CHAPTER 4
TECHNICAL SUPPLY OFFICER

REVIEW YOUR RESPONSIBILITIES AND CONCERNS

In general, your responsibilities and concerns will be similar to those of a supply platoon leader. You need to review the responsibilities of the supply platoon leader, especially in the operation of Class II, IV, and VII sections. However, your concerns are multiplied due to the number of repair parts which your SSA must maintain. Almost 92 percent of the total Army inventory consists of repair parts lines. Estimates are that each soldier may consume as many as 4.83 pounds of repair parts each day during theater operations in an intense European conflict. Even this figure may be too low. Older items in the Army’s inventory will still need repairs, and repair parts must be stocked for newer and more complex items. You will be concerned mainly that your Class IX ASL contains enough lines and has enough depth to support the maintenance of critical equipment in supported units during wartime. You also will be concerned with filling NMCS and high-priority requests for parts to fix critical weapons systems and end items. Your SSA must be able to transport these essential repair parts in organic repair parts vans. You may be tasked to supervise RM and QSS items.

★REVIEW MANDATORY PARTS LISTS AND DETERMINE IMPACT ON ASL

As the technical supply officer, you should review the MPLs of supported units to determine possible impact on your ASL. MPLs identify mandatory stockage quantities of combat-essential repair parts. The ASL is required to umbrella customer MPL stocks. As a result of the continuing effort to standardize a combat ASL and reduce the number of decisions needed to determine which ASL lines to stock, MPLs have been consolidated into three pamphlets. DA Pamphlet 710-2-3 is for combat arms, DA Pamphlet 710-2-4 is for combat support units, and DA Pamphlet 710-2-6 is for aviation units. The consolidated MPLs are to be updated semiannually.

NOTE: Proposals have been made to eliminate combat prescribed load lists and mandatory parts lists and to abolish retention authority. If this becomes policy, it will be explained in AR 710-2.

USE LIF TO DETERMINE SUPPLY STATUS

The LIF is a computer data bank of supply requisitions and transportation documents maintained by the US AMC LCA. It covers requisitions for all items except subsistence, bulk petroleum, and ammunition. AR 725-50, Chapter 6, describes the file, management data provided, and inquiry capabilities. You can use data from this file to take the following actions:

- Check on the latest status of a requisition. You should first request status through your supporting supply activities. You may call in urgent inquiries on DSN 586-5823 or 5824 or send a priority message. Refer to DA Pamphlet 700-30 for information on using the LIF.
- Divert, split, reconsign, or expedite items or shipments on short notice. Ensure you submit standard transactions to effect these actions as well, since all activities in your chain of support must also be aware of these actions.
• Reconstruct requisitions for shipments lost in transit or damaged while en route overseas.
• Trace a requisition from the date it was submitted to the date the item was delivered.
• Analyze requisition demand history. Send requests for remote terminal access to the LIF to:
  Commander
  LCA
  ATTN: AMXLC-M
  Building 650
  Presidio of San Francisco, CA 94129-6900

★ DETERMINE SIZE OF CLASS IX ASL

Maintaining large stocks of repair parts impedes mobility and increases vulnerability. DSU stockage must umbrella the MPLs of supported units.

★ INCORPORATE ASL CHANGE LIST RECOMMENDATIONS

Automated systems produce an ASL change list. The list identifies automatic stockage level increases and decreases. It also gives recommended stockage level or stockage list code changes and recommended ASL additions or deletions. If an item qualifies for retention on the ASL, the automated system recomputes the RO and ROP and prints the recommended quantities. For more information, see TM 38-L32-13. (NOTE: This change deletes Figures 4-1, 4-2, and 4-3.)

★ ANALYZE IMPACT OF PLL CHANGES ON ASL SIZE AND DEPTH

The ULLS maintains demand data through its demand analysis process. Each recommended change to a PLL may cause a change in that ASL. You should review the ULLS listing on an as-required basis to determine the impact of any PLL changes. After completion of your review, analyze the impact on the size or depth of your Class IX ASL. You may need to add or delete line items. You also may need to adjust stockage levels to correspond to increases or decreases in the PLL stockage levels of supported units.

NOTE: The update of the unit PLL is a semiannual requirement within the USAR and ARNG.

★ MONITOR DEMAND SATISFACTION AND OTHER SUPPLY INDICATORS

Supply performance reports are used to measure support of customer units. The reports alert managers to problem areas. These areas include warehouse denials, overuse of high PDs, number of ASL lines at or below safety level or at zero balance with due-outs, and number of lines frozen due to inventory. The reports will provide balance on statistical data for common repair parts, aircraft repair parts, and missile repair parts. The forms will vary depending on the STAMIS used.

VERIFY CRITICAL EQUIPMENT DEADLINED DUE TO ZERO BALANCES

Major weapons systems and critical end items can be deadlined due to a zero balance. A zero balance may result from inadequate depth of ASL, RM, or QSS items or inadequate safety levels. It may result from a lack of inventory accuracy, delinquent deliveries on contracts, or problems with cancellations. Your tasks are listed below.
• Verify that the correct part has been ordered. If not, have the unit reorder.
• Verify that the NMCS request had been received, processed, and (if necessary) transmitted to the MMC.
• Have soldiers check the AMDF for an interchangeable or substitute item when using manual operations. SARSS automation considers relationships with interchangeable and substitute items.
• Coordinate with your MMC on possible lateral issue.
• Consider cannibalization to obtain the part.

MONITOR STOCK CONTROL

During the initial stages of deployment of a DSU, stock control will be decentralized. Although the MMC often deploys a small element as early as possible, there may be only limited capability to manage stocks. Fewer than 1,000 lines may be managed. In the future, the DSUs that are authorized a dedicated automated system will be responsible for routine stock control and stock record accounting. The MMC will perform supply and stock control on an exception basis. Therefore, as the technical supply officer, you
must be able to check on and edit requests before submitting them to the DS4.

**SET UP CARD FILE FOR A PART OR REFERENCE NUMBER**

Part, model, and type numbers are listed in alphanumeric order on the MCRL. This list, on microfiche, is updated semiannually. It lists all unclassified manufacturers' part and reference numbers recorded in the Federal Catalog System and the NSN of each. You must maintain a DD Form 1348-6 (DOD Single Line Item Requisition System Document (Manual Long-Form)) when the manufacturers’ part numbers have more than 15 digits. Automated systems cannot accept such numbers. Also, have soldiers set up a card file of non-NSN items requested by supported units. This will reduce time needed to search the MCRL.

**USE OF STANAG AND QSTAG AGREEMENTS**

The United States Federal Supply Classification System (STANAG 3150 and QSTAG 680) was adopted as the NATO Supply Classification System. The NATO Supply Classification System and the NATO Item Identification System (STANAG 3151 and QSTAG 642) form the basis for the NATO Codification of Equipment System. Procedures for the NATO Codification of Equipment System are published in the NATO Manual for Codification. The United States Federal System of Item Identification is explained in DOD 4130.2-M.

**MONITOR ADP SUPPORT**

Sustained Class IX supply depends on ADPE support. This support includes a solid backup and a Continuity of Operations Plan. The COOP is a formal agreement between two facilities to use computer hardware. This plan ensures support provided to an organization is consistent with mission requirements while under emergency conditions. Keep in mind that backups must be in compatible formats. For more details on a COOP, see AR 380-19. Your tasks are listed below.

- Incorporate backup automated procedures in your SOP. Refer to TM 38-L32-13 for DS4 procedures to follow during short-term (less than 72 hours) and long-term outages. During deployment and redeployment operations, the best backup is other ADPE.
- Identify all outstanding requests and those requests which must be filled.
- Direct your soldiers to process NMCS requests manually on a postpost basis.
- Have soldiers hold low-priority requests until the end of the expected short-term outage.
- Determine availability, capability, and compatibility of host-nation ADPE assets.
- Transfer operations to alternate or replacement ADPE in floats during long-term outages.

**STANDARDIZE RECEIPT, STORAGE, AND ISSUE PROCEDURES**

Figure 4-4, page 4-4 shows a standard method for issuing items. Have your section supervisors prepare pages similar in format to the page shown. Such pages can then be used to train new personnel in standard, efficient procedures. You may use performance measures from soldier's manuals and trainer's guides. This would serve not only to train storage personnel in standard methods, but it would help them to pass their SDT, also. Emphasize that they should make as few moves as possible. Each move increases time and costs. Additional handling also increases the chance for damage.

**MONITOR STOCK LOCATIONS AND STORAGE PROCEDURES**

Incorrect storage locations can cause MRDs and prolong critical equipment deadlines. As the technical supply officer, you should periodically spot-check the locations of 5 to 10 items. Figure 4-5, page 4-5 shows how the five-character stock locator code can be used to locate an item in a repair parts van. Most repair parts will be stored in bins and on shelves in a warehouse or in bins which are truck- or van-mounted. See Figure 4-6, page 4-6 for some basic guidelines for bin and shelf storage. Items stored in bins must be truck- or van-mounted according to policies in AR 710-2. For more information on stock locator codes and bin storage, see DOD 4145. 19-R-1 and Chapter 5 of this manual.
ISSUE METHOD DESCRIPTION

Job ........................................... Select Bin Material

Location .................................... Warehouse Bin Area

Condition ................................. Stock Picker's Cart and
                                       Conveyor Line

Method ................................. Hand Pick from Bin Opening

Personnel Required:

1 - Stock Picker

Equipment Required:

- Stock Picker's Cart with Ladder (Figure 3)
- Small Bags and / or Tote Pans

Procedures:

1. Documents:
   a. Stock picker proceeds to document pick up
      point and obtains sorted issue documents.
      Issue documents have been sorted into
      proper picking sequence.
   b. If any documents are found to be out of
      sequence, sort and place into proper picking
      sequence.

2. Prepare for issue operation:
   a. Receive instructions (as required).
   b. Travel to designated locations and obtains
      stock pickers cart, sufficient bags and/or tote
      pans as required.
   c. Push stock pickers cart to location of first
      item to be selected.

3. Perform selection operation:
   a. Check and select the quantity ordered on the
      MRO's from the designated location.
   b. Annotate the issue document.
   c. Attach or place the annotated document with
      the selected material.
   d. Move to next locations with cart and repeat
      steps 3a-3c.
   e. Place material onto conveyor system.

4. After selection operation:
   a. Travel to document pick up point for next
      assignment.
   b. Return stock pickers cart, unused bags tote
      pans to designated area (once per day).
   c. Clean up work area (once per day).

Special Instructions:

1. Issues can be made from drawers, cartons, or
   shelves located in the bin storage area. Normally
   the bins are 36" x 18" x 12" or less in size.
2. Small items should be placed in bags (Jiffy) with
   the document attached wherever possible at the
   time of pulling stock item (not at packer's work
   station).
3. Guidance is furnished under [Chapter 2] Joint
   Storage and Material Handling Manual on proper
   utilization of bin spaces.

Figure 4-4. Issue method page extracted from TM 743-200-3
Figure 4-5. Five-character stock locator code applied to repair parts van
Place light, slow-moving items on the highest shelves.
Store small items in the center at chest-high position to aid in picking.
Place heavy, large items and slow-moving items on the lowest shelves.

*Figure 4-6. Sample bin and shelf box arrangement*
**CHANGE STORAGE RECORDS AND STORAGE AIDS TO AGREE WITH MONTHLY CROSS-REFERENCE LIST**

Each month, as a result of the catalog update process, the MMC will send your DSU a cross-reference list for each supported unit. The list shows changes of stock number, units of issue, or both identified by the catalog update process. You must make sure that storage personnel use the information on this list to update bin tags, placards, and parts identification. Failure to make these changes could result in incorrect quantity fills, delays in supply fills, and MRDs. MRDs require a special inventory. (NOTE: This change deletes Figure 4-7.)

**MAINTAIN OR MANAGE RMA**

Using units turn in unserviceable items and request serviceable items from their supporting supply activity. There is no longer an exchange of items. Everything must be formally turned in and requested, to include those items previously exchanged. AR 710-2, paragraph 3-18; DA Pamphlet 710-2-2, Chapter 11; and TM 38-L32-12 give details on how to manage an RMA. Stockage selection is based on demand history, maintenance repair dates, and maintenance capabilities. Table 4-1 lists criteria used to select the DS repair items which will be issued from your RMA. Your tasks are listed below.

- Ensure that unserviceable are job-ordered within three workdays of receipt. You must send DA Form 5504 (Maintenance Request) with UND C with the item to maintenance. DA Form 5504 replaces DA Form 2407 for those units supported by an automated system. Follow the instructions of your automated system, as they are printed in facsimile maintenance requests, materiel release orders, and location tickets.
- Check that there are no excess SIMS-X items or ARIs and no excess stock of items with an RC of D, F, H, or L each day activity occurs on the line. All other items will be reviewed for excess on a monthly basis. In CONUS, there is no retention limit above the RO. OCONUS may retain twice the RO.
- Ensure that all excess stocks above the RO and OST are turned in within 10 days after determination that they are excess.
- Review stockage level computations.

**STORAGE RECORDS**

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- Review stockage level computations.

**STORE BATTERIES**

Batteries are perishable items. Their storage life will depend on storage practices and the climate. Proper storage can extend battery life, ensuring that the battery is charged and ready for issue when required. Table 4-2 page 4-8 lists storage requirements for vehicle and dry cell batteries. For more information, see DOD 4145.19-R-1, SB 11-30, and TM 11-415. Your tasks are listed below.

- Consider the lead time required to obtain replacement batteries.
- Monitor storage. Dry batteries should be stored at 35 degrees Fahrenheit or less. CTA 50-909 authorizes refrigerators for storage at unit and activity level.
  - Request refrigerator transportation.
  - Monitor shelf life expiration dates.
  - Require that lot samples be inspected and tested when the issue date exceeds the expiration date.
- Ensure unsuitable dry batteries are disposed of. Continuing corrosion can create health and safety hazards. Check with the defense reutilization and marketing office for disposal instructions.

**MONITOR TIRE STORAGE**

You must rotate stock and issue oldest stock first. This will prevent deterioration of tires and inner tubes. Ensure that soldiers follow proper storage precautions and stock control measures. Your tasks are listed below.

- Store tires in a vertical position when possible. Require that tires stored horizontally be reversed each six months so that the tire that was on the bottom is on the top. Ensure stacking limits shown in DOD 4145.19-R-1, Chapter 5, are not exceeded.
- Ensure tires are stored away from direct sunlight when possible.
- Make sure that no unmounted tires and tubes are stored in the open for more than 90 days.

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**Table 4-1. DS repair items package criteria**

- Class II, IV, or IX reparables.
- Automated to repair at DS level.
- Recoverability code must be D, F, H, or L.
MANAGE A QSS

Any divisional main or nondivisional DSC for repair parts supply may be authorized a QSS. DS4 procedures are in TMs 38-L32-12 and 38-L32-13. Basic operating procedures are covered in DA Pamphlet 710-2-2, Chapter 12. Appendix C of this FM provides a sample internal SOP for a QSS. Your tasks are listed below.

- Review the quarterly ASL change list to identify those items for which QSS additions or deletions have been approved. Figure 4-8 lists QSS stockage criteria.
- Screen carefully any candidates for deletions which have a UI other than each. The prorated cost of items in the unit pack may be less than the amount specified in DA Pamphlet 710-2-2.
- Establish an effective date when ASL items are to be converted to QSS or QSS items are to be returned to detailed accounting. Do not stock QSS items in other sections.
- Submit change cards for automated processing.
- Ensure storage sections have completed rewarehousing using storage item data change cards.
- Check that the ROP quantity has been physically segregated (placed in a plastic bag, paper bag, or small box) and that the QSS reorder point card has been attached.
- Monitor the number of QSS lines at zero balance. Your objective is to have no more than 10 percent of all QSS lines at zero balance.
- Submit inventory count cards showing new locations to the MMC or SCS for processing.
- Distribute quarterly QSS listings to supported units. (These listings will not be processed during wartime.)
- Forward QSS reorder point cards to the MMC or SCS when the ROP has been penetrated.

NOTE: The DS4 will recompute the RO and ROP.

Table 4-2. Battery storage requirements

<table>
<thead>
<tr>
<th>GENERAL REQUIREMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Store batteries on pallets, in bins, or on racks. Never pile batteries on top of one another.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CAUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Batteries removed from containers must never come into contact with steel shelving. This can cause short circuits or discharge.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>VEHICLE BATTERIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Store batteries in a cool location (between 60° and 80°F).</td>
</tr>
<tr>
<td>• Maintain a continuous trickle charge or perform a periodic recharge once each month on charged and wet batteries.</td>
</tr>
<tr>
<td>• Add water and check specific gravity every week on charged and wet batteries.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DRY CELL BATTERIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Store in a refrigerated well-ventilated storage area (30° to 35°F is recommended).</td>
</tr>
<tr>
<td>• Never remove batteries from sealing bags until they have been allowed to warm up to surrounding temperatures.</td>
</tr>
</tbody>
</table>
1. Stockage list code (SLC) must be Q, except for EC G items; see 9 below.

2. Unit price must be $10 or less except where the unit of issue contains more than one item. However, the cost of an item (in unit of measurement quantity) must not exceed $10.

3. CIIC code must be U.

4. Accounting requirements code (ARC) must be X.

5. Recoverability code (RC) must be Z.

6. MATCAT code position 2 must be 2.

7. Fund code (FC) must be either 1 or blank.

8. Reportable item control code (RICC) must be 0.

9. Essentiality code (EC) must be J, except that where a QSS is established, EC G items that receive nine demands in the control period meet all other QSS criteria will be transferred to QSS accounting.

10. Supply category of materiel code (SCMC) position 1 is 9.

Notes:

1. All critical except 1 are found in the ARMS Monthly AMDF.

2. Criterion 1 is found in the stock record account.

Figure 4-8. QSS stockage criteria extracted from DA Pamphlet 710-2-2