Maintenance Checklist          | _              | RK<br>DE  |   |   | _ | QUIPME<br>ACRON |                        |  | CLA<br>CO |        |   | UMBE  | ₽R | TYPE |
|                                | 0              | 3   | М | S | Т |                 |                        |  | С         | Α      | 2 | 0     | 3  | M    |
| Equipment Nomenclature  LM MST |                | Equipment Model Shooting Star Bulk Staging Unit Phase 3A and 3B |   |   |   |                 | Bulletin Filer<br>mm09 |  |           | Occurr |   | nthly | /  |      |

|           |      | Unit Phase 3A and 3B   |                      |           |              |                        |       |
|-----------|------|--|----------------------|-----------|--------------|------------------------|-------|
| Part or   | Item | Task Statement and Instruction   | Est.                 | Min.      |              | Threshold              | S     |
| Component | No   | (Comply with all current safety precautions)   | Time<br>Req<br>(min) | Skill Lev | Run<br>Hours | Pieces<br>Fed<br>(000) | Freq. |
|           |      | NOTE   |                      |           |              |                        |       |
|           |      | If one minute has not elapsed before the SHORTCUT TO INTERFACE.EXE Icon is activated, a prompt screen will appear advising SHORTCUT TO INTERFACE.EXE is terminated due to ORACLE not available.  |                      |           |              |                        |       |
|           |      | <ol> <li>Double click on the SHORTCUT TO<br/>INTERFACE.EXE Icon. The STAR Console<br/>Login screen appears.</li> </ol>   |                      |           |              |                        |       |
|           |      | NOTE   |                      |           |              |                        |       |
|           |      | The LOGIN name of the user who last successfully logged into the system appears initially in this field. To return to the LOGIN name window, click it with the trackball or press SHIFT-TAB.   |                      |           |              |                        |       |
|           |      | 8. Enter the USER NAME and PASSWORD.   |                      |           |              |                        |       |
|           |      | <ol> <li>The CELL STATUS screen appears after<br/>successful LOGIN. Wait for a green<br/>CONNECTED to appear at the right of the<br/>NETWORK status indicating the cell controller<br/>establishes communication with the TMS<br/>system.</li> </ol> |                      |           |              |                        |       |
|           |      | <ol> <li>Review the CELL STATUS screen for errors.<br/>Review the Fault Description and note any<br/>discrepancies.</li> </ol>   |                      |           |              |                        |       |
|           |      | WARNING  |                      |           |              |                        |       |
|           |      | Close the appropriate turn-end safety-fenced gate, but do not enter.   |                      |           |              |                        |       |
|           |      | <ol> <li>Using a bypass key, go to the appropriate<br/>safety fence lock and insert the key.</li> </ol>  |                      |           |              |                        |       |
|           |      | 12. Physically close the safety gates.   |                      |           |              |                        |       |
|           |      | 13. Select Maint Mode option from Main screen.   |                      |           |              |                        |       |
|           |      | <ol> <li>Access the MAINTENANCE MODE screen.<br/>Select the Discrete I/O screen option under<br/>the Miscellaneous section.</li> </ol>   |                      |           |              |                        |       |
|           |      | 15. At the Discrete I/O screen, select the Status  |                      |           |              |                        |       |

| 1411410-0-13-1-4                |                       | Maintenance recrinical Support Center |                                |      |   |   |              |  |      |      |               |      |            |      |    |      |       |      |
|---------------------------------|-----------------------|---------------------------------------|--------------------------------|------|---|---|--------------|--|------|------|---------------|------|------------|------|----|------|-------|------|
| U.S. Postal S                   | ervice                |                                       |                                |      |   |   |              |  | IDEN | TIFI | CAT           | ION  |            |      |    |      |       |      |
| Maintenance (                   | Maintenance Checklist |                                       |                                |      |   |   | QUIF<br>ACRO |  |      |      |               | _    | ASS<br>ODE |      | Νl | JMBE | R     | TYPE |
|                                 | winment Nemenelature  |                                       |                                | М    | S | Т |              |  |      |      |               | С    | Α          | 2    | 2  | 0    | 3     | M    |
| Equipment Nomenclature<br>LM MS |                       | hoot                                  | nt Mo<br>ing S<br>t Pha        | Star |   |   |              |  |      |      | name<br>077al | n    | Occ        | urre |    | nthl | у     |      |
| Part or                         | Item                  |                                       | Task Statement and Instruction |      |   |   |              |  |      |      |               | Est. | Min.       |      |    | Thre | eshol | ds   |

|                      |            |  |              | <u> </u>      |              |                        |       |
|----------------------|------------|--|--------------|---------------|--------------|------------------------|-------|
| Part or<br>Component | Item<br>No | Task Statement and Instruction (Comply with all current safety precautions)  | Est.<br>Time | Min.<br>Skill |              | Threshold              | S     |
| Component            | NO         | (Comply with all current safety precautions)   | Req<br>(min) | Lev           | Run<br>Hours | Pieces<br>Fed<br>(000) | Freq. |
|                      |            |  |              | 1             | ī            | 1                      |       |
|                      |            | screen option.   |              |               |              |                        |       |
|                      |            | <ol><li>Click the Disable PLC button in the Safety<br/>Controls section.</li></ol>   |              |               |              |                        |       |
|                      |            | <ol> <li>Under the Safety Controls section, uncheck<br/>the UNLOCK GATE option to ensure the<br/>safety gates are locked.</li> </ol>   |              |               |              |                        |       |
|                      |            | <ol><li>Select the Close Button to return to the<br/>MAINTENANCE MODE screen.</li></ol>  |              |               |              |                        |       |
|                      |            | 19. Leave one gate that is bypassed for access.  |              |               |              |                        |       |
|                      |            | NOTE   |              |               |              |                        |       |
|                      |            |  |              |               |              |                        |       |
|                      |            | SA guide wheels require lubrication on a periodic basis to prevent excessive wear and minimize noise levels when storage unit cycles. A scissors lift, or other lifting device, is necessary to access SA guide wheel (upper) lube points. |              |               |              |                        |       |
|                      |            | <ol> <li>Position the scissors lift outside the safety<br/>fence, if possible, at the end of SA for access<br/>to the top of the unit.</li> </ol>  |              |               |              |                        |       |
|                      |            | 21. At the MAINTENANCE MODE screen, enable the pendent.  |              |               |              |                        |       |
|                      |            | WARNING  |              |               |              |                        |       |
|                      |            | Chemical proof goggles (with side shields), and rubber gloves must be worn when using CRC 3-36.  |              |               |              |                        |       |
|                      |            | WARNING  |              |               |              |                        |       |
|                      |            | Discard or dispose of chemical soaked materials according to MSDS and in accordance with local procedures.   |              |               |              |                        |       |
|                      |            | NOTE   |              |               |              |                        |       |
|                      |            | Exercise care when lubricating the SA guide wheel upper lube points. Wipe off excess oil immediately after spraying.   |              |               |              |                        |       |
|                      |            | 22. Locate lube points and carefully lubricate 4 places (top and bottom of the 2 guide wheels)   |              |               |              |                        |       |

| Maintenance Le             | chnical Sup | port C | ente       | er |      |   |                   |           |      |                |                     |                      | N      | <u>/IMC</u> | <b>)-</b> 04 | 3-14       |
|----------------------------|-------------|--------|------------|----|------|---|-------------------|-----------|------|----------------|---------------------|----------------------|--------|-------------|--------------|------------|
| U.S. Postal                | Service     |        |            |    |      |   |                   | IDE       | NTIF | ICAT           | ON                  |                      |        |             |              |            |
| Maintenance                | Checklist   | _      | ORK<br>ODE |    |      |   | QUIP<br>ACRO      |           |      |                | _                   | ASS<br>ODE           | N      | JMBE        | ĒR           | TYPE       |
|                            |             | 0      | 3          | М  | S    | Т |                   |           |      |                | С                   | Α                    | 2      | 0           | 3            | M          |
| Equipment Nomenclatur LM M |             |        | hoot       |    | Star |   | Stag              | В         |      | n Filer<br>m09 | name<br>077ah       | 1                    | Occurr |             | onthly       | /          |
| Part or<br>Component       | Item<br>No  | (Comp  |            |    |      |   | nstruc<br>ety pro | <br>ions) |      |                | Est.<br>Time<br>Req | Min.<br>Skill<br>Lev | Run    | Pie         | eshold       | s<br>Freq. |

| Part or   | Item | Task Statement and Instruction  | Est.                 | Min.           |              | Threshold              | s     |
|-----------|------|---|----------------------|----------------|--------------|------------------------|-------|
| Component | No   | (Comply with all current safety precautions)  | Time<br>Req<br>(min) | Skill .<br>Lev | Run<br>Hours | Pieces<br>Fed<br>(000) | Freq. |
| Component |      | using CRC 3-36 Technical Grade (Part # 03003) spray.  23. Use the Manual Pendant to jog the RSS to place the next rack in the proper position at the turn end.  24. Repeat steps 22 thru 24 until all upper guide wheels have been lubricated.  25. Locate lube points and lubricate 4 places (both sides of load bearing wheel) on bottom of rack using CRC 3-36 Technical Grade (Part # 03003) spray.  26. Use the Manual Pendant to jog the RSS to place the next rack in the proper position at the turn end.  27. Repeat steps 25 and 26 until all lower guide wheels have been lubricated.  28. With the Pendant raise the VA/RA/TA assembly to the Maintenance position.  29. Access the MAINTENANCE MODE screen. Select the Discrete I/O screen option at the Miscellaneous section.  30. At the Discrete I/O screen, select the Status screen option.  31. Ensure the Enable PLC option is displayed at the Discrete I/O Status Screen Safety Controls section. Click on the Disable PLC option to change to Enable PLC if required.  32. Select the UNLOCK THE GATE option. The pneumatic system purge valve is automatically activated, removing air pressure from the system. In addition, the KP Main Motor Contactor is opened. This removes the 480 VAC from the servo drive controllers and the power to the motor fans. Control voltage is present at the controllers and sensors. | Req                  |                |              | Fed                    | Freq. |
|           |      | Close the appropriate turn-end safety-fenced gate, but do not enter.  |                      |                |              |                        |       |

U.S. Postal Service

Maintenance Technical Support Center

IDENTIFICATION

| U.S. Postal Service    |                                   | MODY   |           | FOLUS   |                   | DENTIFICA <sup>*</sup>                |              | 400         |         | IMPED     | TVDE  |
|------------------------|-----------------------------------|--|-----------|---|-------------------|---------------------------------------|--------------|-------------|---------|-----------|-------|
| Maintenance Checkl     | list                              | WORK<br>CODE   |           | EQUIP<br>ACRO   |                   |                                       |              | _ASS<br>ODE | I NL    | JMBER     | TYPE  |
|                        |                                   | 0 3  | M S       | T   |                   |                                       | С            | A           | 2       | 0 3       | М     |
| Equipment Nomenclature |                                   | Equipme  | ent Model | 1 1   |                   | Bulletin File                         | ename        |             | Occurre | ence      |       |
| LM MST                 |                                   |  |           | Bulk Stag   |                   | mm0                                   | 9077a        | h           |         | Monthly   | y     |
|                        |                                   | Un   | it Phase  | 3A and 3  | В                 |                                       |              |             |         |           |       |
| Part or Item           |                                   | Task   | (Statemen | and Instruc   | ction             |                                       | Est.         | Min.        |         | Threshold | ds    |
| Component No           | (0                                |  |           | nt safety pr  |                   | ns)                                   | Time         | Skill       | Run     | Pieces    | Freq. |
|                        |                                   |  |           |   |                   |                                       | Req<br>(min) | Lev         | Hours   | Fed       | 1104. |
|                        |                                   |  |           |   |                   |                                       | ` '          |             |         | (000)     |       |
|                        | 33. Rem                           | ove the  | bypass k  | ey.   |                   |                                       |              |             |         |           |       |
|                        |                                   |  | •         |   |                   |                                       |              |             |         |           |       |
|                        |                                   |  | WAR       | NING  |                   |                                       |              |             |         |           |       |
|                        | Dofor                             | o norf   |           | the felle   |                   |                                       |              |             |         |           |       |
|                        |                                   | Before performing the following steps you must don the appropriate PPE.  |           |   |                   |                                       |              |             |         |           |       |
|                        | , ca                              |  | up        | p. op. ia.c   |                   |                                       |              |             |         |           |       |
|                        | 34. Close                         |  | secure    | interlock   |                   |                                       |              |             |         |           |       |
|                        | gates                             | 6.   |           |   |                   |                                       |              |             |         |           |       |
|                        |                                   |  | WAR       | NING  |                   |                                       |              |             |         |           |       |
|                        |                                   |  |           |   |                   |                                       |              |             |         |           |       |
|                        |                                   |  |           | orking ar   | ound<br>has       | or on<br>been                         |              |             |         |           |       |
|                        | equip<br>applie                   |  | when      | power   |                   |                                       |              |             |         |           |       |
|                        |                                   |  |           | Facilities  | STA               | R circuit                             |              |             |         |           |       |
|                        |                                   | ker, if re   | •         |   |                   |                                       |              |             |         |           |       |
|                        | to ap                             | ply 480<br>power   | VAC 3-p   | hases to  | the M             | ch (CB-1)<br>1CC. The<br>al fans will |              |             |         |           |       |
|                        | diagr                             |  | outine to |   |                   | ernal self<br>the green               |              |             |         |           |       |
|                        |                                   |  |           |   |                   | controller.                           |              |             |         |           |       |
|                        | acce:                             | When prompted, press Ctrl-Alt-Delete to access the Windows NT Logon box. At the password default prompt, press ENTER and vait one minute for all processes to start. |           |   |                   |                                       |              |             |         |           |       |
|                        |                                   |  | NO        | TE  |                   |                                       |              |             |         |           |       |
|                        | SHOF<br>activa<br>advisi<br>INTEF | RTCUT<br>ted, a<br>ng<br>RFACE.  | TO INTE   | et elapsed<br>ERFACE.<br>screen<br>DRTCUT<br>terminate. |                   |                                       |              |             |         |           |       |
|                        |                                   | RFACE  |           | on. The   | CUT TO<br>Console |                                       |              |             |         |           |       |

| U.S. Postal Service    |              |       |       |      |      |      | IDENTI | FICAT   | ION   |           |      |     |     |       |      |
|------------------------|--------------|-------|-------|------|------|------|--------|---------|-------|-----------|------|-----|-----|-------|------|
| Maintenance Checklist  | WORK<br>CODE |       |       |      |      | MENT |        |         | _     | ASS<br>DE |      | NUM | BE  | R     | TYPE |
|                        | 0 3          | М     | S     | Т    |      |      |        |         | С     | Α         | 2    | (   | )   | 3     | М    |
| Equipment Nomenclature | Equipmer     |       |       |      |      |      |        | in File |       |           | Occı |     |     |       |      |
| LM MST                 | Shoot        |       |       |      |      |      | r      | nm09    | 077ah |           |      | N   | ΛOI | nthly | /    |
|                        | Uni          | t Pna | ase ( | 3A a | nd 3 | В    |        |         |       |           |      |     |     |       |      |

|                           |            | Unit Phase 3A and 3B   |              |               |              |                        |       |
|---------------------------|------------|--|--------------|---------------|--------------|------------------------|-------|
| Part or<br>Component      | Item<br>No | Task Statement and Instruction (Comply with all current safety precautions)  | Est.<br>Time | Min.<br>Skill |              | Threshold              | S     |
| Component                 | NO         | (Comply with all current safety precautions)   | Req<br>(min) | Lev           | Run<br>Hours | Pieces<br>Fed<br>(000) | Freq. |
|                           |            | NOTE   |              |               |              |                        |       |
|                           |            | The LOGIN name of the user who last successfully logged into the system appears initially in this field. To return to the LOGIN name window, click it with the trackball or press SHIFT-TAB.                                     |              |               |              |                        |       |
|                           |            | 41. Enter the USER NAME and PASSWORD.  |              |               |              |                        |       |
|                           |            | 42. The CELL STATUS screen appears after<br>successful LOGIN. Wait for a green<br>CONNECTED to appear at the right of the<br>NETWORK status, indicating the cell<br>controller establishes communication with the<br>TMS system. |              |               |              |                        |       |
|                           |            | 43. Review the CELL STATUS screen for errors. Review the Fault Description and note any discrepancies.   |              |               |              |                        |       |
|                           |            | 44. Physically close the safety gates.   |              |               |              |                        |       |
|                           |            | 45. Select Maint Mode option from Main screen.   |              |               |              |                        |       |
|                           |            | 46. Access the MAINTENANCE MODE screen. Select the Discrete I/O screen option under the Miscellaneous section.   |              |               |              |                        |       |
|                           |            | 47. At the Discrete I/O screen, select the Status screen option.   |              |               |              |                        |       |
|                           |            | 48. Click the Disable PLC button in the Safety Controls section.   |              |               |              |                        |       |
|                           |            | <ol> <li>Under the Safety Controls section, uncheck<br/>the UNLOCK GATE option to ensure the<br/>safety gates are locked.</li> </ol>   |              |               |              |                        |       |
|                           |            | 50. Select the Close button to return to the MAINTENANCE MODE screen.  |              |               |              |                        |       |
| TA, RA HOSES/<br>BSU MATS | 17.        | Check TA and RA Air Hoses and BSU Safety Mats.  CAUTION  Ensure TA is fully retracted before moving the VA. Failure to comply with this precaution may result in BSU equipment damage.   | 8            | 9             |              |                        |       |

| U.S. Postal Service           |  |      |                          |      |   |  |             | IDE | NTIF          | ICAT | ION           |           |        |      |        |      |
|-------------------------------|--|------|--------------------------|------|---|--|-------------|-----|---------------|------|---------------|-----------|--------|------|--------|------|
| Maintenance Checklist         | WORK<br>CODE                                     |      |                          |      |   |  | MENT<br>NYM |     |               |      | _             | ASS<br>DE | N      | UMBI | ĒR     | TYPE |
|                               | 0  | 3    | М                        | S    | Т |  |             |     |               |      | С             | Α         | 2      | 0    | 3      | М    |
| Equipment Nomenclature LM MST |  | noot | nt Mod<br>ing S<br>t Pha | Star |   |  |             | В   | ulletin<br>Mı |      | name<br>077ah |           | Occurr |      | onthly | /    |
| Part or Item                  | Tack Statement and Instruction Fet Min Threshold |      |                          |      |   |  |             |     |               |      |               | le.       |        |      |        |      |

| Part or   | Item | Task Statement and Instruction   | Est.         | Min.  |       | Threshold    | S      |
|-----------|------|--|--------------|-------|-------|--------------|--------|
| Component | No   | (Comply with all current safety precautions)   | Time         | Skill | Run   | Pieces       | Freq.  |
|           |      |  | Req<br>(min) | Lev   | Hours | Fed<br>(000) | 1 104. |
|           |      | At the MAINTENANCE MODE screen, perform  |              |       |       |              |        |
|           |      | he following:  |              |       |       |              |        |
|           |      | <ol> <li>In the Manual Move To section enter 1 in the<br/>VA carriage box.</li> </ol>  |              |       |       |              |        |
|           |      | <ol><li>Click on Move VA to lower the VA carriage to<br/>the lowest position.</li></ol>  |              |       |       |              |        |
|           |      | <ol> <li>Select the CELL OFFLINE option on any<br/>main screen header panel.</li> </ol>  |              |       |       |              |        |
|           |      | <ol> <li>The green stack lights and the CSSS OK-TO-<br/>ENTER light begin to flash.</li> </ol>   |              |       |       |              |        |
|           |      | <ol><li>The cell controller completes all transactions<br/>and comes to a controlled stop. The VTU<br/>returns to the HOME position.</li></ol>   |              |       |       |              |        |
|           |      | 6. The green stack lights go Off.  |              |       |       |              |        |
|           |      | 7. Select Maint Mode option from main screen.  |              |       |       |              |        |
|           |      | <ol> <li>Access the MAINTENANCE MODE screen.<br/>Select the Discrete I/O screen option at the<br/>Miscellaneous section.</li> </ol>  |              |       |       |              |        |
|           |      | 9. At the Discrete I/O screen, select the Status screen option.  |              |       |       |              |        |
|           |      | <ol> <li>Ensure the Enable PLC option is displayed at<br/>the Discrete I/O Status Screen Safety<br/>Controls section. Click on the Disable PLC<br/>option to change to Enable PLC if required.</li> </ol>  |              |       |       |              |        |
|           |      | 11. Select the UNLOCK THE GATE option. The pneumatic system purge valve is automatically activated, removing air pressure from the system. In addition, the KP Main Motor Contactor is opened. This removes the 480 VAC from the servo drive controllers and the power to the motor fans. Control voltage is present at the controllers and sensors. |              |       |       |              |        |
|           |      | 12. Open the safety gates.   |              |       |       |              |        |
|           |      | <ol> <li>Select the Close option. Return to the<br/>MAINTENANCE MODE screen to LOG OFF.</li> </ol>   |              |       |       |              |        |
|           |      | 14. Access the Windows NT START button at the<br>lower screen display. Select the<br>SHUTDOWN option and select YES when<br>prompted. Wait for software to complete  |              |       |       |              |        |

| Manneriane 10                 | difficilities recrimed Support Series |   |                                |                      |      |   |              |  |     |               |      |               |            |        | / I I V I V | <i>)</i> | 10 17 |
|-------------------------------|---------------------------------------|---|--------------------------------|----------------------|------|---|--------------|--|-----|---------------|------|---------------|------------|--------|-------------|----------|-------|
| U.S. Postal                   | Service                               |   |                                |                      |      |   |              |  | IDE | NTIF          | ICAT | ION           |            |        |             |          |       |
| Maintenance                   | Checklist                             |   | RK<br>DE                       |                      |      |   | QUIF<br>ACRO |  |     |               |      | _             | ASS<br>DDE | N      | UMBI        | ĒR       | TYPE  |
|                               | ijnmont Nomanelaturo                  |   |                                | М                    | S    | Т |              |  |     |               |      | С             | Α          | 2      | 0           | 3        | М     |
| Equipment Nomenclatur<br>LM M |                                       |   | hoot                           | nt Moding S<br>t Pha | Star |   |              |  |     | Bulletir<br>M |      | name<br>077ah |            | Occuri |             | nthl     | /     |
| Part or                       | Item                                  | • | Task Statement and Instruction |                      |      |   |              |  |     |               |      | Est.          | Min.       |        | Thre        | esholo   | ls    |

|           |      | Unit Phase 3A and 3B  |             |              |       |              |       |
|-----------|------|---|-------------|--------------|-------|--------------|-------|
| Part or   | Item | Task Statement and Instruction  | Est.        | Min.         |       | Threshold    | s     |
| Component | No   | (Comply with all current safety precautions)  | Time<br>Req | Skill<br>Lev | Run   | Pieces       | Freq. |
|           |      |   | (min)       |              | Hours | Fed<br>(000) |       |
|           |      | shutdown process.   |             |              |       |              |       |
|           |      | WARNING   |             |              |       |              |       |
|           |      | Before performing the following steps you must don the appropriate PPE.   |             |              |       |              |       |
|           |      | 15. Open the MCC doors; turn Off the computer, the monitor, and the UPS.  |             |              |       |              |       |
|           |      | 16. Open the MCC Main Disconnect Circuit Breaker (CB-1).  |             |              |       |              |       |
|           |      | WARNING   |             |              |       |              |       |
|           |      | When performing maintenance inside the MCC, perform system lockout/tagout procedures as prescribed by the current local lockout/restore procedures. Attach a red multi-lock hasp lockout device on the Main Facility Circuit Breaker; and secure with a lock and signed tag. Otherwise, attach a multi-lock lockout device to the Main Disconnect Switch S1 using a lock and signed tag.  17. Close MCC doors. Perform lockout/tagout procedures as prescribed by the current local |             |              |       |              |       |
|           |      | lockout/restore procedures.  WARNING  |             |              |       |              |       |
|           |      | 480 VAC is present on the line side of CB1 with the Main Disconnect Switch in the OFF position. Severe injury or death from electrocution will occur if the line side of the disconnect switch is contacted. The Main Facility Circuit Breaker listed on the MCC exterior must be locked out to completely remove all system power.   |             |              |       |              |       |
|           |      | <ol> <li>Locate the facility Main Power Distribution<br/>Panel. Disconnect STAR circuit breaker<br/>power, and install lockout device and lock.</li> </ol>  |             |              |       |              |       |
|           |      |   |             | <u> </u>     | 1     | I            | I     |

U.S. Postal Service

Maintenance Technical Support Center IDENTIFICATION

| Maintenance                     | Check | list  | WORK<br>CODE   |   |   | QUIPMENT<br>CRONYM  |   |                      | LASS<br>ODE | NU           | IMBER                  | TYPE  |
|---------------------------------|-------|---|--|---|---|---|---|----------------------|-------------|--------------|------------------------|-------|
|                                 |       |   | 0 3  | M S   |   |   |   | С                    | A           | 2            | 0 3                    | М     |
| Equipment Nomenclature<br>LM MS |       |   |  | ing Sta   | r Bulk s  | Staging<br>d 3B   | Bulletin File<br>mm09   |                      | n           | Occurre      | ence<br>Monthl         | у     |
| Part or                         | Item  |   |  |   | nt and Ins  |   |   | Est.                 | Min.        |              | Threshold              | ds    |
| Component                       | No    | (   | Comply wit   | h all curr  | ent safet   | y precaution  | ns)   | Time<br>Req<br>(min) | Skill Lev   | Run<br>Hours | Pieces<br>Fed<br>(000) | Freq. |
|                                 |       | on tipreverse person and the same state of 25 a 2" mat, 23. Exit gate | he pneuent equiponnel.  Inter the air position.  Inter the fen oses on signs of ders and to construct require d in a sributing the asthesizafety materials but a strength on one strength on o | out/tag imatic coment supply dedevice device | Main damage should be a checked the VA or crooleds.  DTE of the tivate the a such that over a checked the value of the tivate of the tivate of the checked as a 2.26 object. Objects area size ject on the VA. The control of the value of the | ck the TA carriage acking a safety man as a foor a larger ay, may potivated.  by a we solve diameted with a to e of a 2.2 a section | o the escribed rocedure. A and RA assembly t the air at, the just be obtained. The revent eight of er disk etal weight 26" disk or of safety the safety |                      |             |              |                        |       |

| U.S. Postal Service           |   |                             |  |  |  |  |             | IDENTI | FICAT         | ION |           |   |        |    |      |
|-------------------------------|---|-----------------------------|--|--|--|--|-------------|--------|---------------|-----|-----------|---|--------|----|------|
| Maintenance Checklist         | _   | WORK EQUIPMENT CODE ACRONYM |  |  |  |  |             |        |               | _   | ASS<br>DE | N | UMBI   | ΞR | TYPE |
|                               | 0 3 M S T   |                             |  |  |  |  |             |        | С             | Α   | 2         | 0 | 3      | М  |      |
| Equipment Nomenclature LM MST | Equipment Model Shooting Star Bulk Staging Unit Phase 3A and 3B |                             |  |  |  |  | Bullet<br>n |        | name<br>077ah |     | Occuri    |   | onthly | y  |      |

| Part or Item Task Statement and Instruction Est. Min. Component No (Comply with all current safety precautions)   | Thresholds |     |
|---|------------|-----|
| Component No (Comply with all current safety precautions) Time   Skill  | , ,        |     |
| Req Lev Hour  |            | eq. |
|   | (000)      |     |
| WARNING   |            |     |
| Before performing the following steps you must don the appropriate PPE.   |            |     |
| 24. Remove the lock and lockout device from Main Disconnect Switch, S1.   |            |     |
| 25. Place Main Disconnect Switch, S1 on the ON position.  |            |     |
| 26. Press the yellow E-STOP RESET Button on the Main Control Cabinet.   |            |     |
| WARNING   |            |     |
| If the red stack lights do not remain illuminated and the E-Stop circuitry does reset, notify your supervisor. Failure to comply may result in potentially hazardous conditions due to degraded E-Stop circuitry. |            |     |
| 27. Verify the red stack lights and the MPAS/CSSS ERROR lights remain illuminated indicating the E-Stop circuitry has failed to reset due to the safety mat being activated.                                      |            |     |
| 28. Place the handle of Main Disconnect Switch, S1, located on the Main Control Cabinet in the OFF position.  |            |     |
| 29. Attach a lockout device to Main Disconnect Switch, S1 and secure with a lock.   |            |     |
| 30. Manually unlock the safety gate Spartan interlock using the manual interlock key.   |            |     |
| 31. Open the safety gate and enter the fenced area.   |            |     |
| 32. Repeating steps 20 thru 29 until all mats have been checked. (Approx.10ea)  |            |     |
| 33. Exit fenced area and close the safety gate.   |            |     |
| 34. Manually lock the safety gate Spartan interlock using the manual interlock key.   |            |     |

Maintenance Technical Support Center

| U.S. Postal S                | Service |                                   | 1116=::                         | 1  |   | IDENTIFICAT           |                      |              |              |                        |       |
|------------------------------|---------|-----------------------------------|---------------------------------|--|---|-----------------------|----------------------|--------------|--------------|------------------------|-------|
| Maintenance                  | Check   | list                              | WORK<br>CODE                    |  | EQUIPMENT<br>ACRONYM  |                       | _                    | ASS<br>ODE   | NU           | MBER                   | TYPE  |
|                              |         |                                   | 0 3                             | M S 7                                    |   |                       | С                    | Α            | 2            | 0 3                    | М     |
| Equipment Nomenclature LM MS |         |                                   | Shoo                            | ent Model<br>ting Star Bu<br>it Phase 3A |   | Bulletin File<br>mm09 | ename<br>9077al      | n            | Occurre      | nce<br>Monthly         | У     |
| Part or                      | Item    |                                   |                                 | Statement and                            |   |                       | Est.                 | Min.         |              | Threshold              | ds    |
| Component                    | No      | (6                                | Comply wi                       | ith all current s                        | afety precaution  | ns)                   | Time<br>Req<br>(min) | Skill<br>Lev | Run<br>Hours | Pieces<br>Fed<br>(000) | Freq. |
|                              |         |                                   |                                 | WARNIN                                   | IG  |                       |                      |              |              |                        |       |
|                              |         |                                   | ment                            |  | ing around<br>wer has   | or on<br>been         |                      |              |              |                        |       |
|                              |         |                                   |                                 | lock and nect Switch                     | lockout de  | vice from             |                      |              |              |                        |       |
|                              |         |                                   | ore the a                       | •  | to the Filter   |                       |                      |              |              |                        |       |
|                              |         |                                   |                                 | ain Facilities<br>equired.               | STAR circu  | ıit                   |                      |              |              |                        |       |
|                              |         | to ap                             | ply 480<br>power:               | VAC 3-phas                               | nnect Switch<br>ses to the M<br>d the interna                       | CC. The               |                      |              |              |                        |       |
|                              |         | diagr                             |                                 | utine to con                             | low the inter<br>nplete and th                                      |                       |                      |              |              |                        |       |
|                              |         |                                   |                                 |  | I the cell con<br>er to boot up                                     |                       |                      |              |              |                        |       |
|                              |         | acce:                             | ss the W<br>word de             | Vindows NT<br>fault promp                | Ctrl-Alt-Dele<br>Logon box.<br>t, press ENT<br>ocesses to           |                       |                      |              |              |                        |       |
|                              |         |                                   |                                 | NOTE                                     |   |                       |                      |              |              |                        |       |
|                              |         | SHOF<br>activa<br>advisi<br>INTEF | RTCUT<br>ted, a<br>ng<br>RFACE. | TO INTERI<br>prompt so<br>SHOR           | elapsed before<br>FACE.EXE I<br>creen will a<br>TCUT<br>erminated d |                       |                      |              |              |                        |       |
|                              |         | INTE                              | RFACE                           |  | RTCUT TO<br>The STAR (  | Console               |                      |              |              |                        |       |
|                              |         |                                   |                                 | NOTE                                     |   |                       |                      |              |              |                        |       |
|                              |         | The I                             | OGIN                            | name of t                                | he user wh  | o last                |                      |              |              |                        |       |

30 Attachment 4

successfully logged into the system appears initially in this field. To return to the LOGIN name window, click it with the

trackball or press SHIFT-TAB.

| U.S. Postal Service           |   |           |  |  |   |  |             | IDE | NTIFI | CATI | ON            |           |        |      |      |      |
|-------------------------------|---|-----------|--|--|---|--|-------------|-----|-------|------|---------------|-----------|--------|------|------|------|
| Maintenance Checklist         | 800   | RK<br>DE  |  |  | _ |  | MENT<br>NYM | •   |       |      | _             | ASS<br>DE | N      | UMBE | ₽R   | TYPE |
|                               | 0   | 0 3 M S T |  |  |   |  |             |     |       |      | С             | Α         | 2      | 0    | 3    | М    |
| Equipment Nomenclature LM MST | Equipment Model Shooting Star Bulk Staging Unit Phase 3A and 3B |           |  |  |   |  |             | Ві  |       |      | name<br>077ah | _         | Occurr |      | nthl | /    |

|           |            | · · · · · · · · · · · · · · · · · · ·  |              |               |              |                        |       |
|-----------|------------|--|--------------|---------------|--------------|------------------------|-------|
| Part or   | Item<br>No | Task Statement and Instruction   | Est.<br>Time | Min.<br>Skill |              | Threshold              | s     |
| Component | INO        | (Comply with all current safety precautions)   | Req<br>(min) | Lev           | Run<br>Hours | Pieces<br>Fed<br>(000) | Freq. |
|           | 1          |  |              | 1             |              | , ,                    | 1     |
|           |            | 43. Enter the USER NAME and PASSWORD.  |              |               |              |                        |       |
|           |            | 44. The CELL STATUS screen appears after successful LOGIN. Wait for a green CONNECTED to appear at the right of the NETWORK status indicating the cell controller establishes communication with the TMS system. |              |               |              |                        |       |
|           |            | 45. Review the CELL STATUS screen for errors. Review the Fault Description and note any discrepancies.   |              |               |              |                        |       |
|           |            | 46. Physically close the safety gates.   |              |               |              |                        |       |
|           |            | 47. Select Maint Mode option from main screen.   |              |               |              |                        |       |
|           |            | 48. Access the MAINTENANCE MODE screen. Select the Discrete I/O screen option under the Miscellaneous section.   |              |               |              |                        |       |
|           |            | 49. At the Discrete I/O screen, select the Status screen option.   |              |               |              |                        |       |
|           |            | <ol><li>Click the Disable PLC button in the Safety<br/>Controls section.</li></ol>   |              |               |              |                        |       |
|           |            | <ol> <li>Under the Safety Controls section, uncheck<br/>the UNLOCK GATE option to ensure the<br/>safety gates are locked.</li> </ol>   |              |               |              |                        |       |
|           |            | WARNING  |              |               |              |                        |       |
|           |            | Be cautious when working around or on equipment when power has been applied.   |              |               |              |                        |       |
|           |            | 52. Select the Close button to return to the MAINTENANCE MODE screen.  |              |               |              |                        |       |
|           |            | 53. Press the yellow E-Stop RESET pushbutton to reset the E-Stop circuitry.  |              |               |              |                        |       |
|           |            | NOTE   |              |               |              |                        |       |
|           |            | The system pneumatics will pressurize, signifying the K1 E-Stop relay and the K19 Safety Mat relay have been reset.  |              |               |              |                        |       |
|           |            | 54. Press the green POWER ON pushbutton to apply power to the KP mainline contactor.   |              |               |              |                        |       |

Maintenance Technical Support Center

IDENTIFICATION

| Maintenance Cl         | heckl | ist |                | WORK<br>CODE   |  |                          | PMENT<br>ONYM             |                           | C                    | ASS<br>ODE |              | MBER                   | TYPE  |
|------------------------|-------|-----|----------------|--|--|--------------------------|---------------------------|---------------------------|----------------------|------------|--------------|------------------------|-------|
| Equipment Nomenclature |       |     |                | 0 3<br>Equipmen  | M S  | Т                        |                           | Bulletin File             | C                    | A          | 2<br>Occurre | 0 3                    | М     |
| LM MST                 | -     |     |                | Shoot  | ing Star   | Bulk Sta<br>3A and 3     |                           | mm09                      |                      | า          | Jocuire      | Monthly                | /     |
| Part or                | Item  |     |                |  |  | and Instru               |                           | ,                         | Est.                 | Min.       |              | Threshold              | s     |
| Component              | No    |     | (              | (Comply wit  | n all curre  | nt sarety p              | recautio                  | ins)                      | Time<br>Req<br>(min) | Skill Lev  | Run<br>Hours | Pieces<br>Fed<br>(000) | Freq. |
|                        | ,     |     | •              | oower is a<br>ultaneous  |  | he follow                | ing ha                    | appens                    |                      |            |              |                        |       |
|                        |       | a   |                | An audibl<br>Personne<br>CycleStol                                       | l Alert S  | tation (M                | 1PAS)                     |                           |                      |            |              |                        |       |
|                        |       | k   | 1              | The stack<br>for about<br>stack ligh                                     | 20 seco  | nds and                  | then t                    |                           |                      |            |              |                        |       |
|                        |       | C   |                | All systen<br>perform a  |  |                          |                           | and                       |                      |            |              |                        |       |
|                        |       | t   | he S           | k on the C<br>STAR in t<br>following                                     | he ONLI  | NE mod                   | e of op                   | peration.                 |                      |            |              |                        |       |
|                        |       | â   | :              | An audibl<br>second fo<br>seconds.                                       |  |                          |                           |                           |                      |            |              |                        |       |
|                        |       | k   | 1              | All start-u<br>10 secone<br>two ambe<br>lamp, and<br>lamps.              | ds. The<br>er stack l                              | start-up<br>ights, the   | lights<br>e amb           | are the<br>er CSSS        |                      |            |              |                        |       |
|                        |       | C   | <br> <br> <br> | At the top<br>message:<br>ONLINE i<br>homed ar<br>checked a<br>STAR is a | s are dis<br>initializat<br>nd initiali<br>and REC | played Fion. As zed, the | PENDI<br>the ax<br>amplif | NG<br>is are<br>fiers are |                      |            |              |                        |       |
|                        |       | C   |                | At the cor<br>white stac   |  |                          |                           |                           |                      |            |              |                        |       |
|                        |       | €   |                | The STA <sup>-</sup><br>displays (                                       |  |                          | op of t                   | he screen                 |                      |            |              |                        |       |
|                        |       |     |                |  | NO.  | TE                       |                           |                           |                      |            |              |                        |       |
|                        |       | S   | TAF<br>S       | white sta<br>R encoun<br>Servo Dr<br>tenance b                           | ters a S<br>ive Mot                                | ervo Dri<br>tor fault    | ve Co                     | ntroller                  |                      |            |              |                        |       |
|                        |       |     |                | en ONLIN<br>er lights t  |  |                          |                           | shing<br>and white        |                      |            |              |                        |       |

| U.S. Postal Service            |   |           |  |  |  |  |             | IDE | NTIF | CAT           | ION       |        |   |       |    |      |
|--------------------------------|---|-----------|--|--|--|--|-------------|-----|------|---------------|-----------|--------|---|-------|----|------|
| Maintenance Checklist          |   | RK<br>DE  |  |  |  |  | MENT<br>NYM |     |      |               | CLA<br>CO |        | N | UMBE  | ER | TYPE |
|                                | 0   | 0 3 M S T |  |  |  |  |             |     |      |               | O         | Α      | 2 | 0     | 3  | М    |
| Equipment Nomenclature  LM MST | Equipment Model Shooting Star Bulk Staging Unit Phase 3A and 3B |           |  |  |  |  | Ві          |     |      | name<br>077ah |           | Occurr |   | nthly | /  |      |

| Part or   | Item<br>No | Task Statement and Instruction (Comply with all current safety precautions)   | Est.<br>Time | Min.<br>Skill |              | Threshold              | S     |
|-----------|------------|---|--------------|---------------|--------------|------------------------|-------|
| Component | NO         | (Comply with all current salety precautions)  | Req<br>(min) | Lev           | Run<br>Hours | Pieces<br>Fed<br>(000) | Freq. |
|           |            | stack lights illuminate steadily, and ONLINE operation begins.  |              |               |              |                        |       |
| CLEAN UP  | 18.        | Clean Up.  Ensure all tools, lubricants, rags, and miscellaneous are removed from the work area. Notify supervisor of any deficiencies. | 2            | All           |              |                        |       |

Maintenance Technical Support Center

| U.S. Postal Service            |   |   |   |   |  |  | IDEN | NTIFICATI             | ON |   |        |    |       |   |
|--------------------------------|---|---|---|---|--|--|------|-----------------------|----|---|--------|----|-------|---|
| Maintenance Checklist          | WORK EQUIPMENT CODE ACRONYM                                     |   |   |   |  |  |      | CLA<br>CO             |    | N | UMBE   | ER | TYPE  |   |
|                                | 0 3   | М | S | Т |  |  |      |                       | O  | Α | 2      | 0  | 3     | М |
| Equipment Nomenclature  LM MST | Equipment Model Shooting Star Bulk Staging Unit Phase 3A and 3B |   |   |   |  |  | Bu   | ılletin Filer<br>mm09 |    |   | Occurr |    | nthly | / |

| Part or<br>Component | Item<br>No | Task Statement and Instruction (Comply with all current safety precautions) | Est.<br>Time | Min.<br>Skill |              | Threshold              | S     |
|----------------------|------------|---|--------------|---------------|--------------|------------------------|-------|
| Component            | 110        | (Comply with all current salety productions)                                | Req<br>(min) | Lev           | Run<br>Hours | Pieces<br>Fed<br>(000) | Freq. |

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#### **ATTACHMENT 5**

## LM MST SHOOTING STAR BULK STAGING UNIT PHASE 3A AND 3B MASTER CHECKLIST

03-MST-CA-204-M

Quarterly Time Total: Per Bulk Staging Unit - 122 Minutes

#### SPECIAL TOOLS NEEDED TO PERFORM THIS ROUTE.

Standard Commercial Grease Gun with Grease
Feather Duster
Extension Pole
Standard/Short Level (Torpedo)
Wiping Rags/Paper cloth
Scissor lift or other Lifting device
Safety Harness and Straps
Basic MPE tools

Refer to the MS-238 if additional maintenance information is required.

Maintenance Technical Support Center

IDENTIFICATION

"CLASS | NUMBER | TYPE

| U.S. Postal Service           |  | 14/65::  |  |  |  |   | DEN  | TIFICA   |                      | 100          | 1            |     |                      | T)/55 |
|-------------------------------|--|--|--|--|--|---|--|--|----------------------|--------------|--------------|-----|----------------------|-------|
| Maintenance Checl             | klist  | WORK<br>CODE   |  |  | QUIPI<br>ACRO  |   |  |  |                      | _ASS<br>ODE  | N            | UMB | BER                  | TYPE  |
|                               |  | 0 3  | M S  | Т  |  |   |  |  | С                    | А            | 2            | 0   | 4                    | М     |
| Equipment Nomenclature LM MST |  | Shoo   | ent Model<br>ting Star<br>it Phase   |  |  |   | Bul  | letin File<br>mm0  | ename<br>9077a       | h            | Occur        |     | e<br>ıarterl         | у     |
| Part or Item                  |  | Task   | Statemen   | t and Ir   | nstruct  | tion  |  |  | Est.                 | Min.         |              | Thr | resholo              | ls    |
| Component No                  | (0   | Comply wi  | ith all curre  | ent safe   | ety pre  | cautio  | ns)  |  | Time<br>Req<br>(min) | Skill<br>Lev | Run<br>Hours |     | ieces<br>Fed<br>000) | Freq. |
| STATEMENT                     | COMPLY Disconnice required local loc | ect power by this ckout produced for suspunusual ction of the cleaning produced for the cleaning produced for the contained for the contai | wer and sinstruction in the equipment of | l apportion ares this ect dust of ance procepuipm as a point as a point are the area of th | oly lo . Re to p mac dust or un e is eedir ent. OR d, a both, l ed i . F visor | rekoud<br>fer to<br>fer to<br>prope<br>hine.<br>co<br>nusual<br>foun<br>g<br>may re<br>duipn<br>rical | its or culting | when irrent shut Open cions. ebris. notify any AIR native tered cloth, e of afety iately ire | 2                    | AII          |              |     |                      |       |
|                               |  |  | NO   | TE   |  |   |  |  |                      |              |              |     |                      |       |
|                               | neces  | NOTE A scissors lift, or other device, may be necessary to access the IA and DA Control Cabinets.  |  |  |  |   |  |  |                      |              |              |     |                      |       |
|                               | <del></del> -  | NOTE  The completion of this task will require   |  |  |  |   |  |  |                      |              |              |     |                      |       |
|                               | some<br>should<br>previo   | of the r<br>d have<br>busly and<br>c for n   | ion of t<br>acks to l<br>had th<br>nd the<br>naintena  | be rer<br>nese<br>shelv  | move<br>rack:<br>/es (   | d. Al<br>s rer<br>disabl  | ll sit<br>nov<br>led   | es<br>ed<br>in   |                      |              |              |     |                      |       |
|                               |  |  | NO   | TE   |  |   |  |  |                      |              |              |     |                      |       |
|                               |  | all gate<br>ing task   | es requir  |  | acco   | omplis  | sh t   | he   |                      |              |              |     |                      |       |

| U.S. Postal Service   | Maintenance Technica | I Suppo  | rt Cente   | <u>er</u>  |  |  |   |  |  |             |       | N     | 1MO-0         | 43-14 |
|---|----------------------|--|--|--|--|--|---|--|--|-------------|-------|-------|---------------|-------|
| Equipment Nomenclature  | U.S. Postal Service  |  |  | 1  |  |  |   | DENT   | IFICAT   |             |       | 1     |               |       |
| Equipment Nomenclature LM MST   Equipment Model Shooting Star Bulk Staging Unit Phase 3A and 3B   Staging Unit Phase 3A and 3B  | Maintenance Chec     | klist  | CODE   |  |  |  |   |  |  | C           |       |       |               |       |
| Part or Component   |                      |  |  |  |  |  |   |  |  | _           | Α     | 2     | 0 4           | M     |
| Component   No   (Comply with all current safety precautions)   Time Req (min)   Run   Pieces Fed (000)   Freq.   |                      |  | Shoot  | ing St   | ar Bulk  |  |   |  |  |             | h     |       |               | ·ly   |
| Component   No   (Comply with all current safety precautions)   Time Req (min)   Run   Pieces Fed (000)   Freq.   | Part or Item         |  | Task   | Statem   | ent and I  | Instructi  | on  |  |  | Fet         | Min   |       | Threshold     | de    |
| CLEANING  (IA) and Discharge Axis (DA) Control Cabinets.  1. At the cell controller, click on the CELL OFFLINE button to take the BSU off-line. The BSU will complete all current transactions, and then come to a controlled stop at the home position.  2. Select the CELL OFFLINE option on any main screen header panel.  3. The green stack lights and the CSSS OK-TO-ENTER light begin to flash.  4. The cell controller completes all transactions and comes to a controlled stop. The VTU returns to the HOME position.  5. The green stack lights go Off.  6. Select the Maint Mode option from the main screen.  7. Access the MAINTENANCE MODE screen. Select the Discrete I/O screen option at the Miscellaneous section.  8. At the Discrete I/O screen, select the Status screen option.  9. Ensure the Enable PLC option is displayed at |                      | (  |  |  |  |  |   | ns)  |  | Time<br>Req | Skill |       | Pieces<br>Fed |       |
| Controls section. Click on the Disable PLC option to change to Enable PLC if required.  10. Select the UNLOCK THE GATE option. The pneumatic system purge valve is automatically activated removing air pressure  |                      | (IA) ar Cabinet  1. At t OFF The trans stop  2. Sele mair  3. The TO-I  4. The and retur  5. The  6. Sele Scre  7. Acce Sele Misc  8. At the scre  9. Ensure the Concoption  10. Sele pneu | the cell FLINE but BSU sactions, at the hore cet the CE are screen of the cell control comes to the green state of the Market the Market the Discrete cen option of the cet the Union to charted the cell the c | control titton will and been pelled ack lig ght been pelled ack lig ac | oller, conto take complete consition.  FFLINE of pane ghts and egin to compled the position.  TENAN et I/O store of the position.  PLC of State of Enable of | is (E) click of the olete ome to the ole | on the BSU all or a common on on on the CSSS tran The optic ect the s discrete Disa if re E optic via | ne Control con | centrol cell. cell. celline. crent colled cons diameter cell. cell. celline. cell. cons diameter cell. celline. | ,           | 9     | Hours |               |       |

Attachment 5 3

Return to the

12. Select the Close option. Return to the MAINTENANCE MODE screen to LOG OFF.

13. Access the Windows NT START button at

11. Open the safety gates.

Maintenance Technical Support Center

| Maintenance Checkli            | WORK EQUIPMENT CODE ACRONYM  |                         | ASS<br>ODE    | NU           | JMBER                   | TYPE    |
|--------------------------------|--|-------------------------|---------------|--------------|-------------------------|---------|
| Equipment Nomenclature  LM MST | 0 3 M S T Bulletin F Shooting Star Bulk Staging mm   | C<br>ilename<br>09077al | A<br>h        | Occurre      | 0 4<br>ence<br>Quarterl | M<br>ly |
|                                | Unit Phase 3A and 3B   |                         |               | <u> </u>     |                         |         |
| Part or Item Component No      | Task Statement and Instruction (Comply with all current safety precautions)  | Est.<br>Time            | Min.<br>Skill |              | Threshold               |         |
| ·                              |  | Req<br>(min)            | Lev           | Run<br>Hours | Pieces<br>Fed<br>(000)  | Freq.   |
| 15                             | the lower screen display. Select the SHUTDOWN option, and select YES wher prompted. Wait for the software to complete the shutdown process.  WARNING  Before performing the following steps to must don the appropriate PPE.  Open the MCC doors; turn Off the computer the monitor, and the UPS.  Open the MCC Main Disconnect Circui Breaker (CB-1).  WARNING  WHEN ING  WHEN ING  WHEN ING  WHEN ING  WARNING  WHEN ING  WARNING  Close the MCC doors. Perform lockout/tagout procedures as prescribed by the and signed tag.  Close the MCC doors. Perform lockout/tagout procedures as prescribed by the current local lockout/restore procedures.  WARNING  WARNING | n ee                    |               |              |                         |         |

| U.S. Postal                                      |      |               |                            |                      |  | ID         | ENTIFICAT             | ΓΙΟΝ                 |              |              |                        |       |
|--|------|---------------|----------------------------|----------------------|--|------------|-----------------------|----------------------|--------------|--------------|------------------------|-------|
| Maintenance                                      |      | klist         | WORK<br>CODE               |                      | EQUIPMEN<br>ACRONYN                                | ١T         |                       | CL                   | ASS<br>ODE   | NL           | IMBER                  | TYPE  |
|  |      |               | 0 3                        | M S                  | T  |            |                       | С                    | Α            | 2            | 0 4                    | М     |
| Equipment Nomenclature                           |      |               |                            | g Star B             | ulk Staging<br>A and 3B                            |            | Bulletin File<br>mm09 | name<br>9077al       | h            | Occurre      | ence<br>Quarter        | ly    |
| Part or  | Item |               |                            |                      | nd Instruction                                     |            | .\                    | Est.                 | Min.         |              | Threshold              | ds    |
| Component  | No   | (             | Comply with                | all current          | safety precau                                      | uons       | 5)                    | Time<br>Req<br>(min) | Skill<br>Lev | Run<br>Hours | Pieces<br>Fed<br>(000) | Freq. |
|  |      | pane          |                            |                      | STAR circu<br>out device a                         |            |                       |                      |              |              |                        |       |
|  |      |               |                            | WARNI                | NG   |            |                       |                      |              |              |                        |       |
|  |      | on the        | he pneun                   | natics N             | t device a<br>lain Air V<br>mage or i              | /alv       | e to                  |                      |              |              |                        |       |
|  |      |               | ite the air s<br>position. | supply sh            | nut-off valve                                      | e to       | the                   |                      |              |              |                        |       |
|  |      | by th         |                            |                      | nd lock as p<br>kout/restore                       |            | scribed               |                      |              |              |                        |       |
|  |      | Cabi          |                            | a damp               | xterior of M<br>cloth (if r                        |            |                       |                      |              |              |                        |       |
|  |      |               |                            | NOTE                 | <b>E</b>   |            |                       |                      |              |              |                        |       |
|  |      |               | ssary to ac                |                      | lift device,<br>IA and DA                          |            |                       |                      |              |              |                        |       |
|  |      | and           | DA Contro                  | ol Cabine            | the exterion<br>ets. Use a<br>excessive o          | dar        | np cloth              |                      |              |              |                        |       |
| SA SENSOR<br>INSPECTION                          | 3.   |               | pper Safe<br>esence Se     |                      | Sensors a  | and        | SA                    | 10                   | 9            |              |                        |       |
|  |      |               | r the sa                   | fety-fenc            | ed area,   | оре        | ened in               |                      |              |              |                        |       |
|  |      | clear<br>uppe | n upper S<br>er SA mid     | SA left<br>Idle safe | on an exte<br>safety bea<br>ty beam s<br>eam senso | am<br>sens | sensor,               |                      |              |              |                        |       |
|  |      | clear         |                            | s on ea              | on an exteach SA trass<br>shelf).                  |            |                       |                      |              |              |                        |       |
| VA BEARING,<br>CABLES,<br>SHEAVES,<br>INSPECTION | 4.   | Bearing       | s, VA Co<br>s on top o     | ounter \             | cate VA Pi<br>Weight Ca<br>Mast and                | able       | es, and               | 19                   | 9            |              |                        |       |

Maintenance Technical Support Center

| U.S. Postal Servi      | ce                   | WORK   |                       | EQUIP        |                  | DENTIFICA <sup>-</sup> |              | ASS           | NII     | MBER         | TYPE  |
|------------------------|----------------------|--|-----------------------|--------------|------------------|------------------------|--------------|---------------|---------|--------------|-------|
| Maintenance Ch         | ecklist              | CODE   |                       | ACRO         |                  |                        |              | ASS<br>ODE    | INU     | IVIDEK       | 1175  |
|                        |                      | 0 3  | M S                   | Т            |                  |                        | С            | Α             | 2       | 0 4          | М     |
| Equipment Nomenclature |                      | Equipmen   |                       | O. III. Cto. |                  | Bulletin File          |              | _             | Occurre |              |       |
| LM MST                 |                      |  | ng Star E<br>Phase 3  |              |                  | mmos                   | 9077al       | 1             |         | Quarter      | У     |
|                        |                      | Offic  | T Hase 5              | A and 5      |                  |                        |              |               |         |              |       |
|                        | em                   |  | Statement a           |              |                  | ) a)                   | Est.<br>Time | Min.<br>Skill |         | Threshold    | ls    |
| Component              | 10                   | (Comply with                                       | i all currerii        | salety pre   | caulioi          | 15)                    | Req          | Lev           | Run     | Pieces       | Freq. |
|                        |                      |  |                       |              |                  |                        | (min)        |               | Hours   | Fed<br>(000) |       |
|                        |                      |  | NOT                   | E            |                  |                        |              |               |         |              |       |
|                        | Δς                   | cissors lif  |                       |              | devid            | e is                   |              |               |         |              |       |
|                        |                      | ssary to   |                       |              |                  |                        |              |               |         |              |       |
|                        |                      | ings the   |                       |              |                  |                        |              |               |         |              |       |
|                        | uppe                 | r portion o  | of the VA             | mast.        |                  |                        |              |               |         |              |       |
|                        |                      | ess the 2  |                       |              |                  |                        |              |               |         |              |       |
|                        |                      | 2 counter<br>ne VTU ma                             |                       |              |                  |                        |              |               |         |              |       |
|                        | ther                 |  | 351 (2 011            | each Sic     | <i>ie)</i> , cie | zari                   |              |               |         |              |       |
|                        | 2. Usir              | ng a stand   | ard com               | mercial c    | ırease           | aun                    |              |               |         |              |       |
|                        |                      | ase each f   |                       |              |                  |                        |              |               |         |              |       |
|                        |                      | blith SHC  |                       |              |                  |                        |              |               |         |              |       |
|                        | 3. Clea              | an, inspec   | t, and lub            | ricate V     | A mas            |                        |              |               |         |              |       |
|                        |                      | counterw   |                       | les that     | are ac           | cessible               |              |               |         |              |       |
|                        | as t                 | he lift unit                                       | lowers.               |              |                  |                        |              |               |         |              |       |
|                        |                      | nove the p   |                       | ft from in   | nside 1          | the BSU                |              |               |         |              |       |
|                        |                      | urity fence  |                       |              |                  |                        |              |               |         |              |       |
|                        |                      | ure all too<br>oved from                           |                       | -            | s, etc           | ., are                 |              |               |         |              |       |
|                        |                      | the safety   | fence a               | rea, and     | close            | the                    |              |               |         |              |       |
|                        | safe                 | ty gate.   |                       |              |                  |                        |              |               |         |              |       |
|                        |                      |  | WARN                  | ING          |                  |                        |              |               |         |              |       |
|                        | Befo                 | re perfor  | ming th               | e follov     | wing             | steps                  |              |               |         |              |       |
|                        | you                  | must don   | the app               | ropriate     | PPE              | •                      |              |               |         |              |       |
|                        |                      | [  | WARN                  | ING          |                  |                        |              |               |         |              |       |
|                        | Be c                 | autious w  | hen wo                | rking ar     | ound             | or on                  |              |               |         |              |       |
|                        |                      | pment v  |                       | _            |                  | been                   |              |               |         |              |       |
|                        |                      | tore the a   |                       | re to the    | Filter           |                        |              |               |         |              |       |
|                        | 8. Res               | et the Mai<br>aker, as re                          | in Faciliti           | es STAF      | R circu          | it                     |              |               |         |              |       |
|                        | 9. Pos<br>to a<br>MC | ition the M<br>pply 480 \<br>C power s<br>come on. | lain Disc<br>/AC 3-ph | ases to      | the M            | CC. The                |              |               |         |              |       |

| U.S. PUSIA           | I DEI VICE |                     | WORK  |                                  |                                | EOI III                  | אבאיד                    |                  | INTIFIC     |             | LASS         | h.       | UMB  | ED          | TYPE  |
|----------------------|------------|---------------------|---|----------------------------------|--------------------------------|--------------------------|--------------------------|------------------|-------------|-------------|--------------|----------|------|-------------|-------|
| Maintenance          | e Chec     | klist               | CODE  |                                  |                                |                          | PMENT<br>DNYM            |                  |             | _           | ODE          |          | OWB  | ĽΚ          | ITPE  |
|                      |            |                     | 0 3   | М                                | S T                            |                          |                          |                  |             | С           | Α            | 2        | 0    | 4           | М     |
| Equipment Nomenclatu |            |                     | Equipme   |                                  |                                |                          |                          | В                |             | ilename     |              | Occur    |      |             |       |
| LM M                 | IST        |                     |   |                                  | Star Bul<br>ase 3A             |                          |                          |                  | mm          | 09077a      | h            |          | Qu   | arterl      | У     |
|                      |            |                     | UII   | IL PIIC                          | 15E 3A                         | anu s                    | D .                      |                  |             |             |              | <u> </u> |      |             |       |
| Part or              | Item       | ,                   |   |                                  | ment and                       |                          |                          | ,                |             | Est.        | Min.         |          | Thre | eshold      | S     |
| Component            | No         | (                   | (Comply w   | ith all c                        | current sa                     | atety pr                 | ecautic                  | ns)              |             | Time<br>Req | Skill<br>Lev | Run      |      | eces        | Freq. |
|                      |            |                     |   |                                  |                                |                          |                          |                  |             | (min)       |              | Hours    |      | Fed<br>000) |       |
|                      |            | 10 =                |   |                                  |                                |                          |                          |                  | ,           | <u>_</u>    | 1            | 1        |      | ,,,,        |       |
|                      |            |                     |   |                                  |                                |                          |                          |                  |             |             |              |          |      |             |       |
|                      |            |                     |   |                                  |                                | ipicio                   | ana t                    | 110              | green       |             |              |          |      |             |       |
|                      |            | 11 Turn             | On the  | moni                             | tor and                        | the c                    | ell co                   | ntro             | oller       |             |              |          |      |             |       |
|                      |            |                     |   |                                  |                                |                          |                          |                  |             |             |              |          |      |             |       |
|                      |            | 12. Whe             | /hen prompted, press Ctrl-Alt-Delete to   |                                  |                                |                          |                          |                  | to          |             |              |          |      |             |       |
|                      |            | acce                | cess the Windows NT Logon box. At the ssword default prompt, press ENTER and it one minute for all processes to start.  |                                  |                                |                          |                          |                  |             |             |              |          |      |             |       |
|                      |            |                     | en prompted, press Ctrl-Alt-Delete to ess the Windows NT Logon box. At the sword default prompt, press ENTER and tone minute for all processes to start.  NOTE  ne minute has not elapsed before the DRTCUT TO INTERFACE.EXE Icon is vated, a prompt screen will appear |                                  |                                |                          |                          |                  |             |             |              |          |      |             |       |
|                      |            | wait                | one min   |                                  | •                              | ocess                    | ses to                   | Sta              | art.        |             |              |          |      |             |       |
|                      |            |                     |   |                                  | NOTE                           |                          |                          |                  |             |             |              |          |      |             |       |
|                      |            |                     |   |                                  |                                |                          |                          |                  |             |             |              |          |      |             |       |
|                      |            |                     |   |                                  |                                |                          |                          |                  |             |             |              |          |      |             |       |
|                      |            | advis               |   |                                  |                                |                          | WIII 6                   | аμμ              |             |             |              |          |      |             |       |
|                      |            | INTE                | RFACE.  | EXE                              | is te                          |                          | ted c                    | lue              | to          |             |              |          |      |             |       |
|                      |            |                     | ERFACE  | .EXE                             | Icon.                          |                          |                          |                  | nsole       |             |              |          |      |             |       |
|                      |            | Logi                | n screer  |                                  |                                |                          |                          |                  |             |             |              |          |      |             |       |
|                      |            |                     |   |                                  | NOTE                           |                          |                          |                  |             |             |              |          |      |             |       |
|                      |            | succe<br>appeathe L | LOGIN<br>essfully<br>ars initia<br>.OGIN n<br>ball or pi  | logo<br>ally in<br>ame           | ged ir<br>this fi<br>windov    | ito t<br>eld.<br>/, clic | he s<br>To re            | sys<br>turi      | tem<br>n to |             |              |          |      |             |       |
|                      |            | 14. Ente            | er the US   | SER N                            | NAME a                         | nd P                     | ASSV                     | VOI              | RD.         |             |              |          |      |             |       |
|                      |            | CON<br>NET<br>cont  | CELL S<br>cessful L<br>NNECTE<br>WORK s<br>roller es<br>TMS sys   | OGIN<br>D to<br>status<br>tablis | N. Wait<br>appear<br>s, indica | for a<br>at the<br>ating | greer<br>right<br>the ce | n<br>: of<br>:II | the         |             |              |          |      |             |       |
|                      |            |                     | iew the (<br>iew the F<br>repancie  | ault                             |                                |                          |                          |                  |             |             |              |          |      |             |       |
|                      |            | 17. Phys            | sically cl  | ose tl                           | he safe                        | ty gat                   | es.                      |                  |             |             |              |          |      |             |       |
|                      |            | 18. Sele            | ct Maint  | Mod                              | e optio                        | n fron                   | n mair                   | ารต              | creen.      |             |              |          |      |             |       |
|                      |            | 19. Acce<br>Sele    | ess the Nect the D  |                                  |                                |                          |                          |                  |             |             |              |          |      |             |       |

Maintenance Technical Support Center IDENTIFICATION

| Maintenance                     | Chec | klist  | WORK<br>CODE  |  |   | EQUIPI<br>ACRO  |   | -   |          | CL                   | ASS<br>ODE   |              | JMBER                  | TYPE    |
|---------------------------------|------|--|---|--|---|---|---|---|----------|----------------------|--------------|--------------|------------------------|---------|
| Equipment Nomenclature<br>LM MS |      |  |   | ing S                                      | S T<br>del<br>Star Bull<br>ase 3A a   |   |   | Bulletin<br>mn  |          | C<br>ame<br>)77al    | A<br>n       | 2<br>Occurr  | 0 4<br>ence<br>Quarter | M<br>ly |
| Part or                         | Item |  |   |  | ment and  |   |   |   |          | Est.                 | Min.         |              | Threshold              | ls      |
| Component                       | No   | (1   | Comply wit  | h all c                                    | current sa  | fety pre  | ecautio   | ons)  |          | Time<br>Req<br>(min) | Skill<br>Lev | Run<br>Hours | Pieces<br>Fed<br>(000) | Freq.   |
|                                 |      | 20. At the screen control cont | en option  to the Disa  trols sect er the Sa  JNLOCK ty gates ct the Cla  NTENAN  autious v beautious | where the low Establishment of the applied | Controls TE option ocked. Outton to MODE s  ARNING n working n pow  E-Stop Figure circuit  NOTE  umatics E-Stop re ave been POWER e KP mate ed the form | tton in s sect on to e coreer or return screer or return screer or reserver on reserver on painline ollowin   | rn to n.  T pu  presund ti et. ushke conn ng ha | Safety uncheck e the the  dor on been shbutton ssurize, ne K19 outton to tactor. appens | i        |                      |              |              |                        |         |
|                                 |      | b<br>f   | Personne Cycle Sto Panels. The stack for about  | op Sv<br>k ligh<br>20 s                    | witch Stants flash  | ation of at a the and the and the at a | (CSS<br>wo h                                    | SS)<br>ertz rate  | <b>;</b> |                      |              |              |                        |         |
|                                 |      | c. /<br>I<br>27. Click<br>the S  | stack light All syster perform a conthe ( STAR in f following   | m drivan int<br>CELL<br>the C              | ves are<br>ternal se<br>ONLINE  | initial<br>elf-tes<br>IE but<br>mode  | ized<br>t.<br>ton t                             | o place<br>peration   | 1.       |                      |              |              |                        |         |

| Walliterlance re-             |            | і Оцрр          | 011                               | 70110                       | .01  |                                   |                                |                             |                       |            | _                |                |          |                         |               |            | 1711 |      | <u> </u>           | J-1 <del>-1</del> |
|-------------------------------|------------|-----------------|-----------------------------------|-----------------------------|--|-----------------------------------|--------------------------------|-----------------------------|-----------------------|------------|------------------|----------------|----------|-------------------------|---------------|------------|------|------|--------------------|-------------------|
| U.S. Postal  Maintenance      |            | klist           |                                   | ORK<br>ODE                  |  |                                   |                                | QUIF<br>ACRO                | MENT<br>NYM           |            | )EN              | ITIFIC         | ATI      | CL                      | ASS<br>ODE    |            | NUI  | MBE  | R                  | TYPE              |
|                               |            |                 | 0                                 | 3                           | М  | S                                 | Т                              |                             |                       |            |                  |                |          | С                       | Α             | 2          |      | 0    | 4                  | М                 |
| Equipment Nomenclatur<br>LM M |            |                 |                                   | Shoo                        | ent Mo<br>ting S<br>it Pha   | odel<br>Star                      |                                |                             |                       |            | Bu               | lletin F<br>mm |          | <sub>ame</sub><br>)77al |               | Оссі       |      |      | arterl             | у                 |
|                               |            | _               |                                   |                             |  |                                   |                                |                             |                       |            |                  |                |          |                         |               |            |      |      |                    |                   |
| Part or<br>Component          | Item<br>No |                 | (Com                              |                             | State  |                                   |                                |                             |                       | ons        | e)               |                |          | Est.<br>Time            | Min.<br>Skill |            | ٦    | Thre | shold              | S                 |
| Component                     | 140        |                 | (COIII)                           | piy w                       | itir ali   | ourro                             | in oui                         | oty pr                      | coadii                | OTIC       | <i>5)</i>        |                |          | Req<br>(min)            | Lev           | Rui<br>Hou |      | F    | eces<br>ed<br>(00) | Freq.             |
|                               |            | a.              | An a                              | ond f                       | ollow  |                                   |                                |                             |                       |            |                  | f five         |          |                         |               |            |      |      |                    |                   |
|                               |            | b.              | two                               | ecor<br>amb<br>o, an        | up lig<br>nds.<br>er sta<br>nd the   | The ack                           | star<br>light:                 | t-up<br>s, the              | lights<br>amb         | s a<br>cei | re<br>r C        | the<br>SSS     | i        |                         |               |            |      |      |                    |                   |
|                               |            | C.              | ONL<br>hom<br>chec                | sage<br>INE<br>ed a<br>cked | p of the same initiation of the same interest of th | e dis<br>alizat<br>nitiali<br>REC | splay<br>tion.<br>ized,<br>CON | ed P<br>As t<br>the<br>CILI | END<br>the at<br>ampl | IN<br>xis  | IG<br>s a<br>ers | re<br>are      |          |                         |               |            |      |      |                    |                   |
|                               |            | d.              | At th                             |                             | omple<br>ack lie   |                                   |                                |                             |                       |            |                  |                |          |                         |               |            |      |      |                    |                   |
|                               |            | e.              | The scre                          |                             | ATUS<br>lispla   |                                   |                                |                             | op of                 | th         | е                |                |          |                         |               |            |      |      |                    |                   |
|                               |            |                 |                                   |                             |  | NO.                               | TE                             |                             |                       |            |                  |                |          |                         |               |            |      |      |                    |                   |
|                               |            | STA<br>to       | white<br>R en<br>Serventena       | cour<br>D                   | nters<br>rive  | a S<br>Mot                        | ervo<br>tor                    | Driv<br>fault,              | e Co                  | nt         | rol              | ler            |          |                         |               |            |      |      |                    |                   |
|                               |            | whi             | en O<br>ber lig<br>te sta<br>LINE | ghts<br>ack li              | turn<br>ights  | Off,<br>illun                     | and<br>nina                    | the o                       | greer                 | n a        | nc               | Ĭ              |          |                         |               |            |      |      |                    |                   |
| UPS check                     | 5.         | Check<br>Supply |                                   |                             | n of   | Unii                              | nter                           | rupti                       | ble F                 | 901        | we               | r              |          | 12                      | 9             |            |      |      |                    |                   |
|                               |            | 1. Sel<br>ma    | ect t<br>in scr                   |                             |  |                                   |                                |                             | optio                 | n          | O                | n an           | у        |                         |               |            |      |      |                    |                   |
|                               |            | 2. The          | gre<br>-ENT                       |                             |  |                                   |                                |                             |                       | S          | SS               | S OK           | <u>-</u> |                         |               |            |      |      |                    |                   |
|                               |            | and             | e cell<br>I con<br>urns t         | nes                         | to a   | con                               | itrolle                        | ed s                        |                       |            |                  |                |          |                         |               |            |      |      |                    |                   |

Attachment 5 9

4. The green stack lights go Off.

Maintenance Technical Support Center

| Maintenance Chec                 | klist  | WORK<br>CODE  |   | EQUIP!<br>ACRO                                       |  |  |                      | ASS<br>ODE     | NU           | IMBER                  | TYPE  |
|----------------------------------|--|---|---|--|--|--|----------------------|----------------|--------------|------------------------|-------|
|                                  |  | 0 3   | M S   | T  | 1  |  | С                    | A              | 2            | 0 4                    | M     |
| Equipment Nomenclature<br>LM MST |  | Equipmer<br>Shoot   |   | Bulk Stag  |  | Bulletin File<br>mm09                          | name                 | ח              | Occurre      | ence<br>Quarter        |       |
| Part or Item                     |  |   | Statement a   |  |  |  | Est.                 | Min.           |              | Threshold              | ds    |
| Component No                     | (  | Comply wit  | h all current   | safety pre   | cautio                                     | ns)  | Time<br>Req<br>(min) | Skill -<br>Lev | Run<br>Hours | Pieces<br>Fed<br>(000) | Freq. |
|                                  | 5. Sele                                      | ct Maint  | Mode opt  | ion from   | main                                       | screen.  |                      |                |              |                        |       |
|                                  | 6. Turn                                      |   | ·   |  |  |  |                      |                |              |                        |       |
|                                  |  |   | NOT   | E  |  |  |                      |                |              |                        |       |
|                                  |  | red-up,   | r and ce<br>the U                                     |  |  | remain<br>erating                              |                      |                |              |                        |       |
|                                  | 7. Wait                                      | approxir  | nately 5 n  | ninutes.   |  |  |                      |                |              |                        |       |
|                                  | the<br>Cont                                  | Discrete<br>trols sect  | I/O S   | tatus S<br>k on the                                  | creei<br>Dis                               | splayed at<br>n Safety<br>able PLC<br>equired. |                      |                |              |                        |       |
|                                  | pnet<br>auto<br>pres<br>KP l<br>remo<br>cont | umatic<br>matically<br>sure fror<br>Main Mo<br>oves 480<br>rollers ar | system<br>activa<br>n the sys<br>tor Conta<br>) VAC f | purge ted, re stem. Ir actor is of from the to motor | v<br>emov<br>n add<br>open<br>e se<br>fans | dition, the ed. This rvo drive . Control       |                      |                |              |                        |       |
|                                  | 10. Ope                                      | n the safe  | ety gates.  |  |  |  |                      |                |              |                        |       |
|                                  |  |   | Close op<br>CE MODI                                   |  |  | n to the OG OFF.                               |                      |                |              |                        |       |
|                                  | the<br>SHU<br>prom                           | lower :<br>ITDOWN<br>npted. W   | screen o  | display.<br>and sele<br>e softwa                     | Sect Y                                     | button at<br>elect the<br>ES when<br>complete  |                      |                |              |                        |       |
|                                  |  |   | WARNI   | NG   |  |  |                      |                |              |                        |       |
|                                  |  | •   | rming th<br>n the app                                 |  | _  | •  |                      |                |              |                        |       |
|                                  |  |   | C doors;<br>and the Ul                                |  | the o                                      | computer,                                      |                      |                |              |                        |       |
|                                  |  | n the Naker (CB-  |   | in Disco   | onne                                       | ct Circuit                                     |                      |                |              |                        |       |
|                                  |  |   |   |  |  |  |                      |                |              |                        |       |

| U.S. Postal Service                                | п Сарро  |  | 11101  |   |  |  |  | IDENT   | IEICA:  | TION           |               |              | VIIV | v.O 0                  | 43-14 |
|--|--|--|--|---|--|--|--|---|---|----------------|---------------|--------------|------|------------------------|-------|
| Maintenance Chec                                   | kliet  | WOF  |  |   |  | EQUIPN<br>ACROI  | <b>JENT</b>  | IDLINI  | II ICA  | Cl             | LASS<br>ODE   | N            | IUN  | 1BER                   | TYPE  |
| Wantenance Cileu                                   | MIISL  |  | 3 M  | S   | Т  | AUKUI  | N I IVI  |   |   | C              | A             | 2            | (    | 0 4                    | M     |
| Equipment Nomenclature LM MST                      |  | Equip<br>Sh  | ment Mooting Jnit Ph   | odel<br>Star  |  | _  | _  |   |   | ename<br>9077a | _             | Occur        |      | ce<br>(uarter          |       |
| Part or Item Component No                          | (1)  |  | ask State<br>with all  |   |  |  |  | ne)   |   | Est.<br>Time   | Min.<br>Skill |              | Т    | hreshol                | ds    |
| Component  | (  | Joinply  | with an  | cuire   | THE SAI  | cty pic  | cautio   | 113)  |   | Req<br>(min)   | Lev           | Run<br>Hours |      | Pieces<br>Fed<br>(000) | Freq. |
|  | the tagou curre proce hasp Facili a local Main and s 15. Clos locks the control of the Control o | MCC, it produced local ty Circle and Discourren MAC is with to DFF in from the solution of the | forming periode s. A kout rouit Band signature of tag. The second of t | roce lock  /ARI sent Doon. ctroce f the cted be vere a list lilloce | s sy s properties of tage of t | tenandes red on and sectore sectore on will on the limited on on ocked return the limited on on ocked return the limited on on ocked return the limited ocked r | looped I bout/re multi the ecur Other vice sing pres proces in Figure 1 octoor power Discours power Discours power Discours processor pr | ckout<br>by the<br>estore<br>ti-local<br>Main<br>e with<br>rwise<br>to the<br>a local<br>Periode<br>cribed<br>cedure<br>ide of<br>itch in<br>iry of<br>cur if<br>onned<br>acility<br>MCC<br>ut to<br>ver. | the ek ho |                |               |              |      |                        |       |
|  | on th  | ne pr<br>ent ec  | ckout<br>neuma<br>quipm  | /tage   | Mai  | device<br>in Air   | · Va   | lve to  | 0   |                |               |              |      |                        |       |
| CABLE, 6. SHEAVES, V GROVE GUIDE WHEELS INSPECTION | Clean, In<br>Cables, S   | Sheav  |  | Gro<br>NO   | ve G<br><b>TE</b>  | iuide \  | Whee   | els.  | eight   | 64             | 9             |              |      |                        |       |

Maintenance Technical Support Center IDENTIFICATION

| Maintenance                     | Chec       | klist            | WORK<br>CODE                       |      |                       | EQUIF<br>ACRO             | MENT<br>NYM | ·           |     | CL                  | ASS<br>ODE           |           | JMBER                   | TYPE       |
|---------------------------------|------------|------------------|------------------------------------|------|-----------------------|---------------------------|-------------|-------------|-----|---------------------|----------------------|-----------|-------------------------|------------|
| Equipment Nomenclature<br>LM MS |            |                  |                                    | ing  |                       | ılk Sta                   |             | Bullet<br>n |     | C<br>name<br>0077al | h A                  | 2 Occurre | 0 4<br>ence<br>Quarterl | M<br>y     |
| Part or<br>Component            | Item<br>No | (                | Task<br>Comply wi                  |      | ement an<br>current s |                           |             | ons)        |     | Est.<br>Time<br>Req | Min.<br>Skill<br>Lev | Run       | Threshold               | s<br>Freq. |
|                                 |            |                  |                                    |      |                       |                           |             |             |     | (min)               | Lev                  | Hours     | Fed<br>(000)            | ,          |
|                                 |            | safety           | issors lif<br>y harnes<br>ss sheav | s as | sembly                | lift de<br>are r<br>s and | eces        | sary to     | )   |                     |                      |           |                         |            |
|                                 |            |                  | mplete s<br>be remo                |      | f shelv               | es (top                   |             |             |     |                     |                      |           |                         |            |
|                                 |            | 1. Sele          | ct Maint                           | Mod  | de optic              | n from                    | maiı        | scree       | en. |                     |                      |           |                         |            |
|                                 |            |                  | ess the Mect the Dis<br>Miscellan  | scre | te I/O s              | creen                     |             |             |     |                     |                      |           |                         |            |
|                                 |            | 3. At th         | e Discre<br>en optior              |      | O scree               | en, sel                   | ect th      | e Statı     | sı  |                     |                      |           |                         |            |
|                                 |            | 4. Click<br>Cont | the Disa<br>trols sect             |      |                       | utton i                   | n the       | Safety      |     |                     |                      |           |                         |            |
|                                 |            |                  | er the Sa<br>JNLOCK<br>ty gates    | GĀ   | TE opt                |                           |             |             | k   |                     |                      |           |                         |            |
|                                 |            |                  | ct the CL<br>NTENAN                |      |                       |                           |             | o the       |     |                     |                      |           |                         |            |
|                                 |            |                  |                                    | W    | /ARNIN                | IG                        |             |             |     |                     |                      |           |                         |            |
|                                 |            |                  | autious voment<br>ed.              |      |                       |                           |             |             |     |                     |                      |           |                         |            |
|                                 |            | 7. Pres          | s the yel<br>set the E             |      |                       |                           | T pu        | shbutto     | on  |                     |                      |           |                         |            |
|                                 |            |                  |                                    |      | NOTE                  |                           |             |             |     |                     |                      |           |                         |            |
|                                 |            | signif           | system<br>ying the<br>y Mat rel    | K1 I | E-Stop                | relay                     | and t       |             |     |                     |                      |           |                         |            |
|                                 |            | 8. Pres          | s the gre                          |      |                       |                           |             |             |     |                     |                      |           |                         |            |

| Maintenance                     |            | klist  | WORK<br>CODE   |  |   |  | PMENT<br>ONYM   |  | INTIFICA   | CL                   | ASS<br>ODE             | NU           | JMBEF             | ₹           | TYPE       |
|---------------------------------|------------|--|--|--|---|--|---|--|--|----------------------|------------------------|--------------|-------------------|-------------|------------|
| Equipment Nomenclature<br>LM MS |            |  |  | ting S   | _   |  |   | В  | Bulletin File<br>mm09  | C<br>ename<br>9077ah | A<br>n                 | 2<br>Occurre | 0<br>ence<br>Quai | 4<br>rterly | M<br>y     |
| Part or<br>Component            | Item<br>No |  | Task<br>(Comply wi   |  | ment an   |  |   | ons)   |  | Est.<br>Time<br>Req  | Min.<br>Skill -<br>Lev | Run<br>Hours | Thres             | ces         | s<br>Freq. |
|                                 |            | simula.  a. b. c. 10. Click the The a. b. c. The STAI to Smain | Dower is a cultaneous An audib Personn CycleSto Panels. The stace for about stack light All syste perform k on the STAR in following An audib seconds All start-10 seconds amp and lamps. At the to message ONLINE homed a checked is accom At the cowhite start accom At the cowhite start accome and the start accome and the start accome accom | sly: le tolel Alebo Sw k light Sw | ne souert Stavitch S  nts flassecond wes arriternal ONLIN onts arr gnal w yed by  ghts flas ack lig bottor  he CE e displ alization itialize recond ed.  ption or ghts ille field a ys ON  NOTE ight fla a Ser Motor s deple comp | unds frition (Notation (Notation)) sh at a distance initial self-te initial se | om the MPAS (CSS) two he then adily. It ton the adily. It ton the formal lights a 2 Hz lights a 2 Hz lights a 2 Hz ampling of the according to the flat to the flat lights and the according to the flat lights according to | e No artisthe and open five of solves if it is his solves. | lail and the z rate white d lace ration. e of five te for e the CSSS Screen Scr | (min)                |                        | Hours        | Fe (00            |             |            |

Maintenance Technical Support Center

| Maintenance Ch                   | heck | list   | WORK<br>CODE   |  |  | UIPMENT<br>CRONYM  |  | _                    | ASS<br>ODE     | NU           | MBER                   | TYPE  |
|----------------------------------|------|--|--|--|--|--|--|----------------------|----------------|--------------|------------------------|-------|
|                                  |      |  | 0 3  | M S  | T  |  |  | С                    | A              | 2            | 0 4                    | М     |
| Equipment Nomenclature<br>LM MST |      |  |  | nt Model<br>ing Star<br>: Phase                            |  |  | Bulletin File<br>mm09                          | ename<br>9077al      | า              | Occurre      | nce<br>Quarter         | ly    |
| Part or It                       | tem  |  | Task   | Statemen   | t and Ins                                    | struction  |  | Est.                 | Min.           |              | Threshold              | ds    |
| Component 1                      | No   | (  | Comply wit   | h all curre  | ent safety                                   | y precautio  | ons)   | Time<br>Req<br>(min) | Skill -<br>Lev | Run<br>Hours | Pieces<br>Fed<br>(000) | Freq. |
|                                  |      |  | k lights ill<br>ation beg  |  | stead  | ily, and (   | ONLINE   |                      |                |              |                        |       |
|                                  | 1    |  | he Mainte<br>Machine (   |  |  |  |  |                      |                |              |                        |       |
|                                  |      | high   | o the mai<br>est value<br>e to box.                                | (top rov   | w on yo                                      | our BSU  |  |                      |                |              |                        |       |
|                                  |      | to th<br>that<br>direc                       | ring in the<br>e Move T<br>will place<br>ctly cente<br>c on Move   | o Bin b<br>the em<br>red on t                              | ox and<br>pty rac<br>he cou                  | l enter th<br>ck (no sh                                  | elves)   |                      |                |              |                        |       |
|                                  |      | cent   | ally ensu<br>ered on c<br>be requi                                 | ounter   |  |  | is<br>pendant                                  |                      |                |              |                        |       |
|                                  | 1    |  | e Discret<br>en option   |  | creen,                                       | select the   | e Status                                       |                      |                |              |                        |       |
|                                  |      | the<br>Con                                   | Discrete   | I/O<br>ion. C  | Status<br>lick on                            | Scree<br>the Dis   | splayed at<br>n Safety<br>able PLC<br>equired. |                      |                |              |                        |       |
|                                  |      | pnet<br>auto<br>pres<br>Mair<br>remo<br>cont | umatic<br>matically<br>sure fror<br>Motor<br>oves 48<br>rollers an | system<br>activenthe s<br>Contaction<br>30 VA<br>and power | n pu<br>vated,<br>ystem.<br>ctor is<br>C fro | rge v<br>remov<br>In add<br>opene<br>om ser<br>otor fans | dition, KP<br>d. This                          |                      |                |              |                        |       |
|                                  | 1    | 19. Ope                                      | n the safe   | ety gate   | s.   |  |  |                      |                |              |                        |       |
|                                  | 2    |  |  |  |  |  | n to the OG OFF.                               |                      |                |              |                        |       |
|                                  |      | the<br>SHU<br>pron                           | lower s  | screen<br>option<br>ait for t                              | displa<br>, and<br>the sof                   | ay. So<br>select Y                                       | button at<br>elect the<br>ES when<br>complete  |                      |                |              |                        |       |
|                                  |      |  |  | WAR  | NING   |  |  |                      |                |              |                        |       |
|                                  |      |  | re perfo<br>must dor   |  |  |  |  |                      |                |              |                        |       |

| Maintenance Tech             |            | Suppo  | rt Cent  | er   |  |   |  | DENTIE: 0:   | F1011                |               | M            | MO-04                  | 13-14 |
|------------------------------|------------|--|--|--|--|---|--|--|----------------------|---------------|--------------|------------------------|-------|
| U.S. Postal Se               |            | ist  | WORK<br>CODE   |  |  | EQUIPN<br>ACRON   | /ENT   | DENTIFICAT   | CL                   | ASS<br>ODE    | NU           | MBER                   | TYPE  |
| Equipment Nomenclature LM MS | Т          |  |  | ing S  | S T<br>del<br>Star Bull<br>ase 3A a  |   |  | Bulletin File  | C<br>ename<br>9077al | h A           | 2<br>Occurre | 0 4<br>Ince<br>Quarter | У     |
| Part or<br>Component         | Item<br>No |  | Task<br>Comply with  |  | ment and   |   |  | ne)  | Est.<br>Time         | Min.<br>Skill |              | Threshold              | ls    |
| Component                    | 140        | (  | Comply wi  | ur an c  | curcii sa  | icty pro  | cautio   | 10)  | Req<br>(min)         | Lev           | Run<br>Hours | Pieces<br>Fed<br>(000) | Freq. |
|                              | 24         | When the tagor curre processigned a local municipal current processigned a local current processigned a | monitor, and the Maker (CB- maker | www.min perfedures local At the local Switch as progressing a sition of a siti | ARNING  ARNING | Discontant of the line of the | nce i location de control de cur location de c | ckout/ by the estore i-lock Main e with attach Main k and but/tagout rent local  de of tch in ry or cur if nnect acility MCC t to er. stribution breaker d lock. |                      |               |              |                        |       |

Attachment 5 15

26. Rotate the air supply shut-off valve to the EXH position.

Maintenance Technical Support Center

| Maintenance            | Chec       | klist    | CODE                     |         |             | ACRO           |         |        |          |              | ODE           | INC     | INDER        | ITPE  |
|------------------------|------------|----------|--------------------------|---------|-------------|----------------|---------|--------|----------|--------------|---------------|---------|--------------|-------|
|                        |            |          | 0 3                      | M S     | 3   -       | Т              |         |        |          | С            | Α             | 2       | 0 4          | М     |
| Equipment Nomenclature | )          |          | Equipmer                 |         |             | 1              | I       |        | tin File |              |               | Occurre |              |       |
| LM MS                  |            |          | Shoot                    | ing Sta | ar Bu       | ulk Sta        |         |        |          | 9077al       | า             |         | Quarter      | ly    |
|                        |            |          | Unit                     | t Phase | e 3A        | and 3          | В       |        |          |              |               |         |              |       |
| Ded                    | 140        |          | T!                       | O4-4    |             | al lus - ( ··· | 41      |        |          | Fe!          | NA:           | -       | Thus - ! !   | da 1  |
| Part or<br>Component   | Item<br>No |          | Task S<br>Comply wit)    |         |             | d Instruc      |         | ns)    |          | Est.<br>Time | Min.<br>Skill |         | Threshol     | us    |
| Component              |            |          | (Comply Wit              | a oui   |             | Jaioty Pi      | Jaario  | ,      |          | Req          | Lev           | Run     | Pieces       | Freq. |
|                        |            |          |                          |         |             |                |         |        |          | (min)        |               | Hours   | Fed<br>(000) |       |
|                        | <u> </u>   |          |                          |         |             |                |         |        |          |              |               |         | (000)        |       |
|                        |            |          | all lockout              |         |             |                |         | escrib | ed       |              |               |         |              |       |
|                        |            |          | he curren                | t local | IOCK        | out/res        | tore    |        |          |              |               |         |              |       |
|                        |            | •        | edure.                   |         |             |                |         |        |          |              |               |         |              |       |
|                        |            |          | n the gate               |         | ving        | acces          | s to th | ne     |          |              |               |         |              |       |
|                        |            |          | nter weigh               |         |             |                |         |        |          |              |               |         |              |       |
|                        |            |          | ng a wipin               |         |             |                |         |        |          |              |               |         |              |       |
|                        |            |          | els/greas                |         | _           |                |         |        | icks,    |              |               |         |              |       |
|                        |            |          | essive we                |         |             | •              | -       |        |          |              |               |         |              |       |
|                        |            |          | e a level                |         |             |                |         |        |          |              |               |         |              |       |
|                        |            |          | ure it is le<br>othly.   | vei and | u Wil       | ıı travel      | up ar   | ia ao  | wn       |              |               |         |              |       |
|                        |            |          | •                        |         |             |                |         |        |          |              |               |         |              |       |
|                        |            | 31. Rem  | nove the I               | evel.   |             |                |         |        |          |              |               |         |              |       |
|                        |            |          | ng a star                |         |             |                |         |        |          |              |               |         |              |       |
|                        |            |          | ase each                 |         |             |                |         |        |          |              |               |         |              |       |
|                        |            |          | blith SHC<br>ess greas   |         |             |                |         | Ciear  | ı OTT    |              |               |         |              |       |
|                        |            | CAGE     | Joo greas                | o untoi | upp         | modilo         | ••      |        |          |              |               |         |              |       |
|                        |            |          |                          | N       | OTE         |                |         |        |          |              |               |         |              |       |
|                        |            | A so     | cissors li               | ft, or  | oth         | er lift        | devi    | ce. i  | s        |              |               |         |              |       |
|                        |            |          | ssary to                 |         |             |                |         |        |          |              |               |         |              |       |
|                        |            | shea     | ve, and c                | able a  | sser        | nblies.        |         | -      |          |              |               |         |              |       |
|                        |            |          |                          | N       | OTE         |                |         |        |          |              |               |         |              |       |
|                        |            | Dono     | andina on                |         |             |                | nroc    | - Aur  |          |              |               |         |              |       |
|                        |            |          | ending on<br>require e   |         |             |                |         |        |          |              |               |         |              |       |
|                        |            |          | ection mu                |         |             |                |         |        |          |              |               |         |              |       |
|                        |            |          | urrent loc               |         |             |                |         |        | ,        |              |               |         |              |       |
|                        |            |          | owing ea                 | •       | •           | 2) cla         | an an   | d ine  | nect     |              |               |         |              |       |
|                        |            |          | fraying,                 |         |             |                |         |        |          |              |               |         |              |       |
|                        |            |          | aves. In                 |         |             |                |         |        |          |              |               |         |              |       |
|                        |            | aligr    | nment, ai                | nd pro  | per         | opera          | tion.   | Rea    | pply     |              |               |         |              |       |
|                        |            |          | e lubricar               |         |             |                |         |        |          |              |               |         |              |       |
|                        |            |          | gs. Clea<br>lication.    | an off  | any         | exces          | s gre   | ase a  | aπer     |              |               |         |              |       |
|                        |            |          |                          |         |             |                |         |        | _        |              |               |         |              |       |
|                        |            | 34. Ens  | ure all                  | tools,  | lu<br>'a'a' | bricant        | s; ra   | ags,   | and      |              |               |         |              |       |
|                        |            |          | cellaneous<br>de the saf |         |             |                | remo    | vea 1  | 110111   |              |               |         |              |       |
|                        |            |          |                          | •       |             |                |         |        |          |              |               |         |              |       |
|                        |            | 35. Clos | se safety f              | rence ( | gate        | S.             |         |        |          |              |               |         |              |       |
|                        |            |          |                          |         |             |                |         |        |          |              |               |         |              |       |
|                        |            |          |                          |         |             |                |         |        |          |              |               |         |              |       |
|                        |            |          |                          |         |             |                |         |        |          |              |               |         |              |       |
|                        |            |          |                          |         |             |                |         |        | I        |              |               |         |              | •     |

| II C Destal O                    | on/ioc     |                         |                                 |                                   | 1  | IDENTIFICAT                 | IONI           |               |              |                        |       |
|----------------------------------|------------|-------------------------|---------------------------------|-----------------------------------|--|-----------------------------|----------------|---------------|--------------|------------------------|-------|
| U.S. Postal Se                   |            | klic4                   | WORK                            |                                   | EQUIPMENT  | IDENTIFICAT                 | CL             | ASS           | NU           | MBER                   | TYPE  |
| Maintenance C                    | JIEC       | VIIS                    | CODE 0 3                        | M S T                             | ACRONYM  |                             | C              | DDE           | 2            | 0 4                    | M     |
| Equipment Nomenclature<br>LM MST | Г          |                         |                                 | ng Star Bu                        |  | Bulletin File               | name<br>9077ah |               | Occurre      | ence<br>Quarter        | ly    |
|                                  |            |                         | Unit                            | Phase 3A                          | and 3B   |                             |                |               |              |                        |       |
| Part or<br>Component             | Item<br>No | (                       |                                 | tatement and                      | I Instruction afety precautio                                  | ne)                         | Est.<br>Time   | Min.<br>Skill |              | Threshold              | ls    |
| Component                        | NO         | (                       | Comply with                     | all current so                    | diety precautio  | 113)                        | Req<br>(min)   | Lev           | Run<br>Hours | Pieces<br>Fed<br>(000) | Freq. |
|                                  |            |                         |                                 | WARNIN                            | G  |                             |                |               |              |                        |       |
|                                  |            |                         |                                 |                                   | following<br>priate PPE  |                             |                |               |              |                        |       |
|                                  |            |                         |                                 | WARNIN                            | G  |                             |                |               |              |                        |       |
|                                  |            |                         | pment v                         |                                   | ing around<br>wer has  | or on<br>been               |                |               |              |                        |       |
|                                  |            |                         |                                 |                                   | ut device a<br>S1 in on po                                     |                             |                |               |              |                        |       |
|                                  |            |                         | tore the<br>ulator Sup          |                                   | sure to t  | he Filter                   |                |               |              |                        |       |
|                                  |            |                         | et the N<br>ker, as re          |                                   | lities STA   | R circuit                   |                |               |              |                        |       |
|                                  |            | to ap                   | oply 480 V                      | AC 3-phas                         | nnect Switch<br>ses to the Mind the inte                       | ICC. The                    |                |               |              |                        |       |
|                                  |            | diag                    |                                 | tine to cor                       | llow the int   |                             |                |               |              |                        |       |
|                                  |            |                         |                                 |                                   | d the cell or to boot up                                       |                             |                |               |              |                        |       |
|                                  |            | acce<br>pass            | ess the W<br>sword defa         | indows N7<br>ault promp           | Ctrl-Alt-E<br>Logon boot<br>t, press EN<br>ocesses to          | x. At the ITER and          |                |               |              |                        |       |
|                                  |            |                         |                                 | NOTE                              |  |                             |                |               |              |                        |       |
|                                  |            | SHOI<br>activa<br>advis | RTCUT T<br>ated, a<br>sing SHOF | O INTERI<br>prompt so<br>RTCUT TO | elapsed bet<br>FACE.EXE<br>creen will<br>INTERFA<br>CLE not av | Icon is<br>appear<br>CE.EXE |                |               |              |                        |       |
|                                  |            | INTE                    |                                 | EXE Icon.                         | SHORTO   |                             |                |               |              |                        |       |

Maintenance Technical Support Center IDENTIFICATION

| Maintenance Che                  | ecklist                    | WORK<br>CODE   |                                |                                   | EQUIP<br>ACRO            |                     |                           |                    |                              | ASS<br>ODE           |              | JMBER                    | TYPE    |
|----------------------------------|----------------------------|--|--------------------------------|-----------------------------------|--------------------------|---------------------|---------------------------|--------------------|------------------------------|----------------------|--------------|--------------------------|---------|
| Equipment Nomenclature<br>LM MST |                            |  | ing S                          | S T<br>lel<br>tar Bulk<br>se 3A a |                          |                     | Bulleti<br>m              |                    | C<br>name<br>077al           | A<br>n               | 2<br>Occurre | 0   4<br>ence<br>Quarter | M<br>ly |
| Part or Iter<br>Component No     |                            | Task<br>Comply wit   |                                | nent and<br>urrent saf            |                          |                     | ins)                      |                    | Est.<br>Time<br>Req<br>(min) | Min.<br>Skill<br>Lev | Run<br>Hours | Pieces<br>Fed<br>(000)   | Freq.   |
|                                  |                            |  | ı                              | NOTE                              |                          |                     |                           |                    |                              |                      |              |                          |         |
|                                  | succe<br>appe<br>the L     | LOGIN essfully ars initia<br>OGIN naball or pr   | logg<br>Ily in<br>ame v        | ed int<br>this fie<br>window      | o th<br>ld<br>, clicl    | ne s<br>To re       | system<br>turn to         |                    |                              |                      |              |                          |         |
|                                  | 44. Ente                   | er the US  | ER N                           | AME a                             | nd PA                    | SSV                 | ORD.                      |                    |                              |                      |              |                          |         |
|                                  | succ<br>CON<br>NET<br>cont | CELL Scessful  <br>NNECTE<br>WORK<br>roller est<br>S system.   | LOGI<br>D to<br>stat<br>ablish | N. \<br>appear<br>us in           | Vait<br>⊤at tl<br>dicati | for<br>ne rio<br>ng | a greath<br>ght of<br>the | een<br>the<br>cell |                              |                      |              |                          |         |
|                                  | Rev                        | iew the C<br>iew the<br>repancies  | Fault                          |                                   |                          |                     |                           |                    |                              |                      |              |                          |         |
|                                  | 47. Phys                   | sically clo  | se th                          | e safet                           | y gate                   | es.                 |                           |                    |                              |                      |              |                          |         |
|                                  | 48. Sele                   | ct Maint   | Mode                           | option                            | from                     | mair                | scree                     | n.                 |                              |                      |              |                          |         |
|                                  | Sele                       | ess the lect the D<br>Miscellan  | iscret                         | te I/O s                          | cree                     |                     |                           |                    |                              |                      |              |                          |         |
|                                  |                            | ne Discre<br>en optior   |                                | ) scree                           | n, se                    | lect t              | he Sta                    | tus                |                              |                      |              |                          |         |
|                                  |                            | the Distrols sect  |                                | PLC b                             | utton                    | in t                | he Saf                    | ety                |                              |                      |              |                          |         |
|                                  | the                        | er the Sound of th | Κ ĞΑ                           | TE op                             |                          |                     |                           |                    |                              |                      |              |                          |         |
|                                  |                            | ct the (<br>NTENAN   |                                |                                   |                          |                     | n to                      | the                |                              |                      |              |                          |         |
|                                  |                            |  | WA                             | ARNING                            | è                        |                     |                           |                    |                              |                      |              |                          |         |
|                                  |                            | autious v<br>pment<br>ied.   |                                |                                   |                          |                     |                           |                    |                              |                      |              |                          |         |
|                                  |                            | ss the ye<br>eset the E  |                                |                                   |                          | ЕТ р                | ushbut                    | ton                |                              |                      |              |                          |         |

| U.S. Postal                  | Service |                 |  |   | I                         | DENTIFICAT            | ΓΙΟΝ                 |              |              |                            |       |
|------------------------------|---------|-----------------|--|---|---------------------------|-----------------------|----------------------|--------------|--------------|----------------------------|-------|
| Maintenance                  | Chec    | klist           | WORK<br>CODE                             |   | EQUIPMENT<br>ACRONYM      |                       |                      | ASS<br>ODE   | NU           | MBER                       | TYPE  |
|                              |         |                 | 0 3                                      | M S T   |                           |                       | С                    | A            | 2            | 0 4                        | М     |
| Equipment Nomenclature LM MS |         |                 |  | <sup>nt Model</sup><br>ing Star Bull<br>t Phase 3A a  |                           | Bulletin File<br>mm09 | ename<br>9077al      | h            | Occurre      | <sup>nce</sup><br>Quarterl | у     |
| Part or                      | Item    |                 | Tack                                     | Statement and   | Instruction               |                       | Est.                 | Min.         |              | Threshold                  | le.   |
| Component                    | No      | ((              |  | th all current sa   |                           | ns)                   | Time<br>Req<br>(min) | Skill<br>Lev | Run<br>Hours | Pieces<br>Fed<br>(000)     | Freq. |
|                              |         |                 |  | NOTE  |                           |                       | Į.                   |              |              | (/                         | 1     |
|                              |         | signif<br>Safet | ying the<br>y Mat rel                    | pneumatics<br>K1 E-Stop r<br>ay have bee  | elay and then reset.      | e K19                 |                      |              |              |                            |       |
|                              |         |                 |  | een POWER to the KP ma  |                           |                       |                      |              |              |                            |       |
|                              |         |                 | oower is<br>Iltaneous                    | applied the<br>sly:   | following                 | happens               |                      |              |              |                            |       |
|                              |         | F<br>(          | Personne                                 | le tone soun<br>el Alert Statio<br>p Switch Sta   | on (MPAS)                 |                       |                      |              |              |                            |       |
|                              |         | f               | or about                                 | k lights flash<br>20 seconds<br>nt illuminates  | and then the              |                       |                      |              |              |                            |       |
|                              |         |                 | -  | m drives are<br>an internal s   |                           | and                   |                      |              |              |                            |       |
|                              |         | the S           | STAR in                                  | CELL ONL<br>the ONLINE<br>events are  | mode of c                 |                       |                      |              |              |                            |       |
|                              |         | 5               |  | le signal will<br>ollowed by a  |                           |                       |                      |              |              |                            |       |
|                              |         | 6               | 10 secon<br>amber sta                    | up lights flas<br>ds. The sta<br>ack lights, a<br>om orange M                                   | rt-up lights<br>mber CSSS | are two<br>Slamp      |                      |              |              |                            |       |
|                              |         | r<br>(<br>}     | message<br>ONLINE<br>nomed ar<br>checked | o of the CEL<br>is are display<br>initialization<br>and initialized<br>and RECON<br>accomplishe |                           |                       |                      |              |              |                            |       |
|                              |         |                 |  | mpletion of i<br>ck lights illur  |                           |                       |                      |              |              |                            |       |
|                              |         |                 |  | TUS field at<br>splays ONL  | •                         | he                    |                      |              |              |                            |       |
|                              |         |                 |  |   |                           |                       |                      |              |              |                            |       |

Maintenance Technical Support Center

| U.S. Postal S                | Service    |   |  |                |                |                |              | I           | DENTI | FICAT             | ION          |               |        |                    |        |      |
|------------------------------|------------|---|--|----------------|----------------|----------------|--------------|-------------|-------|-------------------|--------------|---------------|--------|--------------------|--------|------|
| Maintenance                  | Chec       | klist                                       | WORK<br>CODE                                 |                |                |                | UIPN<br>CRON | MENT<br>NYM |       |                   | _            | ASS<br>ODE    | NU     | JMBI               | ĒR     | TYPE |
|                              |            |   | 0 3  | М              | S              | Т              |              |             |       |                   | С            | Α             | 2      | 0                  | 4      | М    |
| Equipment Nomenclature LM MS |            |   | Equipmer<br>Shoot<br>Unit                    |                | tar B          |                |              |             |       | tin Filer<br>nm09 |              | n             | Occurr |                    | arterl | у    |
| Part or<br>Component         | Item<br>No | ((  | Task S<br>Comply wit                         | Statem         |                |                |              |             | ) ()  |                   | Est.<br>Time | Min.<br>Skill |        | Thre               | eshold | s    |
| Component                    | 140        | ("  | Somply wit                                   | ii ali C       | unent          | Salety         | , biec       | Jautioi     |       | Req<br>(min)      | Lev          | Run<br>Hours  | F      | eces<br>ed<br>(00) | Freq.  |      |
|                              |            |   |  | 1              | NOTE           | <b>=</b>       |              |             |       |                   |              |               |        |                    |        |      |
|                              |            | STAR<br>to Se                               | white sta<br>Rencoun<br>ervo Dri<br>enance b | ters a         | a Ser<br>Moto  | vo D<br>r fa   | rive<br>ult, | Con         | r     |                   |              |               |        |                    |        |      |
|                              |            | white                                       | n ONLINer lights<br>e stack<br>INE oper      | turn<br>lights | Off,<br>s illu | , and<br>Imina | d th         | ne gr       | and   |                   |              |               |        |                    |        |      |
| CLEAN UP                     | 7.         | Clean Up<br>Ensure<br>removed<br>any defice | all tools<br>from the                        |                |                |                |              |             |       | 3                 | ALL          |               |        |                    |        |      |

#### **ATTACHMENT 6**

# LM MST SHOOTING STAR BULK STAGING UNIT PHASE 3A AND 3B MASTER CHECKLIST

03-MST-CA-205-M

3-Year Time Total: Per Bulk Staging Unit - 171 Minutes

Refer to the MS-238 if additional maintenance information is required.

Maintenance Technical Support Center

| U.S. Postal Service           |   |            |   |      |   |              | IDE  | NTIF                | ICAT | ION           |           |       |     |      |      |
|-------------------------------|---|------------|---|------|---|--------------|------|---------------------|------|---------------|-----------|-------|-----|------|------|
| Maintenance Checklist         |   | ORK<br>ODE |   |      | _ | QUIF<br>ACRO | <br> |                     |      | CLA<br>CO     | ASS<br>DE | N     | UMB | ER   | TYPE |
|                               | 0 | 3          | М | S    | Т |              |      |                     |      | С             | Α         | 2     | 0   | 5    | М    |
| Equipment Nomenclature LM MST |   | hoot       |   | Star |   | Sta          |      | ulletir<br><b>m</b> |      | name<br>077ah | I         | Occur |     | Year | •    |

|                     | Unit Phase 3A and 3B   |                      |              |              |                        |       |
|---------------------|--|----------------------|--------------|--------------|------------------------|-------|
| Part or Ite         |  | Est.                 | Min.         |              | Threshold              | S     |
| Component No        | (Comply with all current safety precautions)   | Time<br>Req<br>(min) | Skill<br>Lev | Run<br>Hours | Pieces<br>Fed<br>(000) | Freq. |
| SAFETY 1. STATEMENT | 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. 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.       |                      |              |              |                        |       |
|                     | WARNING FOR EWP/PPE: 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.  |                      |              |              |                        |       |
|                     | NOTE   |                      |              |              |                        |       |
|                     | Prior to performing the following route, the BSU should be emptied and reported empty to TMS1 and TMS2 in accordance with local policy/ procedure. This procedure should be performed by the shift prior to this route being assigned.  NOTE   |                      |              |              |                        |       |
|                     | The completion of this task will require   |                      |              |              |                        |       |
|                     |  |                      |              |              |                        |       |

| U.S. Postal Service           |   |          |   |   |   |                 | I | DENTIFICAT             | ION |           |        |      |      |      |
|-------------------------------|---|----------|---|---|---|-----------------|---|------------------------|-----|-----------|--------|------|------|------|
| Maintenance Checklist         |   | RK<br>DE |   |   | _ | QUIPMI<br>ACRON |   |                        | _   | ASS<br>DE | N      | UMBE | ĒR   | TYPE |
|                               | 0   | 3        | М | S | Т |                 |   |                        | С   | Α         | 2      | 0    | 5    | M    |
| Equipment Nomenclature LM MST | Equipment Model Shooting Star Bulk Staging Unit Phase 3A and 3B |          |   |   |   |                 |   | Bulletin Filer<br>mm09 |     |           | Occurr |      | Year |      |

|                |      | Unit Phase 3A and 3B   |             |              |          |           |       |
|----------------|------|--|-------------|--------------|----------|-----------|-------|
| Part or        | Item | Task Statement and Instruction   | Est.        | Min.         |          | Threshold | S     |
| Component      | No   | (Comply with all current safety precautions)   | Time<br>Reg | Skill<br>Lev | Run      | Pieces    | Freq. |
|                |      |  | (min)       | Lev          | Hours    | Fed (000) |       |
|                | _    |  | 1           |              | <u> </u> | (000)     |       |
| RSS OIL CHANGE | 2    | Change Oil in Rotating Staging Structure<br>(RSS) Gear Reducers.   | 167         | 9            |          |           |       |
|                |      | NOTE   |             |              |          |           |       |
|                |      | Two people required for this task.   |             |              |          |           |       |
|                |      | <ol> <li>Select the CELL OFFLINE option on any<br/>main screen header panel.</li> </ol>  | ,           |              |          |           |       |
|                |      | <ol><li>The green stack lights and the CSSS OK<br/>TO-ENTER light begin to flash.</li></ol>  | -           |              |          |           |       |
|                |      | <ol><li>The cell controller completes all transactions<br/>and comes to a controlled stop. The VTL<br/>returns to the HOME position.</li></ol>   |             |              |          |           |       |
|                |      | 4. The green stack lights go Off.  |             |              |          |           |       |
|                |      | 5. Select Maint Mode option from main screen.  |             |              |          |           |       |
|                |      | <ol> <li>At the Machine Control Page, click on the<br/>MAINTENANCE POSITION button. The VA<br/>carriage will move to a pre-set position or<br/>the VTU mast.</li> </ol>  | \           |              |          |           |       |
|                |      | <ol> <li>Determine which shelves are to be removed<br/>to access one of the RSS gear reducers<br/>Removal of two shelves is recommended.</li> </ol>  |             |              |          |           |       |
|                |      | 8. At the MAINTENANCE MODE Machine<br>Control tab, in the Manual Move to section<br>enter the appropriate number and click or<br>the MOVE SA pushbutton to locate a rack o<br>shelves at the end of the machine. | ,<br>1      |              |          |           |       |
|                |      | <ol> <li>Access the MAINTENANCE MODE screen<br/>Select the Discrete I/O screen option at the<br/>Miscellaneous section.</li> </ol>   |             |              |          |           |       |
|                |      | <ol> <li>At the Discrete I/O screen, select the Status<br/>screen option.</li> </ol>   |             |              |          |           |       |
|                |      | <ol> <li>Ensure the Enable PLC option is displayed<br/>at the Discrete I/O Status Screen Safety<br/>Controls section. Click on the Disable PLC<br/>option to change to Enable PLC if required.</li> </ol>        | ,           |              |          |           |       |
|                |      | <ol> <li>Select the UNLOCK THE GATE option. The<br/>pneumatic system purge valve is<br/>automatically activated, removing ai<br/>pressure from the system. In addition, the</li> </ol>                           | S r         |              |          |           |       |

Maintenance Technical Support Center

| U.S. Postal Service            |   |          |                          |      |   |                 | IDE | NTIF | CAT | ION           |           |        |      |      |      |
|--------------------------------|---|----------|--------------------------|------|---|-----------------|-----|------|-----|---------------|-----------|--------|------|------|------|
| Maintenance Checklist          |   | RK<br>DE |                          |      | _ | <br>MENT<br>MYM | •   |      |     | _             | ASS<br>DE | N      | JMBE | ER   | TYPE |
|                                | 0 | 3        | М                        | S    | Т |                 |     |      |     | С             | Α         | 2      | 0    | 5    | М    |
| Equipment Nomenclature  LM MST |   | hoot     | nt Mod<br>ing S<br>t Pha | Star |   |                 | Ві  |      |     | name<br>077ah |           | Occurr |      | Year |      |

|              | Unit Phase 3A and 3B   |              |               |              |                        |       |
|--------------|--|--------------|---------------|--------------|------------------------|-------|
| Part or Item | Task Statement and Instruction   | Est.<br>Time | Min.<br>Skill |              | Threshold              | S     |
| Component No | (Comply with all current safety precautions)   | Req<br>(min) | Lev           | Run<br>Hours | Pieces<br>Fed<br>(000) | Freq. |
|              | KP Main Motor Contactor is opened. This removes 480 VAC from the servo drive controllers and the power to the motor fans. Control voltage is present at the controllers and sensors.  13. Open the safety gates.  14. Select the Close option. Return to the MAINTENANCE MODE screen to LOG OFF.  15. Access the Windows NT START button at the lower screen display. Select the SHUTDOWN option. Select YES when prompted. Wait for the software to complete the shutdown process.  WARNING  Before performing the following steps you must don the appropriate PPE.  16. Open the MCC doors; turn Off the computer, the monitor, and the UPS.  17. Open the MCC Main Disconnect Circuit Breaker (CB-1).  WARNING  When performing maintenance inside MCC, perform system lockout/tagout procedures as prescribed by the current local lockout/restore procedures. Attach a red multi-lock hasp lockout device on the main facility circuit breaker; and secure with a lock and signed tag. Otherwise attach a multi-lock lockout device to the Main Disconnect Switch S1 using a lock and signed tag.  18. Close the MCC doors. Perform lockout/tagout procedures as prescribed by the current local lockout/restore procedures. |              |               |              |                        |       |

| U.S. Postal Service            |   |          |   |      |   |              | IDE | NTIF                  | ICATI | ON            |           |        |      |      |      |
|--------------------------------|---|----------|---|------|---|--------------|-----|-----------------------|-------|---------------|-----------|--------|------|------|------|
| Maintenance Checklist          | _ | RK<br>DE |   |      |   | QUIF<br>ACRO |     |                       |       | _             | ASS<br>DE | N      | UMBI | ĒR   | TYPE |
|                                | 0 | 3        | М | S    | Т |              |     |                       |       | С             | Α         | 2      | 0    | 5    | М    |
| Equipment Nomenclature  LM MST |   | hoot     |   | Star |   | Stag         | В   | ulletin<br><b>m</b> ı |       | name<br>077ah |           | Occurr |      | Year |      |

| EW W      | <b>.</b> |   |  | hase 3A and  |  |  | , , , , , , , , , , , , , , , , , , , |                |              | o roar                 |       |
|-----------|----------|---|--|--|--|--|---------------------------------------|----------------|--------------|------------------------|-------|
| Part or   | Item     |   | Task Stat  | tement and Instru  | uction   |  | Est.                                  | Min.           |              | Threshold              | S     |
| Component | No       | (1  | Comply with al   | ll current safety p  | recaution  | s)   | Time<br>Req<br>(min)                  | Skill .<br>Lev | Run<br>Hours | Pieces<br>Fed<br>(000) | Freq. |
|           |          | the death the I Switch Circulexter comp.  19. Loc Pan pow.  Insta on tl preve perso.  20. Rota EXH  21. Insta by t prod.  22. Ente mai assamot.  The shelv shoul perso nuts. SA si for tw.  23. Usin. | VAC is prewith the Ma OFF position from electine side of the contact of the side of the si | ctrocution vof the Main acted. The Main acted. The Main acted. The Main acted one locked over all systems of the Mark Main Ponnect STAR call lockout de WARNING  t/tagout deviatics Main Actent damage supply shut-off device and lockout/reserved area and bar under secure to preserved. | ect Switte injur vill occ Discor Main Fa the ed out m power wer Discircuit vice and Air Valve to the extere  The control or inju  If valve to the control or inju  The control or | ch in y or cur if innect cility MCC is to er. Stribution breaker d lock.  lock re to ry to o the escribed eage long carriage ownward expension other is and e the count move |                                       | Lev            |              | Fed                    |       |
|           |          |   |  | ylon locking r<br>e bin structur   |  |  |                                       |                |              |                        |       |

Maintenance Technical Support Center

| U.S. Postal Service           |    |      |   |      |   |      |      |   | IDENTIFICATION      |               |   |                      |                           |      |   |   |
|-------------------------------|----|------|---|------|---|------|------|---|---------------------|---------------|---|----------------------|---------------------------|------|---|---|
| Maintenance Checklist         | CO |      |   |      | _ |      | MEN. | - |                     |               | _ | ASS<br>DE            | NUMBER  2 0 5  Occurrence | TYPE |   |   |
|                               | 0  | 3    | М | S    | Т |      |      |   |                     |               | С | Α                    | 2                         | 0    | 5 | М |
| Equipment Nomenclature LM MST | SI | noot |   | Star |   | Stag |      | В | ulletir<br><b>m</b> | name<br>077ah | C | Occurrence<br>3-Year |                           |      |   |   |
|                               |    |      |   |      |   |      |      |   |                     |               |   |                      |                           |      |   |   |

| person should support the shelf as it is removed). Dispose of the nylon locking nuts removed.  24. Place the removed shelves in a secure location safely away from the BSU equipment and maintenance activity area.  25. Place the long maintenance bar in the storage position and secure it.  26. Exit safety fenced area, close gates, and secure interlock switches and gates.  WARNING  Before performing the following steps you must don the appropriate PPE.  WARNING  Be cautious when working around or on equipment when power has been applied.  27. Restore the air pressure to the Filter Regulator Supply  28. Reset the Main Facilities STAR circuit |           |                              |             |       | <br>  |           |       |
|--|-----------|------------------------------|-------------|-------|-------|-----------|-------|
| person should support the shelf as it is removed). Dispose of the nylon locking nuts removed.  24. Place the removed shelves in a secure location safely away from the BSU equipment and maintenance activity area.  25. Place the long maintenance bar in the storage position and secure it.  26. Exit safety fenced area, close gates, and secure interlock switches and gates.  WARNING  Before performing the following steps you must don the appropriate PPE.  WARNING  Be cautious when working around or on equipment when power has been applied.  27. Restore the air pressure to the Filter Regulator Supply  28. Reset the Main Facilities STAR circuit |           |                              |             |       |       | Threshold | S     |
| person should support the shelf as it is removed). Dispose of the nylon locking nuts removed.  24. Place the removed shelves in a secure location safely away from the BSU equipment and maintenance activity area.  25. Place the long maintenance bar in the storage position and secure it.  26. Exit safety fenced area, close gates, and secure interlock switches and gates.  WARNING  Before performing the following steps you must don the appropriate PPE.  WARNING  Be cautious when working around or on equipment when power has been applied.  27. Restore the air pressure to the Filter Regulator Supply  28. Reset the Main Facilities STAR circuit | Component | Re                           | INU         | Req   |       |           | Freq. |
| removed). Dispose of the nylon locking nuts removed.  24. Place the removed shelves in a secure location safely away from the BSU equipment and maintenance activity area.  25. Place the long maintenance bar in the storage position and secure it.  26. Exit safety fenced area, close gates, and secure interlock switches and gates.  WARNING  Before performing the following steps you must don the appropriate PPE.  WARNING  Be cautious when working around or on equipment when power has been applied.  27. Restore the air pressure to the Filter Regulator Supply  28. Reset the Main Facilities STAR circuit  |           | (mi.                         |             | (min) | iouls | 1         |       |
| removed). Dispose of the nylon locking nuts removed.  24. Place the removed shelves in a secure location safely away from the BSU equipment and maintenance activity area.  25. Place the long maintenance bar in the storage position and secure it.  26. Exit safety fenced area, close gates, and secure interlock switches and gates.  WARNING  Before performing the following steps you must don the appropriate PPE.  WARNING  Be cautious when working around or on equipment when power has been applied.  27. Restore the air pressure to the Filter Regulator Supply  28. Reset the Main Facilities STAR circuit  |           | elf as it is                 | <del></del> | _     | T     |           |       |
| 24. Place the removed shelves in a secure location safely away from the BSU equipment and maintenance activity area.  25. Place the long maintenance bar in the storage position and secure it.  26. Exit safety fenced area, close gates, and secure interlock switches and gates.  WARNING  Before performing the following steps you must don the appropriate PPE.  WARNING  Be cautious when working around or on equipment when power has been applied.  27. Restore the air pressure to the Filter Regulator Supply  28. Reset the Main Facilities STAR circuit  |           |                              |             |       |       |           |       |
| location safely away from the BSU equipment and maintenance activity area.  25. Place the long maintenance bar in the storage position and secure it.  26. Exit safety fenced area, close gates, and secure interlock switches and gates.  WARNING  Before performing the following steps you must don the appropriate PPE.  WARNING  Be cautious when working around or on equipment when power has been applied.  27. Restore the air pressure to the Filter Regulator Supply  28. Reset the Main Facilities STAR circuit  |           |                              |             |       |       |           |       |
| equipment and maintenance activity area.  25. Place the long maintenance bar in the storage position and secure it.  26. Exit safety fenced area, close gates, and secure interlock switches and gates.  WARNING  Before performing the following steps you must don the appropriate PPE.  WARNING  Be cautious when working around or on equipment when power has been applied.  27. Restore the air pressure to the Filter Regulator Supply  28. Reset the Main Facilities STAR circuit  |           |                              | 24.         |       |       |           |       |
| 25. Place the long maintenance bar in the storage position and secure it.  26. Exit safety fenced area, close gates, and secure interlock switches and gates.  WARNING  Before performing the following steps you must don the appropriate PPE.  WARNING  Be cautious when working around or on equipment when power has been applied.  27. Restore the air pressure to the Filter Regulator Supply  28. Reset the Main Facilities STAR circuit  |           |                              |             |       |       |           |       |
| storage position and secure it.  26. Exit safety fenced area, close gates, and secure interlock switches and gates.  WARNING  Before performing the following steps you must don the appropriate PPE.  WARNING  Be cautious when working around or on equipment when power has been applied.  27. Restore the air pressure to the Filter Regulator Supply  28. Reset the Main Facilities STAR circuit  |           |                              | 25          |       |       |           |       |
| Before performing the following steps you must don the appropriate PPE.  WARNING  Be cautious when working around or on equipment when power has been applied.  27. Restore the air pressure to the Filter Regulator Supply  28. Reset the Main Facilities STAR circuit  |           |                              | 20.         |       |       |           |       |
| Before performing the following steps you must don the appropriate PPE.  WARNING  Be cautious when working around or on equipment when power has been applied.  27. Restore the air pressure to the Filter Regulator Supply  28. Reset the Main Facilities STAR circuit  |           |                              | 26.         |       |       |           |       |
| you must don the appropriate PPE.  WARNING  Be cautious when working around or on equipment when power has been applied.  27. Restore the air pressure to the Filter Regulator Supply  28. Reset the Main Facilities STAR circuit  |           |                              |             |       |       |           |       |
| Be cautious when working around or on equipment when power has been applied.  27. Restore the air pressure to the Filter Regulator Supply  28. Reset the Main Facilities STAR circuit  |           |                              |             |       |       |           |       |
| equipment when power has been applied.  27. Restore the air pressure to the Filter Regulator Supply  28. Reset the Main Facilities STAR circuit  |           |                              |             |       |       |           |       |
| Regulator Supply 28. Reset the Main Facilities STAR circuit  |           |                              |             |       |       |           |       |
|  |           | e Filter                     | 27.         |       |       |           |       |
| breaker, as required.  |           | \R circuit                   | 28.         |       |       |           |       |
| 29. Position the Main Disconnect Switch (CB-1) to apply 480 VAC 3-phases to the MCC. The MCC power supplies and the internal fans will come on.  |           | o the MCC.                   | 29.         |       |       |           |       |
| 30. Turn On the UPS, and allow the internal self diagnostic routine to complete and the green LED to illuminate.   |           |                              | 30.         |       |       |           |       |
| 31. Turn On the monitor and the cell controller. Allow to the cell controller to boot up.  |           |                              | 31.         |       |       |           |       |
| 32. When prompted, press Ctrl-Alt-Delete to access the Windows NT Logon box. At the password default prompt, press ENTER and wait one minute for all processes to start.   |           | on box. At the ess ENTER and | 32.         |       |       |           |       |
|  |           |                              |             |       |       |           |       |

| U.S. Postal Service    |   |          |       |       |      |               |     | IDENTIF | ICAT    | ION   |           |        |      |      |      |
|------------------------|---|----------|-------|-------|------|---------------|-----|---------|---------|-------|-----------|--------|------|------|------|
| Maintenance Checklist  | _ | RK<br>DE |       |       | _    | QUIPI<br>ACRO |     |         |         | _     | ASS<br>DE | Z      | UMBE | ΞR   | TYPE |
|                        | 0 | 3        | М     | S     | Т    |               |     |         |         | С     | Α         | 2      | 0    | 5    | М    |
| Equipment Nomenclature |   | •        | nt Mo |       |      |               |     | Bulleti | n Filer | name  | (         | Occurr | ence |      |      |
| LM MST                 | S | hoot     | ing S | Star  | Bulk | Stag          | ing | m       | m09     | 077ah |           |        | 3-   | Year | •    |
|                        |   | Uni      | t Pha | ase : | 3A a | nd 3E         | 3   |         |         |       |           |        |      |      |      |

|                      |            | Unit Phase 3A and 3B  |               |               |               |                        |               |
|----------------------|------------|---|---------------|---------------|---------------|------------------------|---------------|
| Part or<br>Component | Item<br>No | Task Statement and Instruction (Comply with all current safety precautions)   | Est.<br>Time  | Min.<br>Skill |               | Threshold              | ls            |
| Component            | INU        | (Somply with all current salety precautions)  | Req<br>(min)  | Lev           | Run<br>Hours  | Pieces<br>Fed<br>(000) | Freq.         |
|                      |            | NOTE  | _ <del></del> |               | _ <del></del> | _ <del></del>          | _ <del></del> |
|                      |            | If one minute has not elapsed before the SHORTCUT TO INTERFACE.EXE Icon is activated, a prompt screen will appear advising SHORTCUT TO INTERFACE.EXE is terminated due to ORACLE not available.                   |               |               |               |                        |               |
|                      |            | 33. Double click on the SHORTCUT TO INTERFACE.EXE Icon. The STAR Console Login screen appears.  |               |               |               |                        |               |
|                      |            | NOTE  |               |               |               |                        |               |
|                      |            | The LOGIN name of the user who last successfully logged into the system appears initially in this field. To return to the LOGIN name window, click it with the trackball or press SHIFT-TAB.                      |               |               |               |                        |               |
|                      |            | 34. Enter the USER NAME and PASSWORD.   |               |               |               |                        |               |
|                      |            | 35. The CELL STATUS screen appears after successful LOGIN. Wait for a green CONNECTED to appear at the right of the NETWORK status, indicating the cell controller established communication with the TMS system. |               |               |               |                        |               |
|                      |            | <ol> <li>Review the CELL STATUS screen for<br/>errors. Review the Fault Description and<br/>note any discrepancies.</li> </ol>  |               |               |               |                        |               |
|                      |            | 37. Physically close the safety gates.  |               |               |               |                        |               |
|                      |            | 38. Select Maint Mode option from main screen.  |               |               |               |                        |               |
|                      |            | <ol> <li>Access the MAINTENANCE MODE screen.<br/>Select the Discrete I/O screen option under<br/>the Miscellaneous section.</li> </ol>  |               |               |               |                        |               |
|                      |            | 40. At the Discrete I/O screen, select the Status screen option.  |               |               |               |                        |               |
|                      |            | <ol> <li>Click the Disable PLC button in the Safety<br/>Controls section.</li> </ol>  |               |               |               |                        |               |
|                      |            | 42. Under the Safety Controls section, uncheck the UNLOCK GATE option to ensure the safety gates are locked.  |               |               |               |                        |               |

Maintenance Technical Support Center

| U.S. Postal           | Service |          |  |         |                  |       |        |        | <u>IDEN</u> | TIFICA <sup>*</sup> |       |       |         |             |      |       |
|-----------------------|---------|----------|--|---------|------------------|-------|--------|--------|-------------|---------------------|-------|-------|---------|-------------|------|-------|
| Maintenance           | Chack   | liet     | WORK   |         |                  |       |        | MENT   |             |                     | _     | ASS   | NU      | JMBEF       | ₹    | TYPE  |
| Wantenance            | CHECK   | iist     | CODE   | N /     | S                |       | ACRU   | MYM    |             | 1                   | C     | ODE   | 2       | 0           | 5    | M     |
|                       |         |          | 0 3  |         |                  | Т     |        |        | , ,         |                     | _     | Α     |         |             | Э    | IVI   |
| Equipment Nomenclatur |         |          | Equipme  |         |                  |       | 01-    | . •    | Bul         | letin File          |       | i.    | Occurre | ence<br>3-Y |      |       |
| LM M                  | 51      |          | Shooting Star Bulk Staging mm09 Unit Phase 3A and 3B |         |                  |       |        |        |             | 9077al              | n     |       |         |             |      |       |
|                       |         |          | Un   | it Pha  | se 3             | я а   | na 3   | В      |             |                     |       |       |         |             |      |       |
| Part or               | Item    |          | Task   | Statem  | ent s            | and I | netruc | tion   |             |                     | Est.  | Min.  |         | Thres       | hold | c     |
| Component             | No      | (0       | Comply wi  |         |                  |       |        |        | ns)         |                     | Time  | Skill |         |             |      |       |
| <u>'</u>              |         | `        | . ,  |         |                  |       | , ,    |        | ,           |                     | Req   | Lev   | Run     | Piec        |      | Freq. |
|                       |         |          |  |         |                  |       |        |        |             |                     | (min) |       | Hours   | Fe<br>(00   |      |       |
|                       | 1       |          |  |         |                  |       |        |        |             |                     |       |       |         | (50         | ٧,   |       |
|                       |         | 43. Sele | ect the C  | Close b | outto            | on to | o reti | urn to | the         |                     |       |       |         |             |      | _     |
|                       |         | MAI      | NTENA  | NCE I   | MOE              | DE s  | scree  | en.    |             |                     |       |       |         |             |      |       |
|                       |         |          |  |         |                  |       |        |        |             |                     |       |       |         |             |      |       |
|                       |         |          |  | WΔ      | ١RN              | ING   | :      |        |             |                     |       |       |         |             |      |       |
|                       |         |          |  |         |                  |       |        |        |             |                     |       |       |         |             |      |       |
|                       |         | Be ca    | utious   | when    | wo               | rkir  | ng ar  | ound   | or o        | on                  |       |       |         |             |      |       |
|                       |         |          |  | when    |                  |       |        |        |             |                     |       |       |         |             |      |       |
|                       |         | applie   |  |         | •                |       |        |        |             |                     |       |       |         |             |      |       |
|                       |         | •        |  |         |                  |       |        |        |             |                     |       |       |         |             |      |       |
|                       |         | 44. Pres | ss the E   | -Stop   | Res              | et a  | and t  | he Po  | wer         | ON                  |       |       |         |             |      |       |
|                       |         | butte    |  |         |                  |       |        |        |             |                     |       |       |         |             |      |       |
|                       |         |          | i  |         |                  |       |        |        |             |                     |       |       |         |             |      |       |
|                       |         |          |  | CA      | UTI              | ION   |        |        |             |                     |       |       |         |             |      |       |
|                       |         | De       | not me   | ove th  | ۷ م              | Δ .   | r the  | PΛ     |             |                     |       |       |         |             |      |       |
|                       |         | DC       | , HOL III  | טעב נו  | 1 <del>C</del> V | A 0   |        | iva.   |             |                     |       |       |         |             |      |       |
|                       |         | 45. At   | the M  | ΔΙΝΙΤΕ  | =ΝΙΔ             | NC    | Ε N    | 4ODE   | -Ma         | chine               |       |       |         |             |      |       |
|                       |         | _        | trol scr   |         |                  | _     |        |        |             | -                   |       |       |         |             |      |       |
|                       |         |          | h button   |         | Cilci            | . 0   |        | lable  | 1 6         | iluarit             |       |       |         |             |      |       |
|                       |         | •        |  |         |                  |       |        |        |             |                     |       |       |         |             |      |       |
|                       |         | 46. Usir |  |         |                  |       |        |        |             |                     |       |       |         |             |      |       |
|                       |         |          | rack,  |         |                  |       |        |        |             |                     |       |       |         |             |      |       |
|                       |         |          | iously   |         |                  |       | adja   | cent   | to          | the                 |       |       |         |             |      |       |
|                       |         | SA1      | /RSS ge  | ear re  | duce             | er.   |        |        |             |                     |       |       |         |             |      |       |
|                       |         | 47. Sele | ect the  | CELL    | . OF             | FFLI  | INE    | optio  | n or        | any                 |       |       |         |             |      |       |

54. Ensure the Enable PLC option is displayed at the Discrete I/O Status Screen Safety

53. At the Discrete I/O screen, select the Status

main screen header panel.

TO-ENTER light begin to flash.

returns to the HOME position.

50. The green stack lights go Off.

Miscellaneous section.

screen option.

48. The green stack lights and the CSSS OK-

 The cell controller completes all transactions and comes to a controlled stop. The VTU

51. Select Maint Mode option from main screen.52. Access the MAINTENANCE MODE screen. Select the Discrete I/O screen option at the

at the Discrete I/O Status Screen Safety Controls section. Click on the Disable PLC option to change to Enable PLC if required.

55. Select the UNLOCK THE GATE option. The

| U.S. Postal Service            |   |          |   |      |   |             |                  | IDE | NTIF                  | CAT | ON            |           |        |      |      |      |
|--------------------------------|---|----------|---|------|---|-------------|------------------|-----|-----------------------|-----|---------------|-----------|--------|------|------|------|
| Maintenance Checklist          |   | RK<br>DE |   |      |   |             | MEN <sup>-</sup> |     |                       |     |               | ASS<br>DE | N      | UMBI | ΞR   | TYPE |
|                                | 0 | 3        | М | S    | Т |             |                  |     |                       |     | С             | Α         | 2      | 0    | 5    | М    |
| Equipment Nomenclature  LM MST |   | hoot     |   | Star |   | Sta<br>nd 3 | ging<br>B        | В   | ulletir<br><b>m</b> ı |     | name<br>077ah |           | Occuri |      | Year |      |

|           |      | Unit Phase 3A and 3B  |                      |              |              |                        |       |
|-----------|------|---|----------------------|--------------|--------------|------------------------|-------|
| Part or   | Item | Task Statement and Instruction  | Est.                 | Min.         |              | Threshold              | s     |
| Component | No   | (Comply with all current safety precautions)  | Time<br>Req<br>(min) | Skill<br>Lev | Run<br>Hours | Pieces<br>Fed<br>(000) | Freq. |
|           |      | pneumatic system purge valve is automatically activated, removing air pressure from the system. In addition, the KP Main Motor Contactor is opened. This removes 480 VAC from the servo drive controllers and the power to the motor fans. Control voltage is present at the controllers and sensors.  56. Open the safety gates.  57. Select the Close option. Return to the MAINTENANCE MODE screen to LOG OFF.  58. Access the Windows NT START button at the lower screen display. Select the SHUTDOWN option, and select YES when prompted. Wait for the software to complete the shutdown process.  WARNING  Before performing the following steps you must don the appropriate PPE.  59. Open the MCC doors; turn Off the computer, the monitor, and the UPS.  60. Open the MCC's Main Disconnect Circuit Breaker (CB-1).  WARNING  When performing maintenance inside the MCC, perform system lockout/ tagout procedures as prescribed by the current local lockout/restore procedures. Attach a red multi-lock hasp lockout device on the main facility circuit breaker; and secure with a lock and signed tag. Otherwise, attach a multi-lock lockout device to the Main Disconnect Switch S1 using a lock and signed tag.  61. Close MCC doors. Perform lockout/tagout procedures as prescribed by the current local lockout/restore procedures. |                      |              |              |                        |       |

| ИМО-043-14                  |            |   |  |                       |                | Mai                              | intenance               | e Tec        | hnic          | al Su                | oport C                | enter |  |  |
|-----------------------------|------------|---|--|-----------------------|----------------|----------------------------------|-------------------------|--------------|---------------|----------------------|------------------------|-------|--|--|
| U.S. Posta                  | al Service |   |  | <del></del>           |                |                                  | IDENTIFICA <sup>T</sup> |              |               | NUMBER TY            |                        |       |  |  |
| Maintenanc                  | e Check    | list                                      | WORK<br>CODE   | <br>                  | A              | QUIPMENT<br>CRONYM               |                         | С            | ASS<br>ODE    |                      |                        | TYPE  |  |  |
|                             |            |   | 0 3  | M S                   | Т              |                                  |                         | CA           |               | 2                    | 0 5                    | М     |  |  |
| quipment Nomenclatu<br>LM N |            |   | Equipment Model Shooting Star Bulk Staging Unit Phase 3A and 3B  Bulletin Fi mm0   |                       |                |                                  |                         |              | h             | Occurrence<br>3-Year |                        |       |  |  |
| Part or                     | Item<br>No | ,   |  | Statemen              |                | struction<br>ty precautio        | )na)                    | Est.<br>Time | Min.<br>Skill |                      | Threshold              | ls    |  |  |
| Component                   | NO         | (   | Comply wi  | in all curre          | ili Salei      | y precautio                      | 115)                    | Req<br>(min) | Lev           | Run<br>Hours         | Pieces<br>Fed<br>(000) | Freq  |  |  |
|                             |            |   |  | WAR                   | NING           |                                  |                         |              |               |                      |                        |       |  |  |
|                             |            | the I<br>Switch<br>Circu<br>exter<br>comp | Ith from electrocution will occur if line side of the Main Disconnect itch is contacted. The Main Facility cuit Breaker listed on the MCC erior must be locked out to inpletely remove all system power. |                       |                |                                  |                         |              |               |                      |                        |       |  |  |
|                             |            | Pan                                       | el. Dis  | sconnec<br>install lo | t STA          |                                  | t breaker               |              |               |                      |                        |       |  |  |
|                             |            | on the                                    | ne pneu  | ımatics               | out de<br>Main | evice and<br>Air Va<br>ge or inj | lve to                  |              |               |                      |                        |       |  |  |
|                             |            |   | Rotate the air supply shut-off valve to the EXH position.  |                       |                |                                  |                         |              |               |                      |                        |       |  |  |
|                             |            |   |  |                       |                | lock as p                        | rescribed               |              |               |                      |                        |       |  |  |

- by the current local lockout/restore procedure.
- 65. Enter the safety-fenced area, and engage the long maintenance bar underneath the VA carriage assembly, and secure it so downward motion of the VA carriage is prevented.
- 66. Using a 5/32" Allen wrench, remove cover(s) over the lower SA Drive belt.
- 67. Position a drain pan (of sufficient size to contain at least 2.14 gallons) under the drain plug in the RSS gear reducer casing.

#### **WARNING**

Discard or dispose of chemical soaked materials according to MSDS and in accordance with local procedures.

68. Using a wiping rag or paper wipe, clean dirt

| U.S. Postal Service    |              |       |       |      |      |             | IDENTI | FICAT   | ION   |           |      |       |     |      |      |
|------------------------|--------------|-------|-------|------|------|-------------|--------|---------|-------|-----------|------|-------|-----|------|------|
| Maintenance Checklist  | WORK<br>CODE |       |       |      |      | MENT<br>NYM |        |         | _     | ASS<br>DE |      | NUI   | МВЕ | R    | TYPE |
|                        | 0 3          | М     | S     | Т    |      |             |        |         | С     | Α         | 2    |       | 0   | 5    | М    |
| Equipment Nomenclature | Equipmer     |       |       |      |      |             | Bullet | in File | name  |           | Оссі | ırrer | псе |      |      |
| LM MST                 | Shoot        | ing S | Star  | Bulk | Sta  | ging        | r      | ոm09    | 077ah |           |      |       | 3-  | Year |      |
|                        | Unit         | t Pha | ase ( | 3A a | nd 3 | В           |        |         |       |           |      |       |     |      |      |

| _ |                      |            |                                | Unit Phase 3A and 3B  |   |              |               |              |                        |       |
|---|----------------------|------------|--------------------------------|---|---|--------------|---------------|--------------|------------------------|-------|
|   | Part or<br>Component | Item<br>No | 11                             | Task Statement and Instruction Comply with all current safety precautior  | ne)   | Est.<br>Time | Min.<br>Skill |              | Threshold              | S     |
|   | Component            | NO         | ((                             | Somply with all current salety precaution   | 15)   | Req<br>(min) | Lev           | Run<br>Hours | Pieces<br>Fed<br>(000) | Freq. |
|   |                      |            | fron                           | n the oil drain plug and the oil fill   | plua  |              |               |              |                        |       |
|   |                      |            | 69. Place the electron to e SA | ce a protective cover over the SSA1 belt drive sprocket a strical connections/terminals is similarly with the gear box and/or onsure oil does not drain on the drive belt sprocket(s), or the ninals. | SA1 belt,<br>and any<br>in close<br>drain pan<br>SA belt, |              |               |              |                        |       |
|   |                      |            | 70. Usir<br>plug               | ng a 6 mm Allen wrench, removers.   | e both fill   |              |               |              |                        |       |
|   |                      |            | dete<br>oil                    | ng a clean straw or similermine the oil level in the gearb<br>in a full gearbox should<br>roximately 5".  | ox. The   |              |               |              |                        |       |
|   |                      |            |                                | ition a trough or offset funnel un plug to drain the oil into the dra   |   |              |               |              |                        |       |
|   |                      |            |                                | ng a 6 mm Allen wrench, remo<br>I from the gear casing.   | ove drain   |              |               |              |                        |       |
|   |                      |            | 74. Drai                       | n gear oil from crankcase.  |   |              |               |              |                        |       |
|   |                      |            |                                | r oil has drained from cr<br>stall drain plug and ensure it is ti   |   |              |               |              |                        |       |
|   |                      |            | con                            | te sure the SA1 drive belt; nections, and electrical terminered to prevent any oil from being hem.  | nals are  |              |               |              |                        |       |
|   |                      |            |                                | efully add 2.14 gallons of ne<br>ir 630 (or equivalent) oil.  | ew Mobil  |              |               |              |                        |       |
|   |                      |            | 78. Veri                       | fy oil level measures approxima   | tely 5".  |              |               |              |                        |       |
|   |                      |            | 79. Reir                       | nstall both fill plugs and ensure t.  | they are  |              |               |              |                        |       |
|   |                      |            | 80. Clea                       | an any oil spilled in the process.  |   |              |               |              |                        |       |
|   |                      |            | oil                            | nove protective covers used to<br>spillage on SA1 drive belt,<br>nections, and electrical terminals   | electrical  |              |               |              |                        |       |
|   |                      |            | COV                            | ng a 5/32" Allen wrench, re-insta<br>er(s), previously removed, over t<br>drive belt.   |   |              |               |              |                        |       |
|   |                      |            | 83. Ens                        | ure all tools, materials, and ed  | quipment  |              |               |              |                        |       |

| U.S. Postal Service            |   |          |   |      |   |              | IDI   | ENTIF         | ICAT | ION           |           |       |      |      |      |
|--------------------------------|---|----------|---|------|---|--------------|-------|---------------|------|---------------|-----------|-------|------|------|------|
| Maintenance Checklist          |   | RK<br>DE |   |      | _ | QUIP<br>ACRO | <br>- |               |      | CLA<br>CO     | ASS<br>DE | NI    | JMBE | ER   | TYPE |
|                                | 0 | 3        | М | S    | Т |              |       |               |      | С             | Α         | 2     | 0    | 5    | М    |
| Equipment Nomenclature  LM MST |   | hoot     |   | Star |   | Stag         | E     | Bulletir<br>M |      | name<br>077ah |           | ccurr |      | Year |      |
|                                |   |          |   |      |   |              |       |               |      |               |           |       |      |      |      |

|                      |            | Unit Phase 3A and 3B  |              |               |              |                        |       |
|----------------------|------------|---|--------------|---------------|--------------|------------------------|-------|
| Part or<br>Component | Item<br>No | Task Statement and Instruction (Comply with all current safety precautions)   | Est.<br>Time | Min.<br>Skill |              | Threshold              | s     |
| Component            | 140        | (Compry with all current salety precautions)  | Req<br>(min) | Lev           | Run<br>Hours | Pieces<br>Fed<br>(000) | Freq. |
|                      |            | are moved every from the CA minute to the CA  |              |               |              |                        |       |
|                      |            | are moved away from the SA prior to the SA being moved.   |              |               |              |                        |       |
|                      |            | 84. Place the long maintenance bar in the storage position, and secure it.  |              |               |              |                        |       |
|                      |            | WARNING   |              |               |              |                        |       |
|                      |            | Before performing the following steps you must don the appropriate PPE.   |              |               |              |                        |       |
|                      |            | WARNING   |              |               |              |                        |       |
|                      |            | Be cautious when working around or on equipment when power has been applied.  |              |               |              |                        |       |
|                      |            | 85. Exit the safety fenced area, close gate(s), and secure interlock switches.  |              |               |              |                        |       |
|                      |            | 86. Restore the air pressure to the Filter Regulator Supply   |              |               |              |                        |       |
|                      |            | 87. Reset the Main Facilities STAR circuit breaker, as required.  |              |               |              |                        |       |
|                      |            | 88. Position the Main Disconnect Switch (CB-1) to apply 480 VAC 3-phases to the MCC. The MCC power supplies and the internal fans will come on.   |              |               |              |                        |       |
|                      |            | 89. Turn On the UPS and allow the internal self diagnostic routine to complete and the green LED to illuminate.   |              |               |              |                        |       |
|                      |            | 90. Turn On the monitor and the cell controller. Allow to the cell controller to boot up.   |              |               |              |                        |       |
|                      |            | 91. When prompted, press Ctrl-Alt-Delete to access the Windows NT Logon box. At the password default prompt, press ENTER and wait one minute for all processes to start.                        |              |               |              |                        |       |
|                      |            | NOTE  |              |               |              |                        |       |
|                      |            | If one minute has not elapsed before the SHORTCUT TO INTERFACE.EXE Icon is activated, a prompt screen will appear advising SHORTCUT TO INTERFACE.EXE is terminated due to ORACLE not available. |              |               |              |                        |       |

| U.S. Postal Service            |   |          |                          |      |   |                 | IDE | NTIF | ICATI | ION           |           |       |      |      |      |
|--------------------------------|---|----------|--------------------------|------|---|-----------------|-----|------|-------|---------------|-----------|-------|------|------|------|
| Maintenance Checklist          |   | RK<br>DE |                          |      | _ | <br>MENT<br>MYM | •   |      |       | _             | ASS<br>DE | N     | UMBE | ER   | TYPE |
|                                | 0 | 3        | М                        | S    | Т |                 |     |      |       | С             | Α         | 2     | 0    | 5    | М    |
| Equipment Nomenclature  LM MST |   | hoot     | nt Mod<br>ing S<br>t Pha | Star |   |                 | Ві  |      |       | name<br>077ah | _         | ccurr |      | Year |      |

|           |      |             | Unit Phase 3A and 3B  |                      |                |              |                        |       |
|-----------|------|-------------|---|----------------------|----------------|--------------|------------------------|-------|
| Part or   | Item |             | Task Statement and Instruction (Comply with all current safety precautions)   | Est.                 | Min.           |              | Threshold              | S     |
| Component | No   |             | (Comply with all current safety precautions)  | Time<br>Req<br>(min) | Skill -<br>Lev | Run<br>Hours | Pieces<br>Fed<br>(000) | Freq. |
|           |      |             |   |                      |                |              |                        |       |
|           |      | 92.         | Double click on the SHORTCUT TO INTERFACE.EXE Icon. The STAR Console Login screen appears.  |                      |                |              |                        |       |
|           |      |             | NOTE  |                      |                |              |                        |       |
|           |      | s<br>a<br>t | The LOGIN name of the user who last successfully logged into the system appears initially in this field. To return to he LOGIN name window, click it with the rackball, or press SHIFT-TAB.                   |                      |                |              |                        |       |
|           |      | 93.         | Enter the USER NAME and PASSWORD.   |                      |                |              |                        |       |
|           |      | 94.         | The CELL STATUS screen appears after successful LOGIN. Wait for a green CONNECTED to appear at the right of the NETWORK status, indicating the cell controller established communication with the TMS system. |                      |                |              |                        |       |
|           |      | 95.         | Review the CELL STATUS screen for errors. Review the Fault Description and note any discrepancies.  |                      |                |              |                        |       |
|           |      | 96.         | Physically close the safety gates.  |                      |                |              |                        |       |
|           |      | 97.         | Select Maint Mode option from main screen.  |                      |                |              |                        |       |
|           |      | 98.         | Access the MAINTENANCE MODE screen.<br>Select the Discrete I/O screen option under<br>the Miscellaneous section.  |                      |                |              |                        |       |
|           |      | 99.         | At the Discrete I/O screen, select the Status screen option.  |                      |                |              |                        |       |
|           |      | 100         | . Click the Disable PLC button in the Safety Controls section.  |                      |                |              |                        |       |
|           |      | 101         | . Under the Safety Controls section, uncheck<br>the UNLOCK GATE option to ensure the<br>safety gates are locked.  |                      |                |              |                        |       |
|           |      | 102         | . Select the Close button to return to the MAINTENANCE MODE screen.   |                      |                |              |                        |       |
|           |      |             | WARNING   |                      |                |              |                        |       |
|           |      | €           | Be cautious when working around or on equipment when power has been applied.  |                      |                |              |                        |       |

| U.S. Postal Service            |   |          |                         |      |   |              | IDE | NTIF                  | ICATI | ION           |           |        |      |      |      |
|--------------------------------|---|----------|-------------------------|------|---|--------------|-----|-----------------------|-------|---------------|-----------|--------|------|------|------|
| Maintenance Checklist          |   | RK<br>DE |                         |      |   | QUIF<br>ACRO |     |                       |       | _             | ASS<br>DE | N      | UMBI | ĒR   | TYPE |
|                                | 0 | 3        | M                       | S    | Т |              |     |                       |       | С             | Α         | 2      | 0    | 5    | M    |
| Equipment Nomenclature  LM MST |   | hoot     | nt Mo<br>ing S<br>t Pha | Star |   |              |     | ulletir<br><b>m</b> ı |       | name<br>077ah | 1 7       | Occurr |      | Year |      |

|           |      | Unit Phase 3A and 3B   |                      |               |              |                        |       |
|-----------|------|--|----------------------|---------------|--------------|------------------------|-------|
| Part or   | Item | Task Statement and Instruction (Comply with all current safety precautions)  | Est.                 | Min.<br>Skill |              | Threshold              | S     |
| Component | No   | (Comply with all current salety precautions)   | Time<br>Req<br>(min) | Lev           | Run<br>Hours | Pieces<br>Fed<br>(000) | Freq. |
|           |      | 103. Press the E-Stop Reset and the Power ON buttons.  |                      |               |              |                        |       |
|           |      | CAUTION  |                      |               |              |                        |       |
|           |      | Ensure the TA is fully retracted before moving the SA.   |                      |               |              |                        |       |
|           |      | CAUTION  |                      |               |              |                        |       |
|           |      | Ensure the VA and RA are not moved.  |                      |               |              |                        |       |
|           |      | 104. At the MAINTENANCE MODE-Machine Control screen, click on Home SA.   |                      |               |              |                        |       |
|           |      | 105. At the Machine Control screen, make the appropriate entry in the Manual Move to section and click on the MOVE SA to move the SA such that the racks, from which the shelves have been removed, are located to allow access to the other gear reducer (SA2/RSS). |                      |               |              |                        |       |
|           |      | 106. At the MAINTENANCE MODE-Machine Control screen, click on Enable Pendant push button.  |                      |               |              |                        |       |
|           |      | 107. Using the pendant, move the SA to position the rack, from which the shelves were previously removed, adjacent to the other gear reducer (SA2/RSS).  |                      |               |              |                        |       |
|           |      | 108. Select the CELL OFFLINE option on any main screen header panel.   |                      |               |              |                        |       |
|           |      | 109. The green stack lights and the CSSS OKTO-ENTER light begin to flash.  |                      |               |              |                        |       |
|           |      | 110. The cell controller completes all transactions and comes to a controlled stop. The VTU returns to the HOME position.  |                      |               |              |                        |       |
|           |      | 111. The green stack lights go Off.  |                      |               |              |                        |       |
|           |      | 112. Select Maint Mode option from main screen.  |                      |               |              |                        |       |
|           |      | 113. Access the MAINTENANCE MODE screen. Select the Discrete I/O screen option at the Miscellaneous section.   |                      |               |              |                        |       |
|           |      | 114. At the Discrete I/O screen, select the Status screen option.  |                      |               |              |                        |       |

| U.S. Postal Service    |   |          |       |       |      |               |     | IDENTI | FICAT   | ION   |           |        |      |      |      |
|------------------------|---|----------|-------|-------|------|---------------|-----|--------|---------|-------|-----------|--------|------|------|------|
| Maintenance Checklist  | _ | RK<br>DE |       |       | _    | QUIPI<br>ACRO |     |        |         | _     | ASS<br>DE | N      | UMBI | ĒR   | TYPE |
|                        | 0 | 3        | М     | S     | Т    |               |     |        |         | С     | Α         | 2      | 0    | 5    | М    |
| Equipment Nomenclature |   | •        | nt Mo |       |      |               |     | Bullet | in File | name  | (         | Occurr | ence |      |      |
| LM MST                 | S | hoot     | ing S | Star  | Bulk | Stag          | ing | n      | nm09    | 077ah |           |        | 3-   | Year | •    |
|                        |   | Uni      | t Pha | ase : | 3A a | nd 3E         | 3   |        |         |       |           |        |      |      |      |

|           |      | Unit Phase 3A and 3B   |                      |              |              |                        |       |
|-----------|------|--|----------------------|--------------|--------------|------------------------|-------|
| Part or   | Item | Task Statement and Instruction   | Est.                 | Min.         |              | Threshold              | S     |
| Component | No   | (Comply with all current safety precautions)   | Time<br>Req<br>(min) | Skill<br>Lev | Run<br>Hours | Pieces<br>Fed<br>(000) | Freq. |
|           |      | 115. Ensure the Enable PLC option is displayed at the Discrete I/O Status Screen Safety Controls section. Click on the Disable PLC option to change to Enable PLC if required.  116. Select the UNLOCK THE GATE option. The pneumatic system purge valve automatically activates, removing air pressure from the system. The KP Main Motor Contactor opens. This removes 480 VAC from servo drive controllers and power to the motor fans. Control voltage is present at the controllers and sensors.  117. Open the safety gates.  118. Select the Close option. Return to the MAINTENANCE MODE screen to LOG OFF.  119. Access the Windows NT START button at the lower screen display. Select the SHUTDOWN option and select YES when prompted. Wait for the software to complete the shutdown process.  WARNING  Before performing the following steps you must don the appropriate PPE.  120. Open the MCC doors; turn Off the computer, the monitor, and the UPS.  121. Open MCC Main Disconnect Circuit Breaker (CB-1).  WARNING  When performing maintenance inside MCC, perform system lockout/ tagout procedures as prescribed by current local lockout/restore procedures. Attach a red multi-lock hasp lockout device on the Main Facility Circuit Breaker; and secure with a lock and signed tag. Otherwise, attach a multi-lock lockout device to the Main Disconnect Switch S1 using a lock and signed tag. |                      |              |              |                        |       |

| U.S. Postal Service            |    |          |   |      |   |              | IDE | NTIF         | ICAT | ION           |           |       |      |      |      |
|--------------------------------|----|----------|---|------|---|--------------|-----|--------------|------|---------------|-----------|-------|------|------|------|
| Maintenance Checklist          | CO | RK<br>DE |   |      |   | QUIP<br>ACRO |     |              |      | CLA<br>CO     | ASS<br>DE | NI    | JMBE | ER   | TYPE |
|                                | 0  | 3        | М | S    | Т |              |     |              |      | С             | Α         | 2     | 0    | 5    | М    |
| Equipment Nomenclature  LM MST |    | hoot     |   | Star |   | Stag         | В   | ulletir<br>m |      | name<br>077ah | _         | ccurr |      | Year |      |
|                                | ı  | •        |   |      |   |              |     |              |      |               | <u> </u>  |       |      |      |      |

| Part or   | Item | Task Statement and Instruction  | Est.                 | Min.         |              | Threshold              | S   |
|-----------|------|---|----------------------|--------------|--------------|------------------------|-----|
| Component | No   | (Comply with all current safety precautions)  | Time<br>Req<br>(min) | Skill<br>Lev | Run<br>Hours | Pieces<br>Fed<br>(000) | Fre |
|           |      | 122. Close MCC doors. Perform lockout/tagout procedures as prescribed by the current local lockout/restore procedures.  WARNING   |                      |              |              |                        |     |
|           |      | 480 VAC is present on the line side of CB1 with the Main Disconnect Switch in the OFF position. Severe injury or death from electrocution will occur if the line side of the disconnect switch is contacted. The Main Facility Circuit Breaker listed on the MCC exterior must be locked out to completely remove all system power. |                      |              |              |                        |     |
|           |      | 123. Locate the facility Main Power Distribution Panel. Disconnect STAR circuit breaker power, and install lockout device and lock.  WARNING  |                      |              |              |                        |     |
|           |      | Install a lockout/tagout device and lock on the pneumatics Main Air Valve to prevent equipment damage or injury to personnel.   |                      |              |              |                        |     |
|           |      | 124. Rotate the air supply shut-off valve to the EXH position.  |                      |              |              |                        |     |
|           |      | 125. Install lockout device and lock as prescribed by current local lockout/restore procedure.  |                      |              |              |                        |     |
|           |      | 126. Enter the safety-fenced area at SA2/RSS.   |                      |              |              |                        |     |
|           |      | 127. Repeat steps 66 through 83 for the SA2/RSS gear box.   |                      |              |              |                        |     |
|           |      | 128. Enter the safety-fenced area.  |                      |              |              |                        |     |
|           |      | 129. At the Machine Control screen, make the appropriate entry in the Manual Move to section to move the SA such that the rack(s), from which the shelves were previously removed, are located on turn end.   |                      |              |              |                        |     |
|           |      | 130. Select the CELL OFFLINE option on any main screen header panel.  |                      |              |              |                        |     |
|           |      | 131. The green stack lights and the CSSS OK-  |                      |              |              |                        |     |

| U.S. Postal Service            |   |          |                          |      |   |                 | IDE | NTIF | ICATI | ION           |           |       |      |      |      |
|--------------------------------|---|----------|--------------------------|------|---|-----------------|-----|------|-------|---------------|-----------|-------|------|------|------|
| Maintenance Checklist          |   | RK<br>DE |                          |      | _ | <br>MENT<br>MYM | •   |      |       | _             | ASS<br>DE | N     | UMBE | ER   | TYPE |
|                                | 0 | 3        | М                        | S    | Т |                 |     |      |       | С             | Α         | 2     | 0    | 5    | М    |
| Equipment Nomenclature  LM MST |   | hoot     | nt Mod<br>ing S<br>t Pha | Star |   |                 | Ві  |      |       | name<br>077ah | _         | ccurr |      | Year |      |

|              | Unit Phase 3A and 3B  |                      |              |              |                        |       |
|--------------|---|----------------------|--------------|--------------|------------------------|-------|
| Part or Item | Task Statement and Instruction  | Est.                 | Min.         |              | Threshold              | S     |
| Component No | (Comply with all current safety precautions)  | Time<br>Req<br>(min) | Skill<br>Lev | Run<br>Hours | Pieces<br>Fed<br>(000) | Freq. |
|              | TO-ENTER light begin to flash.  |                      |              |              |                        |       |
|              | 132. The cell controller completes all transactions and comes to a controlled stop. The VTU returns to the HOME position.   |                      |              |              |                        |       |
|              | 133. The green stack lights go Off.   |                      |              |              |                        |       |
|              | 134. Select Maint Mode option from main screen.   |                      |              |              |                        |       |
|              | 135. Access the MAINTENANCE MODE screen. Select the Discrete I/O screen option at the Miscellaneous section.  |                      |              |              |                        |       |
|              | 136. At the Discrete I/O screen, select the Status screen option.   |                      |              |              |                        |       |
|              | 137. Ensure the Enable PLC option is displayed at the Discrete I/O Status Screen Safety Controls section. Click on the Disable PLC option to change to Enable PLC if required.  |                      |              |              |                        |       |
|              | 138. Select the UNLOCK THE GATE option. The pneumatic system purge valve automatically activates, removing air pressure from the system. The KP Main Motor Contactor opens. This removes 480 VAC from servo drive controllers and power to the motor fans. Control voltage is present at the controllers and sensors. |                      |              |              |                        |       |
|              | 139. Open the safety gates.   |                      |              |              |                        |       |
|              | 140. Select the Close option. Return to the MAINTENANCE MODE screen to LOG OFF.   |                      |              |              |                        |       |
|              | 141. Access the Windows NT START button at the lower screen display. Select the SHUTDOWN option and select YES when prompted. Wait for the software to complete the shutdown process.  WARNING  |                      |              |              |                        |       |
|              | Before performing the following steps you must don the appropriate PPE.   |                      |              |              |                        |       |
|              | 142. Open the MCC doors; turn Off the computer, the monitor, and the UPS.   |                      |              |              |                        |       |

| U.S. Postal Service            | IDENTIFICATION CLASS ANAMORE TYPE |   |   |   |   |              |  |  |  |  |               |           |        |      |      |      |
|--------------------------------|-----------------------------------|---|---|---|---|--------------|--|--|--|--|---------------|-----------|--------|------|------|------|
| Maintenance Checklist          | _                                 | RK<br>DE  |   |   |   | QUIF<br>ACR( |  |  |  |  |               | ASS<br>DE | N      | UMBI | ΞR   | TYPE |
|                                | 0                                 | 3   | М | S | Т |              |  |  |  |  | С             | Α         | 2      | 0    | 5    | М    |
| Equipment Nomenclature  LM MST |                                   | Equipment Model Shooting Star Bulk Staging Unit Phase 3A and 3B |   |   |   |              |  |  |  |  | name<br>077ah |           | Occurr |      | Year |      |

| LM MS     | l    |   |  | r Bulk Staging<br>3A and 3B   | mmus  | 9077al               | 1            |              | 3-Year                 |       |
|-----------|------|---|--|---|---|----------------------|--------------|--------------|------------------------|-------|
| Part or   | Item | 10  |  | nt and Instruction  | ·o)   | Est.                 | Min.         |              | Threshold              | S     |
| Component | No   | (0  | comply with all curr   | ent safety precaution   | 15)   | Time<br>Req<br>(min) | Skill<br>Lev | Run<br>Hours | Pieces<br>Fed<br>(000) | Freq. |
|           |      | When MCC, proce local Attac devic Break signe lock Disco signe 144. Clos proce local 480 V CB1 V the C death the li Switc Circu exteri comp 145. Loca Pan pow | WAR  a performing perform systedures as pre- lockout/res h a red multi e on the Mi cer; and secu d tag. Otherw lockout dev nnect Switch d tag.  WAR  AC is present with the Main D DFF position. from electro ine side of the h is contacted it Breaker lift for must be letely remove ate the facility el. Disconnect er, and install lock WAR  I a lockout/tag ne pneumatics ent equipment | i-lock hasp locain Facility C re with a lock vise, attach a r vice to the S1 using a lock  Perform locko escribed by the exprocedures.  NING  t on the line sin Disconnect Switt Severe injur cution will occur in Main Fasted on the | nside agout irrent lures. ckout ircuit c and multi- Main c and  ut/tagout c current  de of ich in ry or cur if innect acility MCC t to er. stribution breaker d lock. | (min)                |              | nouis        |                        |       |

MMO-043-14

| U.S. Postal Service            |   |   |   |   |   |              |             | IDENT | IFICAT           | ION                      |           |        |      |      |      |
|--------------------------------|---|---|---|---|---|--------------|-------------|-------|------------------|--------------------------|-----------|--------|------|------|------|
| Maintenance Checklist          |   | RK<br>DE  |   |   | _ | QUIP<br>ACRO | MENT<br>NYM |       |                  | _                        | ASS<br>DE | Ζ      | UMBE | ĒR   | TYPE |
|                                | 0 | 3   | М | S | Т |              |             |       |                  | С                        | Α         | 2      | 0    | 5    | М    |
| Equipment Nomenclature  LM MST |   | Equipment Model Shooting Star Bulk Staging Unit Phase 3A and 3B |   |   |   |              |             |       | tin File<br>nm09 | <sub>name</sub><br>077ah |           | Occurr |      | Year |      |

|           |          | Office Thase 3A and 3B  |                      |                                       |              |                        |       |
|-----------|----------|---|----------------------|---------------------------------------|--------------|------------------------|-------|
| Part or   | Item     | Task Statement and Instruction  | Est.                 | Min.                                  |              | Threshold              | s     |
| Component | No       | (Comply with all current safety precautions)  | Time<br>Req<br>(min) | Skill<br>Lev                          | Run<br>Hours | Pieces<br>Fed<br>(000) | Freq. |
|           | <u> </u> |   | ·<br>I               | · · · · · · · · · · · · · · · · · · · | 1            | , ,                    |       |
|           |          | NOTE  |                      |                                       |              |                        |       |
|           |          | The following step to install the SA shelves requires two people. One person should support each shelf, while the other person installs the mounting bolts and new nuts.    |                      |                                       |              |                        |       |
|           |          | 146. Rotate the air supply shut-off valve to the EXH position.  |                      |                                       |              |                        |       |
|           |          | 147. Install lockout device and lock as prescribed<br>by the current local lockout/restore<br>procedure.  |                      |                                       |              |                        |       |
|           |          | 148. Enter the safety-fenced area and engage the long maintenance bar underneath the VA carriage assembly and secure it so downward motion of the VA carriage is prevented. |                      |                                       |              |                        |       |
|           |          | 149. Reinstall the shelves removed earlier. With one person supporting each shelf, secure the shelves with 3 bolts, washers, and 3 new 3/8" nylon locking nuts.             |                      |                                       |              |                        |       |
|           |          | 150. Ensure all materials and tools are removed.  |                      |                                       |              |                        |       |
|           |          | 151. Remove maintenance bar and secure it in the storage position.  |                      |                                       |              |                        |       |
|           |          | 152. Exit the safety fenced area and close gate(s) and secure interlock switches.   |                      |                                       |              |                        |       |
|           |          | WARNING   |                      |                                       |              |                        |       |
|           |          | Before performing the following steps you must don the appropriate PPE.   |                      |                                       |              |                        |       |
|           |          | WARNING   |                      |                                       |              |                        |       |
|           |          | Be cautious when working around or on equipment when power has been applied.  |                      |                                       |              |                        |       |
|           |          | 153. Restore the air pressure to the Filter Regulator Supply.   |                      |                                       |              |                        |       |
|           |          | 154. Reset the Main Facilities STAR circuit breaker, as required.   |                      |                                       |              |                        |       |
|           |          |   |                      | 1                                     |              |                        |       |

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|-------------------------------|----|---|---|---|---|--|------|-----|------|------|---------------|---|--------|------|------|------|
| Maintenance Checklist         | CO |   |   |   | _ |  | MEN. | -   |      |      | CLA<br>CO     |   | N      | JMBE | ΞR   | TYPE |
|                               | 0  | 3   | М | S | Т |  |      |     |      |      | С             | Α | 2      | 0    | 5    | М    |
| Equipment Nomenclature LM MST | SI | Equipment Model Shooting Star Bulk Staging Unit Phase 3A and 3B |   |   |   |  |      |     |      |      | name<br>077ah | C | Occurr |      | Year |      |
|                               |    |   |   |   |   |  |      |     |      |      |               |   |        |      |      |      |

|                      | ,          |  |              |               |              |                        |       |
|----------------------|------------|--|--------------|---------------|--------------|------------------------|-------|
| Part or<br>Component | Item<br>No | Task Statement and Instruction (Comply with all current safety precautions)  | Est.<br>Time | Min.<br>Skill |              | Threshold              |       |
| ,                    |            |  | Req<br>(min) | Lev           | Run<br>Hours | Pieces<br>Fed<br>(000) | Freq. |
|                      |            | 155. Position the Main Disconnect Switch (CB-1)  |              |               |              |                        |       |
|                      |            | to apply 480 VAC 3-phases to the MCC. The MCC power supplies and the internal fans will come on.   |              |               |              |                        |       |
|                      |            | 156. Turn on the UPS and allow the internal self diagnostic routine to complete and the green LED to illuminate.   |              |               |              |                        |       |
|                      |            | 157. Turn On the monitor and the cell controller. Allow to the cell controller to boot up.   |              |               |              |                        |       |
|                      |            | 158. When prompted, press Ctrl-Alt-Delete to access the Windows NT Logon box. At the password default prompt, press ENTER and wait one minute for all processes to start.  |              |               |              |                        |       |
|                      |            | NOTE   |              |               |              |                        |       |
|                      |            | If one minute has not elapsed before the SHORTCUT TO INTERFACE.EXE Icon is activated, a prompt screen will appear advising SHORTCUT TO INTERFACE.EXE is terminated due to ORACLE not available.                    |              |               |              |                        |       |
|                      |            | 159. Double click on the SHORTCUT TO INTERFACE.EXE Icon. The STAR Console Login screen appears.  |              |               |              |                        |       |
|                      |            | NOTE   |              |               |              |                        |       |
|                      |            | The LOGIN name of the user who last successfully logged into the system appears initially in this field. To return to the LOGIN name window, click it with the trackball or press SHIFT-TAB.                       |              |               |              |                        |       |
|                      |            | 160. Enter the USER NAME and PASSWORD.   |              |               |              |                        |       |
|                      |            | 161. The CELL STATUS screen appears after successful LOGIN. Wait for a green CONNECTED to appear at the right of the NETWORK status, indicating the cell controller established communication with the TMS system. |              |               |              |                        |       |
|                      |            | 162. Review the CELL STATUS screen for errors. Review the Fault Description and note any discrepancies.  |              |               |              |                        |       |

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|------------------------|-----|--|-------|------|------|---------------|------|-----|----------------|-------|-----------|--------|------|------|------|
| Maintenance Checklist  | _   | RK<br>DE   |       |      | _    | EQUIP<br>ACRO |      | -   |                | _     | ASS<br>DE | N      | UMBE | R    | TYPE |
|                        | 0   | 3  | М     | S    | Т    |               |      |     |                | С     | Α         | 2      | 0    | 5    | М    |
| Equipment Nomenclature | Equ | ipme   | nt Mo | del  |      |               |      | В   | Bulletin Filer | name  | (         | Occurr | ence |      |      |
| LM MST                 | SI  | hoot   | ing S | Star | Bulk | Stag          | ging |     | mm09           | 077ah |           |        | 3-   | Year | ,    |
|                        |     | Shooting Star Bulk Staging<br>Unit Phase 3A and 3B |       |      |      |               |      |     |                |       |           |        |      |      |      |

|                      |            | Unit Phase 3A and 3B  |              |               |              |                        |       |
|----------------------|------------|---|--------------|---------------|--------------|------------------------|-------|
| Part or<br>Component | Item<br>No | Task Statement and Instruction (Comply with all current safety precautions)   | Est.<br>Time | Min.<br>Skill |              | Threshold              | S     |
| Component            | INU        | (Comply with all current safety precautions)  | Req<br>(min) | Lev           | Run<br>Hours | Pieces<br>Fed<br>(000) | Freq. |
|                      |            | 163. Physically close the safety gates.   |              |               |              |                        |       |
|                      |            | 164. Select Maint Mode option from main screen.   |              |               |              |                        |       |
|                      |            | •   |              |               |              |                        |       |
|                      |            | 165. Access the MAINTENANCE MODE screen.<br>Select the Discrete I/O screen option under<br>the Miscellaneous section.                               |              |               |              |                        |       |
|                      |            | 166. At the Discrete I/O screen, select the Status screen option.   |              |               |              |                        |       |
|                      |            | 167. Click the Disable PLC button in the Safety Controls section.   |              |               |              |                        |       |
|                      |            | 168. Under the Safety Controls section, uncheck the UNLOCK GATE option to ensure the safety gates are locked.                                       |              |               |              |                        |       |
|                      |            | 169. Select the CLOSE button to return to the MAINTENANCE MODE screen.  |              |               |              |                        |       |
|                      |            | WARNING   |              |               |              |                        |       |
|                      |            | Be cautious when working around or on equipment when power has been applied.  |              |               |              |                        |       |
|                      |            | 170. Press the yellow E-Stop RESET pushbutton to reset the E-Stop circuitry.  |              |               |              |                        |       |
|                      |            | NOTE  |              |               |              |                        |       |
|                      |            | The system pneumatics will pressurize, signifying the K1 E-Stop relay and the K19 Safety Mat relay have been reset.                                 |              |               |              |                        |       |
|                      |            | 171. Press the green POWER ON pushbutton to apply power to the KP mainline contactor.   |              |               |              |                        |       |
|                      |            | 172. As power is applied the following happens simultaneously:  |              |               |              |                        |       |
|                      |            | <ul> <li>An audible tone sounds from the Mail<br/>Personnel Alert Station (MPAS) and the<br/>CycleStop Switch Station (CSSS)<br/>Panels.</li> </ul> |              |               |              |                        |       |
|                      |            | <ul> <li>The stack lights flash at a two hertz rate<br/>for about 20 seconds and then the white<br/>stack light illuminates steadily.</li> </ul>    |              |               |              |                        |       |

U.S. Postal Service

Maintenance Technical Support Center

| Maintenance            | Check | list      | CODE        |            | ACRO          |          |               |        | ODE   | INC          | JIVIDEK       | TIPE  |
|------------------------|-------|-----------|-------------|------------|---------------|----------|---------------|--------|-------|--------------|---------------|-------|
|                        |       |           | 0 3         | M S        | Т             |          |               | С      | Α     | 2            | 0 5           | М     |
| Equipment Nomenclature |       |           | Equipmer    |            | ı I           | 1        | Bulletin File |        |       | Occurre      |               | 1     |
| LM MS                  | ST    |           |             |            | Bulk Sta      |          | mm09          | 9077al | h     |              | 3-Yea         | r     |
|                        |       |           | Unit        | Phase      | 3A and 3      | В        |               |        |       |              |               |       |
| Part or                | Item  |           | Task        | Statemen   | t and Instru  | rtion    |               | Est.   | Min.  |              | Threshol      | ds    |
| Component              | No    |           |             |            | ent safety pr |          | ns)           | Time   | Skill |              |               |       |
|                        |       |           |             |            |               |          |               | Req    | Lev   | Run<br>Hours | Pieces<br>Fed | Freq. |
|                        |       |           |             |            |               |          |               | (min)  |       |              | (000)         |       |
|                        |       |           |             |            |               |          |               |        |       |              | <u> </u>      |       |
|                        |       |           |             |            | are initia    |          | and           |        |       |              |               |       |
|                        |       |           | perform a   | an intern  | al self-te    | st.      |               |        |       |              |               |       |
|                        |       | 173. Clic | k on the    | CELL C     | NLINE b       | utton t  | o place       |        |       |              |               |       |
|                        |       |           |             |            |               |          | peration.     |        |       |              |               |       |
|                        |       | The       | e following | g events   | are com       | pleted   | :             |        |       |              |               |       |
|                        |       | a.        | An audib    | ole siana  | al will sou   | nd for   | five          |        |       |              |               |       |
|                        |       |           |             |            |               |          | od of five    |        |       |              |               |       |
|                        |       |           | seconds     |            |               | •        |               |        |       |              |               |       |
|                        |       | b.        | All start-  | up liahts  | s flash at    | a 2 Hz   | z rate for    |        |       |              |               |       |
|                        |       |           |             |            | e start-up    |          |               |        |       |              |               |       |
|                        |       |           | two amb     | er stack   | clights, th   | e amb    | er CSSS       |        |       |              |               |       |
|                        |       |           | •           | d the bo   | ottom ora     | nge M    | PAS           |        |       |              |               |       |
|                        |       |           | lamps.      |            |               |          |               |        |       |              |               |       |
|                        |       | C.        | At the to   | p of the   | CELL ST       | ATUS     | screen        |        |       |              |               |       |
|                        |       |           | -           |            | isplayed      |          |               |        |       |              |               |       |
|                        |       |           |             |            | ation. As     |          |               |        |       |              |               |       |
|                        |       |           |             |            | alized, the   |          |               |        |       |              |               |       |
|                        |       |           |             |            | CONCIL        | IA I IOI | N of the      |        |       |              |               |       |
|                        |       |           | STAR is     |            |               |          |               |        |       |              |               |       |
|                        |       | d.        |             |            | n of reco     |          |               |        |       |              |               |       |
|                        |       |           | wnite sta   | ack light  | s illumina    | te stea  | adily.        |        |       |              |               |       |
|                        |       | e.        |             |            | eld at the    | top of   | the           |        |       |              |               |       |
|                        |       |           | screen d    | lisplays   | ONLINE.       |          |               |        |       |              |               |       |
|                        |       |           |             | NO         | TE            |          |               |        |       |              |               |       |
|                        |       | The       | white sta   | ck liaht   | flashes       | if Aith  | er the        |        |       |              |               |       |
|                        |       |           |             |            | Servo Driv    |          |               |        |       |              |               |       |
|                        |       |           |             |            | tor fault     |          |               |        |       |              |               |       |
|                        |       |           | tenance l   |            |               |          |               |        |       |              |               |       |
|                        |       | 174. Wh   | en ONLI     | NE is co   | mpleted t     | he flas  | shina         |        |       |              |               |       |
|                        |       |           |             |            | , and the     |          |               |        |       |              |               |       |
|                        |       | whi       | te stack l  | ights illu | ıminate s     |          |               |        |       |              |               |       |
|                        |       | ON        | LINE ope    | ration b   | egins.        |          |               |        |       |              |               |       |
|                        |       |           |             |            |               |          |               |        |       |              |               |       |
|                        |       |           |             |            |               |          |               |        |       |              |               |       |
|                        |       |           |             |            |               |          |               |        |       |              |               |       |
|                        |       |           |             |            |               |          |               |        |       |              |               |       |
|                        |       |           |             |            |               |          |               |        |       |              |               |       |
|                        |       |           |             |            |               |          |               |        |       |              |               |       |
|                        |       |           |             |            |               |          |               |        |       |              |               |       |

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|--------------------------------|--------------|---|---|---|--------------|-------------|-------|-------|---------------|-----------|--------|------|------|------|
| Maintenance Checklist          | WORK<br>CODE |   |   |   | QUIP<br>ACRC | MENT<br>NYM |       |       |               | ASS<br>DE | N      | UMBI | ΞR   | TYPE |
|                                | 0 3          | М   | S | Т |              |             |       |       | С             | Α         | 2      | 0    | 5    | М    |
| Equipment Nomenclature  LM MST | Shoot        | Equipment Model Shooting Star Bulk Staging Unit Phase 3A and 3B |   |   |              |             |       |       | name<br>077ah |           | Occurr |      | Year |      |

| Part or<br>Component | Item<br>No | Task Statement and Instruction (Comply with all current safety precautions)   | Est.<br>Time<br>Req<br>(min) | Min.<br>Skill<br>Lev | Thresholds   |                        |       |
|----------------------|------------|---|------------------------------|----------------------|--------------|------------------------|-------|
|                      |            |   |                              |                      | Run<br>Hours | Pieces<br>Fed<br>(000) | Freq. |
| CLEAN UP             |            | Clean Up.  Ensure all tools, lubricants, rags, etc., are removed from the work area. Notify supervisor of any deficiencies. | 2                            | ALL                  |              |                        |       |