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PROJECT NUMBER 014

EXPEDITED RETURN OF MAJOR ITEM EXCESS

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FINAL REPORT
SEPTEMBER 1981

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LOGISTICS STUDIES OFFICE
PROJECT NUMBER 014

FINAL REPORT
SEPTEMBER 1981

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EXECUTIVE SUMMARY

1. Authority for the Study. The Director for Plans, Doctrine, and Systems (DRCPS-S), US Army Materiel Development and Readiness Command (DARCOM), is the sponsor of this study. Tasking was by letter, DRCPS-S, HQ DARCOM, 6 February 1979, subject: Request for Logistics Studies.
2. Problem Statement. The Materiel Returns Program requires that Reports of Excess for some major items be accompanied by technical inspection reports. None of the four inspection forms has an automated capability so that each report and corresponding Report of Excess must be mailed causing increased processing time.
3. Objective. The objective of this study is to expedite the reporting and processing of excess and unserviceable materiel for those major items requiring technical inspection documentation.
4. Approach.
 - a. The four inspection forms used for exception reporting were reviewed to determine the necessity for separate inspection forms for different Federal Supply Classes and to determine whether automation is desirable and feasible.
 - b. Also investigated was:
 - (1) The possibility of combining two or more forms.
 - (2) Whether a change in policy regarding reporting excess with separate inspection reports is required.
 - c. Procedures for processing excess reports were documented and analyzed at the US Army Tank Automotive Command (TACOM) and at the US Army Troop Support

and Aviation Readiness Command (TSARCOM). These analyses were key to the development of the methods/procedures included in this report.

5. Methodology.

a. A bibliographic search was performed to determine if completed, ongoing, or planned efforts in this and related areas were documented. Selected research reports and regulatory documents were reviewed for background material and relevant concepts or procedures.

b. Personal and telephonic interviews were conducted with TACOM and TSARCOM personnel involved in processing major item excess reports.

c. Materiel Returns Program data on 30 major items managed by TACOM was obtained from the Logistics Control Activity (LCA) and analyzed.

6. Findings and Conclusions.

a. Findings.

(1) The Logistics Control Activity does not receive all major item excess report transactions because many are sent to the DARCOM Materiel Readiness Command (MRC) by mail and not by AUTODIN which is LCA's principal method of data collection.

(2) According to paragraph 7-12a of AR 725-50, "Disposition instructions will be furnished on an FTR to the reporting installation within 30 calendar days from date of receipt of the FTE."

(3) The 60-day delay status (FTD) TACOM assigns to each major item excess report does not contribute to on-time processing and is contrary to the 30-day processing goal established by DA in AR 725-50.

(4) The longer an asset awaits disposition instructions the greater the likelihood of cannibalization for repair parts, degradation of physical condition due to weather, and the reduced value placed on the asset by the reporting activity which contributes to the loss of asset visibility and control.

(5) Limiting the number of major items reported on each FTE to one will avoid possible confusion when disposition instructions are issued.

(6) TSARCOM currently processes major item requisitions using a centralized concept similar to that used for major item excess reports.

b. Conclusions.

(1) Implementation of a B-series card to automate the flow of technical inspection information will permit faster receipt of the Report of Excess at the wholesale level.

(2) The inspection information necessary for the major item manager to process excess reports can be coded on an 80-column card and sent over the AUTODIN with the Report of Excess more quickly than by mail.

(3) On the basis of 30 NSNs alone, benefits from the B-series card are estimated to be \$95,575.50.

(4) TACOM can provide disposition instructions at least 114.7 days faster per transaction and 87.8 days per asset by applying TSARCOM procedures.

(5) Estimated avoidable non-use cost in administrative downtime of the 1,931 assets analyzed in this study was \$1,027,967.60 (96.8 days per asset in the Materiel Returns Program pipeline by using current TACOM procedures).

(6) Technical inspection of major items should continue as the information is vital for determining the proper condition of materiel.

7. Recommendations.

a. Recommend, subject to the findings of a cost/benefit analysis, a B-series Document Identifier Code card be developed for transmitting technical inspection data for the Materiel Returns Program.

b. Recommend TACOM use TSARCOM developed excess report procedures to process major item excess reports.

CHAPTER I
INTRODUCTION

1. Background and Problem.

a. When equipment becomes unserviceable, or excess to the requirements of Army units, it is reported to the wholesale manager for disposition instructions. Unserviceable equipment must be repaired or replaced to maintain the readiness of the unit involved. Excess serviceable equipment should be returned to the inventory to satisfy the materiel needs of the service. Excessive time spent returning needed materiel to issuable status causes delays in filling requirements.

b. The Army Materiel Returns Program (MRP) is prescribed in Chapter 7 of Army Regulation (AR) 725-50 (Requisitioning, Receipt, and Issue System) and procedures and exceptions for reporting, utilizing, screening, disposition, and redistribution of excess Department of the Army (DA) personal property are described therein. Paragraph 7-13a of AR 725-50 states that in order "To obtain maximum utilization of reported excesses, minimize holding time and avoid changes to status and condition of reported excesses, replies to Reports of Excess (Document Identifier Code (DIC) FTE) will be processed within 30 calendar days from the date the FTE was received."

c. Most Reports of Excess are sent over Automatic Digital Network (AUTODIN) to the wholesale manager. However, certain equipment requires exception data in the form of a technical inspection report to accompany the FTE. None of the four inspection reports used for this purpose are now automated. To insure that separation of the FTE and required inspection documentation does not occur, both the FTE and the inspection report are now mailed to the wholesale manager by the reporting activity.

d. Some major items managed by the US Army Tank Automotive Command (TACOM) when reported as excess (or unserviceable) require a technical inspection (TI) report to be mailed with the FTE. This results in additional manual processing of excess reports when they arrive at TACOM since care must be taken not to separate the FTE from the inspection report.

e. TACOM performed a study to determine if improvements are possible in their on-time processing of major item Reports of Excess. Their study, entitled "Value Engineering Study to Improve Disposition of Major Item Excess" (VES) cites two TACOM problems:

- (1) Excessive delays in providing disposition instructions.
- (2) Lack of management visibility.

f. As a result of the TACOM VES, the Directorate of Plans, Doctrine and Systems of the US Army Materiel Development and Readiness Command (DARCOM) tasked the Logistics Studies Office (LSO) to analyze the problem and recommend possible remedies.

2. Objective.

The objective of this study is to expedite the reporting of excess materiel and disposition instructions for those items requiring special inspection documentation.

3. Approach.

a. A bibliographic search was performed to determine if completed, ongoing, or planned efforts in this and related areas were documented. Selected research reports and regulatory documents were reviewed for background material and relevant concepts or procedures. The review of the TACOM "Value Engineering Study to Improve Disposition of Major Item Excess" revealed the need for a new analysis of the problem. Face-to-face and telephonic interviews with persons involved in or affected by the major item excess process were conducted. A

data call (see Appendix D) was made to the DARCOM Logistics Control Activity (LCA) to determine the magnitude of the problem and to provide data needed to estimate the benefits to be accrued from the alternate method proposed.

b. The four inspection forms used for exception reporting were reviewed to determine the necessity for separate inspection forms for different Federal Supply Classes and to determine whether automation of these forms is desirable and feasible. The four forms are (see Appendix C for sample copies):

- DA Form 461-5, Vehicle Classification Inspection
- DA Form 2404, Equipment Inspection and Maintenance Worksheet
- DA Form 2407, Maintenance Request
- DA Form 3590, Repair Eligibility Data Sheet

c. Also investigated was:

- (1) The possibility of combining two or more forms.
- (2) Whether a change in policy regarding reporting excess with separate inspection reports is required.

d. Procedures for processing excess reports were documented and analyzed at TACOM and TSARCOM. These analyses were key to the development of the methods/procedures proposed in this report.

CHAPTER II

IMPACT ON AVAILABILITY OF MAJOR ITEMS

1. Each unit in the Army is authorized limited quantities of specific equipment to perform its assigned mission. The Table of Organization and Equipment (TOE) is developed for each different type of Army field unit. It states the mission, personnel, and minimum essential equipment considered necessary for successful mission completion. The Modification TOE (MTOE) is the document which states the unique needs of each unit and serves as the authority for issue of major items. Each item of equipment has designated required and authorized quantities. Required quantities represent the amount of equipment needed in a wartime environment. The quantity authorized represents the number of items that should be on hand and/or on order at the present time. Whenever a unit's on hand plus on order quantity exceeds its authorized quantity, the unit is in an excess position for that item. If a unit has materiel in unserviceable condition (assuming no excess on hand), the situation must be corrected through repair or replacement, or unit readiness suffers.

2. The purpose of the Materiel Returns Program is to provide information on unserviceable or excess materiel to the wholesale manager. This is accomplished with the Report of Excess. The wholesale manager furnished disposition instructions for materiel in issuable condition but excess to local needs may include redistribution, storage pending further instructions, disposal, or return to the supply system to meet the approved needs of other governments. Disposition instructions for materiel in less than issuable condition will

usually direct return to storage for anticipated maintenance programs, cannibalization for parts, components or assemblies, or disposal.

3. Due to procurement policy and budgetary guidance, major items are usually not purchased in quantities sufficient to fill the requirements for MTOE's, maintenance float, war reserves, and additive operational projects. Also, no assets are procured to fill the supply pipeline, i.e., the quantity of equipment needed to offset the materiel which is in the transportation system.

4. Because major items are not purchased in quantities adequate to fill either requirements or the transportation pipeline, the supply system requires that the inventory manager distribute materiel (or conversely, shortages) based on priorities assigned by headquarters. Excessive delays in reporting or returning materiel serves to create additional shortages in maintenance float, war reserves, additive operational projects, and in units with low priority requirements.

5. Some storage costs and materiel deterioration can be attributed to delays in reporting or returning materiel. Unprogrammed expenses for care of supplies in storage caused by avoidable delays in processing Reports of Excess unnecessarily consume the resources of the reporting unit. Assets may deteriorate because care of excess (or unserviceable) materiel cannot enjoy very high priority in units with the limited resources (personnel and funds) prevalent in today's Army.

6. The Army must decide between the status quo, which implies acceptance of a reduced readiness status, or corrective action to either improve the major item excess reporting system or to procure the additional assets required to maintain desired unit readiness with the present management system. Procurement money is not always available to completely fill the Authorized Acquisition Objective (AAO); therefore, corrective action is prescribed.

7. The following quotations from the specified Army regulations express complementary thoughts on the topic of readiness as it relates to materiel.

a. According to AR 11-8, Principles and Policies of the Army Logistics System, one of the fundamental principles of logistics is intelligence. This regulation states:

Commanders must have accurate and timely logistic information in order to provide effective logistic support.

. . . High speed communications and mechanized processing not only provide the information necessary for centralized control and management, but reduce the reporting and record keeping requirements of subordinate echelors.

b. AR 750-1 (para 3-3a), Army Materiel Maintenance Concepts and Policies, states:

The combat readiness of the Army is dependent upon the quality and timeliness of maintenance operations performed on Army materiel.

c. Taken together, the two preceding quotations stress that accurate and timely knowledge of maintenance requirements and the availability of excess materiel for redistribution plays a direct role in the ability of the Army to successfully complete its assigned missions.

CHAPTER III
MATERIEL RETURNS PROGRAM

1. Because the technical inspection forms have not been automated, it is necessary to mail them with the Report of Excess to the DARCOM Materiel Readiness Command (MRC) responsible for managing the particular asset on the wholesale level. This not only causes delay in processing excess reports but also frustrates other procedures discussed below.

a. The Defense Automatic Addressing System (DAAS), designed to receive, process and automatically route logistics transactions to the proper address, is sidestepped as a result of the mailing process. This means that excess reports and inspection documents are delayed further if mailed to an incorrect Materiel Readiness Command which must reroute the report to the correct address.

b. The DARCOM Logistics Control Activity was established to record an image of each materiel transaction sent over the Automatic Digital Network (AUTODIN) and to provide summary level analysis of the transactions. LCA records provide an audit trail which is facilitated by the assignment of a document number that is perpetuated on all ensuing "excess" documentation. When the AUTODIN is not used, LCA cannot record the image or build an auditable record unless a copy is received through other means.

2. Two forms (DA Forms 461-5 and 3590) appear to be used most frequently for passing exception data for excess (and unserviceable) materiel to DARCOM MRCs. On the basis of responses to a data call (Appendix E), visits to two MRCs and telephonic interviews, the following uses and users were identified:

a. DA Form 461-5 is used for excess (and unserviceable) materiel inspection purposes for TACOM, the US Army Troop Support and Aviation Materiel Readiness

Command (TSARCOM) and the US Army Armament Materiel Readiness Command (ARRCOM) managed vehicles. TSARCOM and ARRCOM vehicles have mounted equipment and are managed as part of the end item.

b. DA Form 2404 usually remains with the reporting activity and provides backup data for either DA Forms 3590 or 461-5. It may, however, be sent with the Report of Excess for TACOM combat carriers and tanks.

c. DA Form 2407 is used to request and/or report maintenance actions and unserviceable weapon components for materiel managed by ARRCOM and the US Army Missile Command (MICOM). This form is currently the subject of a contract study sponsored by the US Army Armament Research and Development Command to review the ARRCOM Field Data Feedback System to assess its efficiency, usefulness, and cost effectiveness. The study is scheduled for completion in November 1981.

d. DA Form 3590 is used to pass inspection information for excess and unserviceable mounted and unmounted equipment managed by ARRCOM, TSARCOM, and TACOM.

3. It is not the intent of this study to delete inspection of materiel from the Materiel Returns Program. The wholesale manager needs inspection information to provide prompt, intelligent and economical disposition instructions based on the reported condition of the materiel. The information contained on the forms is valuable to the wholesale manager; the form, in and of itself, is not important.

4. Visits to two DARCOM MRCs which use the inspection forms most frequently (TACOM and TSARCOM) and telephone calls to the other MRCs revealed the information required by the item manager to make the disposition decision. Using this data, a suggested format for an automated inspection card was developed.

a. The recommended format of the inspection card to be used to transfer inspection data is:

| <u>Data Element</u> | <u>Length</u> | <u>Field</u> |
|--|---------------|--------------|
| Document Identifier Code | 3 | 1-3 |
| Routing Identifier Code | 3 | 4-6 |
| Estimated Labor Hours to Repair | 4 | 7-10 |
| Estimated Cost of Parts and Materiel | 6 | 11-16 |
| Total Estimated Cost to Repair | 6 | 17-22 |
| Vehicle Registration Number | 6 | 23-28 |
| Corrosion | 1 | 29 |
| Document Number | 14 | 30-43 |
| Serial Number | 15 | 44-58 |
| Age | 1 | 59 |
| Mileage | 1 | 60 |
| Hours of Operation | 1 | 61 |
| Frame - Condition | 1 | 62 |
| Engine - Condition | 1 | 63 |
| Transmission - Condition | 1 | 64 |
| Transfer - Condition | 1 | 65 |
| Drive Shaft and U-Joint - Condition | 1 | 66 |
| Routing Identifier Code - From | 3 | 67-69 |
| Axles - Condition | 1 | 70 |
| Body - Condition | 1 | 71 |
| Cable - Condition | 1 | 72 |
| Winch - Condition | 1 | 73 |
| Differential - Condition | 1 | 74 |
| Hydraulic System - Condition | 1 | 75 |
| Radio Wire Harness | 1 | 76 |
| Blank | 2 | 77-78 |
| Reject Code from MRC to Reporting Activity | 2 | 79-80 |

b. Appendix F contains a complete description and a suggested coding structure for the inspection card format.

c. Military Standard Requisition and Issue Procedures (MILSTRIP) is a standard system used by the different services and any change to it must be incorporated into the operating programs and procedures of all users. Because each MILSTRIP user may require the ability to deal with unique situations, each service is assigned specific document identifier codes as an accommodation. The Army has been assigned B-series DICs for intra-Army use and is able to specify to the DAAS the editing and validation routines to be used whenever a B-series document passes over the AUTODIN. For these reasons, a B-series DIC is best suited for the purpose of the inspection card.

d. Use of a B-series DIC card to transfer major item inspection data from the retail user to the wholesale manager may require that changes to the Standard Army Intermediate Level System (SAILS) be made to accomplish the creation and transmittal of this DIC. This coded B-series card should also be included in those records established by both retail and wholesale activities for the control of the Report of Excess as necessary.

e. To reduce the chance of confusion, simplify the design of the B-series card, and maintain the integrity of this system to correctly match an inspection card to the Report of Excess, only one asset should be reported on each FTE when the B-series inspection card is required. This assures both retail and wholesale activities that each inspection card is tied directly to a particular asset by serial number and/or vehicle registration number. To report multiple assets under this procedure will promote the likelihood of error, particularly when the wholesale manager provides disposition instructions.

5. In order to avoid separation of an FTE and the accompanying B-series inspection card, a method to tie these cards to one another is necessary. Since the document number is unique and provides an audit trail, and the B-series card allows the Army to specify the edit routine of the DAAS, it is logical to reproduce the document number of the FTE on the corresponding inspection (B-series) card.

a. The benefit of relating the FTE and inspection cards by document number is that each transaction is assigned the same unique document number, eliminating the need to include the National Stock Number (NSN) or other identifying data on the inspection card. Use of the document number allows more economical use of the 80 columns available on the inspection card.

b. If the Routing Identifier Code (RIC-TO) of the addressee and NSN on the FTE are mismatched, DAAS will reroute the transaction and notify the reporting activity of that action and the correct RIC-TO address. Since the NSN is not a suggested B-series card entry, DAAS will be instructed to automatically pass the inspection card to the RIC-TO address. When notified of a DAAS FTE rerouting action, the reporting activity should immediately produce a corrected B-series card and send it to the correct wholesale manager. If a B-series inspection card is required, the MRC should hold the unaccompanied FTE it receives in suspense pending receipt of the inspection card. If after 5 days the MRC still has not received the required inspection card, it should reject the FTE to the sender with Status Code SA. (Status Code SA is used on a re-entry transaction for a Procurement Appropriation (PA) principal item transaction that has been rejected due to a lack of supporting documentation (CCSSOT 18-725-100, Vol 8)). When an unaccompanied B-series card is received by an MRC, it should be held 5 days and rejected back to the RIC-From address in card columns 67-69 if no FTE is received. In this way the system is self-cleansing.

6. While it is important to expedite the flow of reports of excess and inspection reports to the MRC, and to process these excess reports in a timely manner, it is no less important to speed the flow of disposition instructions back to the reporting activity. No procedures exist in the Materiel Returns Program or on a wider basis within MILSTRIP to forward exception data by automated method.

a. Current procedures require the item manager to enter coded disposition instructions on the reply to Report of Excess (FTR) reject card, and re-submit the card to the computer. These instructions include the Status Code which tells the reporting activity the reason for rejection or action status information. If exception data is a necessary part of the disposition instruction,

the item manager should enter a "P" in card column 4. The computer generates an FTR with reject code XN to the item manager which indicates the requirement for exception data on the outgoing transaction. The item manager then will insure that this card is mailed to the reporting activity. Since this card is mailed, LCA is again bypassed. While LCA is capable of receiving transaction copies through the mail and updating the proper records, no instructions are explicitly stated in the MRP instructions (CCSSOI 18-725-100, Vol 8) notifying the item manager of this capability and so the LCA records are seldom updated by mail.

b. With a minor change to the Commodity Command Standard System (CCSS) internal operating procedures, this void in the chain of FTR transaction communication can be overcome. This change is only necessary when the FTR must include exception data and therefore be mailed to the reporting activity. At the present time the item manager enters a "P" in card column 4 which instructs the computer to reject the FTR back to the item manager after processing it so that exception data can be added. The CCSS program should be modified so that when the "P" in card column 4 is read, at which time the CCSS records are updated, the FTR image is transceived directly to LCA. This change to CCSS would not necessitate any other change in the CCSS MRP procedures. An FTR card would still be rejected back to the item manager for the addition of exception data and it would still be mailed to the reporting activity. This procedure is also applicable in any case where the reporting activity does not have the facility for transceiving MILSTRIP data.

c. Current CCSS procedures are adequate for those cases in which no exception data is necessary and the reporting activity has facilities to receive MILSTRIP data by AUTODIN.

CHAPTER IV
DESCRIPTION OF THE TACOM SYSTEM

1. The US Army Tank Automotive Command (TACOM) was visited in December 1980, and internal Materiel Returns Program procedures were discussed. After review of the TACOM operating procedures the following suggestions were made during exit interviews on 3 December 1980.

a. If the DRSTA-FDRM (Major Item Supply Operations Section) personnel were directed to use the Data Entry System Interface (DESI) computer terminal located in their section to key the FTE image directly into the computer, the time delays associated with moving the FTE to and through keypunch and moving the FTE to the computer room would be avoided.

b. If DRSTA-FDRM personnel are not permitted to use the DESI to directly key FTEs into the computer, then some of the current processing time can still be avoided by allowing the clerks to keypunch a duplicate FTE for entry into the computer.

c. Several processing days currently expended can be avoided by directing item managers (or a Materiel Management Directorate clerk) to key major item excess disposition instructions into the computer via the DESI terminal.

2. Implementation of these suggested changes to the TACOM procedures then in effect would have eliminated some time consuming movement of paper from one station to another.

3. As of July 1981 the TACOM procedures were as follows:

a. The reporting activity sends a Report of Excess (FTE) and a Technical Inspection (TI) report to TACOM.

b. The TACOM Major Item Supply Operations Section (DRSTA-FDRM) reviews the FTE and TI report for obvious errors and complete documentation, responding

to the reporting activity with an SA reject code if necessary.

c. If free from obvious error and accompanied by the necessary TI report, the FTE is recorded in a manual daily register. A control form is produced reflecting the FTE card. This control form, accompanied by the TI report is placed in a folder and is handcarried to the responsible branch and logged in before being passed to the item manager. Also, DRSTA-FDRM sends the FTE to the Management Information Systems Directorate (MISD) for entry into the computer.

d. If the computer finds an error on the FTE an "S" series reject is sent to the reporting activity. If the computer finds no error, an FTR "XG" reject will be sent to DRSTA-FDRM. (XG rejects require human processing).

e. Upon receipt of the XG reject from the computer, DRSTA-FDRM sends an FTD with a TR status code (FTE received and in process) and a 60-day delay to MISD which in turn transceives it to the reporting activity.

f. The item manager, upon receiving the folder containing the control sheet (FTE data), TI report, and other pertinent information, decides upon a course of action. Is the materiel serviceable or repairable? Can it be used to fill a requirement? If it can, the FTR is coded for this purpose. If no requirement exists, should it be offered for Major Item Materiel Excess (MIMEX)? When the disposition decision is reached, the FTR is coded and returned with the control sheet and folder to DRSTA-FDRM. The item manager sends exception disposition instructions separately to the reporting activity via US Mail when appropriate. (See Appendix G for a copy of this form letter).

g. DRSTA-FDRM receives the folder and control sheet, indicates the proper response (FTD, FTR) and sends it to MISD which in turn transceives it to the reporting activity. DRSTA-FDRM updates the control sheet and daily register.

4. Paragraph 7-13 of AR 725-50 prescribes the DA goal for providing disposition instructions on excess reports as:

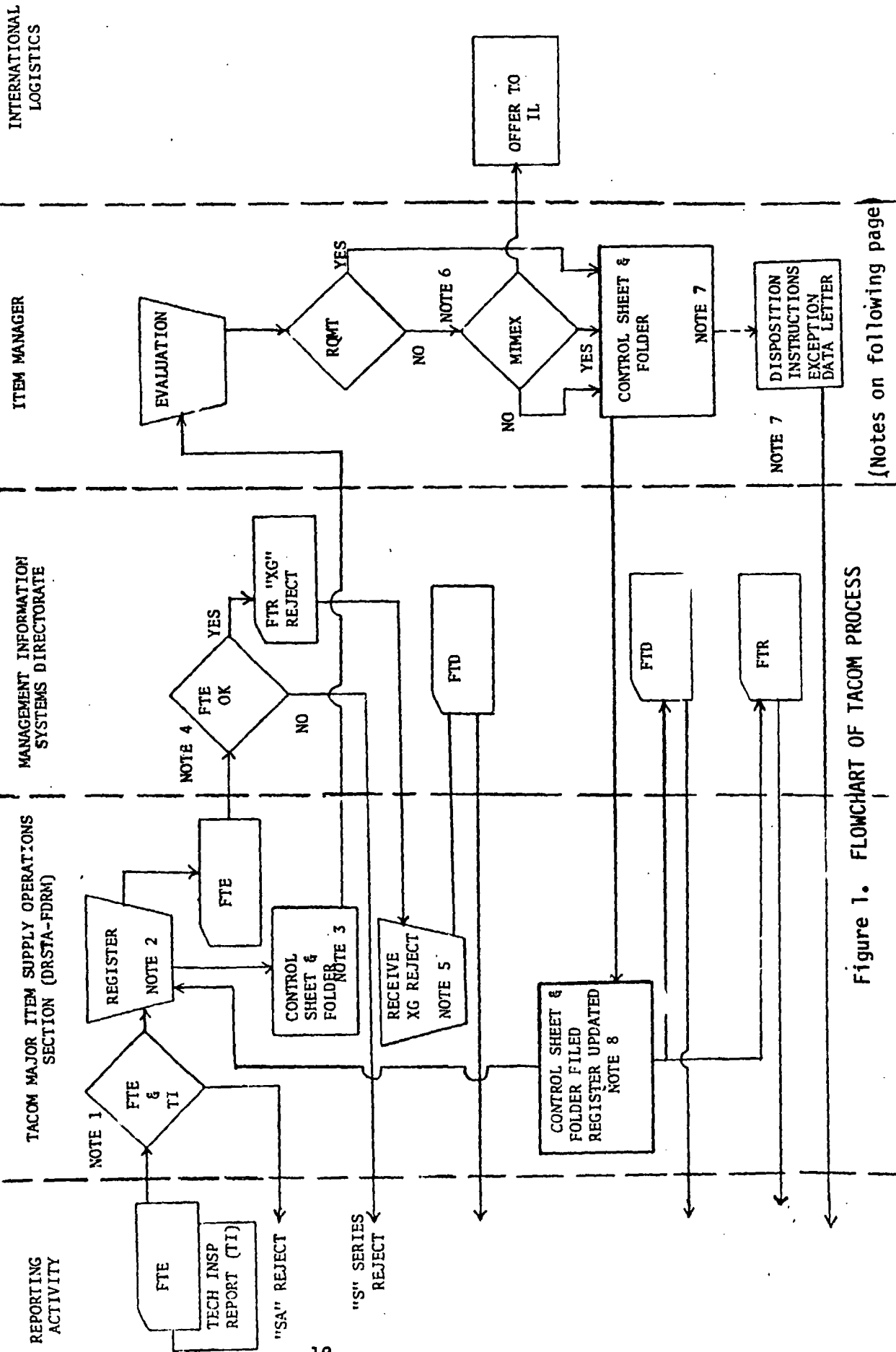
To obtain maximum utilization of reported excesses, minimize holding time and avoid changes to status and condition of reported excesses, replies to FTEs will be processed within 30 calendar days from the date the FTE was received. FTEs for materiel that is to undergo MIMEX screening will be responded to with a DIC FTD with appropriate status code, and final date dispositions instructions from the ICP may be expected

5. Each TACOM major item excess report (whether it requires a technical inspection report or not) has an FTE with a 60-day delay issued to the reporting activity when DRSTA-FDRM receives the FTR "XG" reject from MISD (paragraph 3e). According to paragraph 7-14 of AR 725-50, "When a reply to an excess report (FTR) cannot be furnished within the times prescribed in paragraph 7-13a . . . an FTD will be processed with status code TR" Status code TR indicates that the FTE has been received and is being processed.

a. The "automatic" FTD gives TACOM additional time to provide disposition instructions without receiving followups (FTFs) from the reporting activity. According to paragraph 7-14 of AR 725-50, ". . . Followups (FTFs) to ICPs are not to be submitted prior to expiration of the date entered in card columns 70-73 of the FTD"

b. The purpose of the FTD then is to inform the reporting activity not to expect disposition instructions within the next 60 days, and to prevent the ICP from receiving automatic FTFs every 30 days. However, FTDs should be the exception and not the rule. Issuing an FTD in every case for 60 days (delay) runs counter to the DA goal quoted in paragraph 4 above. TACOM, by issuing automatic FTDs, places the burden on the reporting activity rather than on improving the process currently in use at TACOM.

(See Figure 1, pages 16 and 17, for Flowchart of TACOM Process)



(Notes on following page)

Figure 1. FLOWCHART OF TACOM PROCESS

- NOTES:
- 1 If an excess report is received with obviously incorrect data or without required exception data (Technical Inspection (TI)), clerks in DRSTA-FDRM return the report (FTE & TI) to the customer with an SA reject code. Any errors on FTE/FTF will create "S" type rejects after input. Any "S" type reject closes TACOM file for that Document Control Number, and an FTE with new Document Control Number must be re-input by customer.
 - 2 Visibly acceptable FTE excess reports with accompanying exception data are manually recorded in a daily register by Document Control Number.
 - 3 A folder containing the control sheet, TI, and any other pertinent correspondence is hand carried to the responsible branch and logged in before being passed to the responsible item manager. The control form is also used to track FTE/FTD/FTR processing through the command.
 - 4 The FTE is forwarded to HEART (hardcore entry and routing technique) and entered. If some data is incorrect, an "S" type reject will occur and customer will be notified by transceived FTR. If data is correct, an internal "X" type reject will occur and the FTR "X" reject card is forwarded to DRSTA-FDRM.
 - 5 After DRSTA-FDRM receives FTR "X" reject, a pre-prepared FTD card with status code TR and a date 60 days in advance of FTE HEART input date is forwarded to the Management Information Systems Directorate and transceived to the customer.
 - 6 If there is no Army or other DOD requirement known to the item manager and equipment is not a MIMEX candidate, the item manager so annotates the control sheet and forwards the correspondence to DRSTA-FDRM through the branch clerk. If the equipment is a candidate for MIMEX, the control sheet is so annotated and the folder is returned to DRSTA-FDRM through the branch clerk. In addition, the item manager notifies the International Logistics Directorate of the availability of the equipment.
 - 7 If the item manager has a valid US Army or other DOD requirement, the control sheet is so annotated and forwarded to DRSTA-FDRM through the branch clerk. In addition, the item manager prepares the form letter, if necessary, and mails it to the customer when appropriate.
 - 8 After DRSTA-FDRM receives the folder and control sheet from the item manager, cards (FTD, FTR) are prepared and input to HEART. TACOM files are updated and replies transceived to the customer. At this time the register in DRSTA-FDRM is updated.

CHAPTER V
DESCRIPTION OF THE TSARCOM SYSTEM (DEC 80)

1. During a 2-day visit to TSARCOM, in December 1980, the procedures in effect for processing major item excess reports were examined. TSARCOM procedures are different from those used by TACOM and described in Chapter IV of this report. Whereas TACOM procedures rely on the inventory manager to physically process each excess report, disposition instructions are issued centrally at TSARCOM before the manager is aware an FTE has been received. This contrast in procedures indicates the degree of managerial latitude permitted each MRC within the DARCOM Commodity Command Standard System.

2. TSARCOM procedures must be explained in two parts because they do not form a continuous process.

a. Semiannually each manager is asked to provide to a central office the criteria for processing requisitions and reports of excess for each NSN. Included in these blanket instructions are the inventory manager's name, office symbol, telephone number, item nomenclature, Theater Oriented Depots, maintenance depots, and any other instructions the inventory manager determines necessary for the accurate and expeditious handling of excess reports. Whatever actions the item manager would take to process an excess report are described so that someone else can perform this function correctly. The instructions for all NSNs are cataloged in a book called Edit Criteria. Personnel in the TSARCOM Major Item Section of Materiel Management (DRSTS-SDDM-T) use the Edit Criteria to process requisitions and reports of excess.

b. TSARCOM major item reports of excess are processed as follows:

(1) FTEs and inspection reports are received in the mailroom and distributed twice daily to the Major Item Section (DRSTS-SDDM-T).

(2) An "excess" clerk recalculates the labor charges using representative labor charges of DARCOM maintenance facilities.

(3) The FTE data is keyed into the computer through the DESI by the DRSTS-SDDM-T "excess" clerk.

(4) The computer generates an FTR XG reject and a mini-NSNMDR which is delivered to the "excess" clerk.

(5) The clerk annotates the inspection report with disposition instructions based on the Edit Criteria and keys the disposition instructions into the computer via DESI or has the FTR keypunched and entered into the computer.

(6) The inspection report and NSNMDR are sent to the item manager for review.

(7) If the item manager agrees, nothing more is done. If the manager disagrees, the excess clerk is notified and issues new instructions via letter or message. The item manager may at any time change the Edit Criteria by notifying the "excess" clerk who makes a pencil change to the Edit Criteria.

(8) The item manager may either file or destroy the inspection form and/or NSNMDR. Normally, the manager records some of the data and disposes of the papers received.

3. The flowchart in Figure 2 below depicts the above narrative.

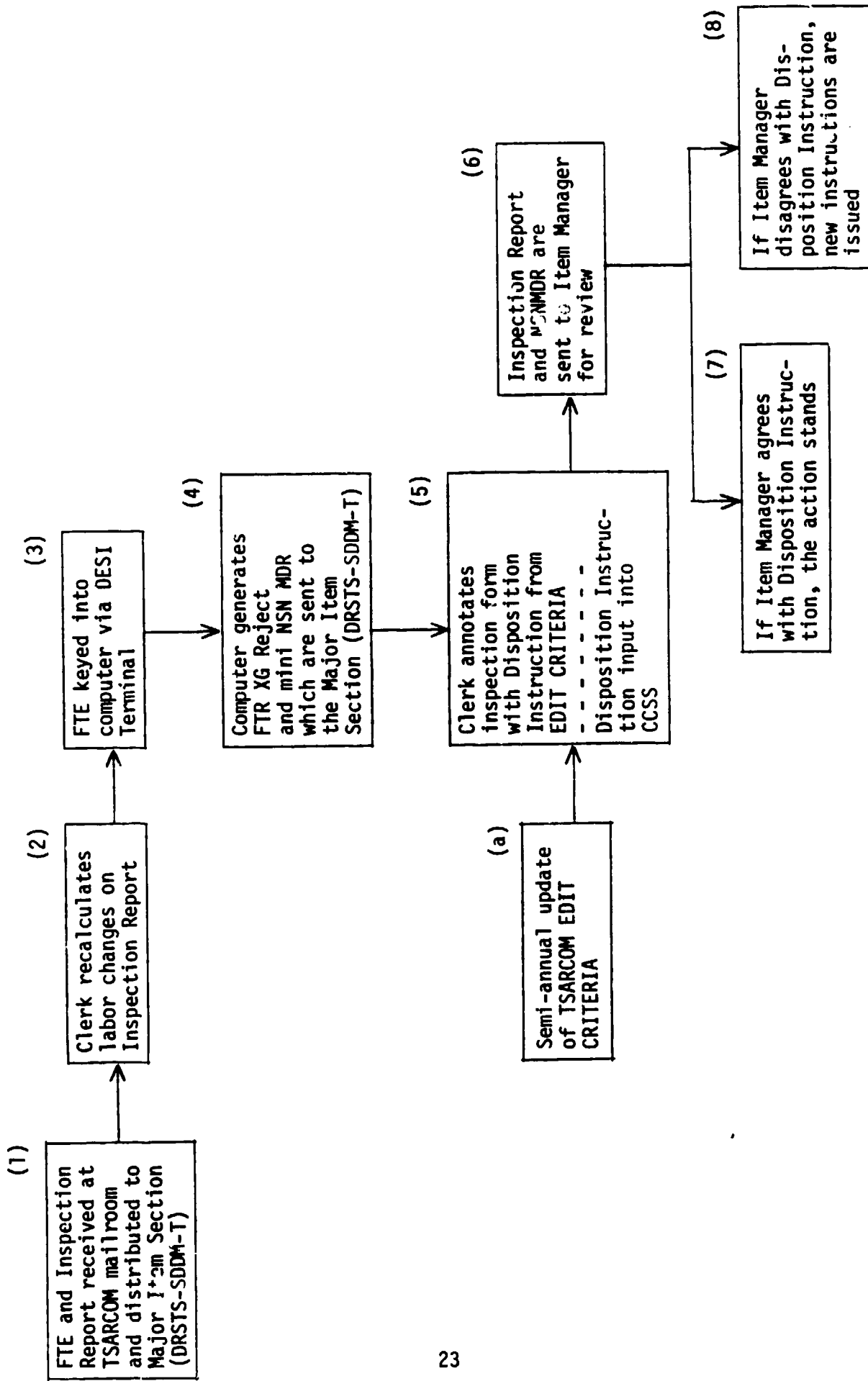


Figure 2. TSARCOM PROCEDURAL FLOWCHART (DEC 80)

CHAPTER VI

DARCOM COMMODITY COMMAND STANDARD SYSTEM

1. Automating the flow of inspection type data alone will not expedite the processing of excess reports at the MRC. It is also necessary to implement changes to CCSS. Each MRC computer must be programmed to ascertain whether the Report of Excess for a given NSN should be accompanied by an inspection card, and to interpret the B-series inspection data card so the information is usable when reviewed with the Report of Excess by the inventory manager or clerk.

a. Standardizing the coding structure of the B-series card and programming CCSS to interpret and print out the inspection information in the clear will eliminate many delays in the current system. These delays include time for mailing, manual processing, keypunching, and passing documents between processing stations.

b. It has been noted that TACOM operating procedures differ markedly from TSARCOM. The TACOM procedures involve much decentralized manual effort while TSARCOM operating procedures rely more on the computer and centralized processing.

c. Automating the transfer of inspection data will benefit both the TACOM and TSARCOM processing by eliminating the mailing delay and the manual entry of the FTE into the computer.

2. Direct computer access is already available in the Materiel Management Directorates at all DARCOM MRCs. Through the DESI computer terminal it is possible to key disposition instructions directly into the computer. This capability has not been exercised to its fullest at TACOM because inventory managers have not been directed to use the terminals for this purpose. TACOM

procedures must be changed to accommodate this feature. TSARCOM procedures are such that disposition instructions are keyed into the computer centrally by the "excess" clerk in the Major Item Section.

a. Entering disposition instructions directly into the computer by the DESi will eliminate delays in keypunching and passing paper between processing stations.

b. Reports of Excess requiring exception data in the disposition instructions will still have to be mailed. However, by including the minor change to CCSS introduced in Chapter III, LCA will receive disposition instructions for all excess transactions. This will allow LCA to more completely perform its assigned mission of recording logistic transactions for management purposes.

3. Eliminating the mailing of the FTE and inspection forms by instituting automated transfer of inspection data allows receipt by the MRC within the real time limitations of the AUTODIN system. CCSS can be reprogrammed so that, when received at the MRC, the FTE and B-card data will be posted to the applicable files and provide an FTR XG reject (this indicates the action requires manual processing) and a mini National Stock Number Master Data Record (NSNMDR) as in the current procedure. CCSS will then provide the item manager (or clerk) a printout with the inspection card data already interpreted. These products can be sent through normal MRC routing channels without establishing manual suspense files. The computer (CCSS) can be programmed to track and follow up on excess transactions, which could result in personnel savings.

a. The computer should be programmed to follow up on excess reports if the time allocated for processing is exceeded.

b. When disposition instructions or other action is furnished the reporting activity, the suspense file will be closed or amended as necessary.

4. When an FTE is received without the essential inspection card, the MRC computer will place the FTE in a suspense file pending receipt of the B-card. Delay in receiving the B-card may be the result of an incorrect RIC-TO applied by the reporting activity. If after 5 days the MRC has not received the inspection card, the excess report will be rejected to the reporting activity with Status Code SA. If the MRC receives only the B-card, it should be held; and, if a matching FTE is not received within 5 days, the B-card should be rejected.

5. By automating the flow of inspection data, programming CCSS to interpret the data, and automating internal procedures, the MRP process is streamlined and more complete management and audit information is collected.

CHAPTER VII
ANALYSIS OF LCA MATERIEL RETURNS PROGRAM DATA

1. Due to the non-availability of historical Materiel Returns Program data from TACOM, the Logistics Control Activity was tasked to provide a copy of their MRP file for selected TACOM managed Line Item Numbers (LIN) which require technical inspection documentation to accompany reports of excess. Because it was necessary to manually enter the LCA data into the computer available to the study activity, the data request was limited to those seventeen LINS listed in Appendix D. The selection of these particular LINS was based on a desire to analyze materiel of significant value in terms of unit price and for which a meaningful but manageable number of transactions could be obtained for our sample.

a. The seventeen requested LINS have a total of 45 NSNs. One of the LINS (X39735) with two NSNs is not now supported by TACOM and was deleted from consideration in this analysis.

b. Of the sixteen remaining LINS, the Logistics Control Activity had MRP data for 30 NSNs (Appendix H).

2. The hardcopy data received from LCA contained 4,636 records with a 20 April 1981 cutoff date. Of this number, 1,598 records contained an FTR and were free from obvious error. The other 3,038 records include both "open" excess reports and those records for which LCA did not receive an FTR because it contained exception instructions and was mailed.

3. Figure 3 below graphically illustrates the three time intervals analyzed on the basis of the usable records.

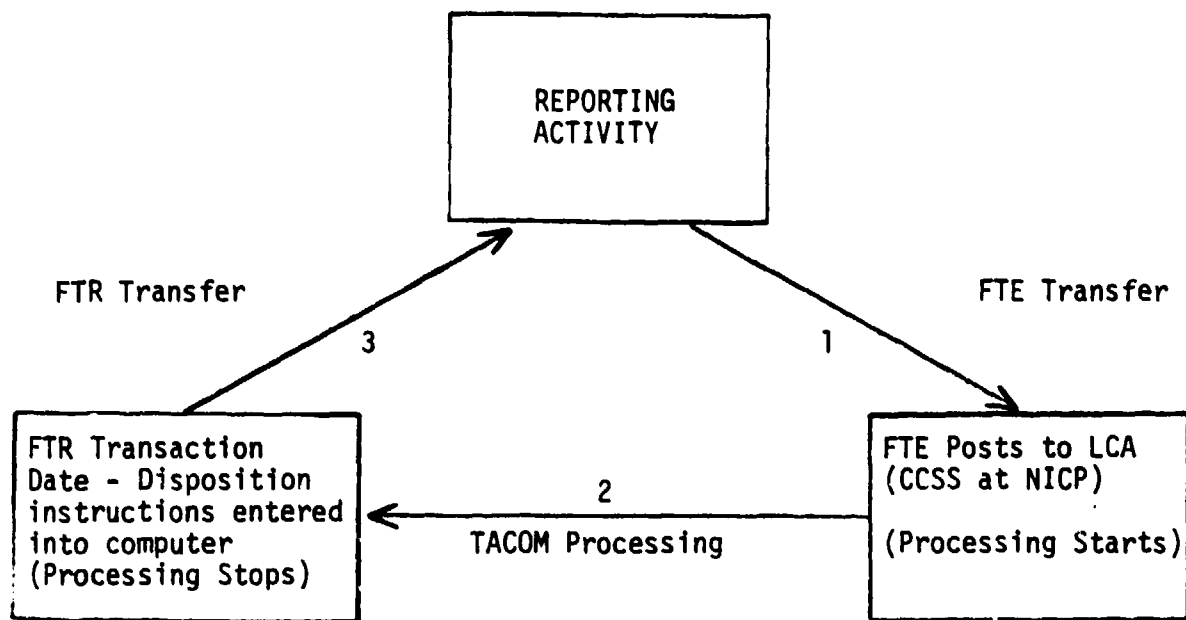


Figure 3. MATERIEL RETURNS PROGRAM PROCESS FLOW

For purposes of analysis it was assumed the records were posted to the addressees record concurrent with the posting to the LCA record.

a. The three time intervals represented in Figure 3 are:

(1) FTE Transfer - The time required for an FTE to post to the TACOM computer using the document number date as the starting point. This interval includes that time expended by the reporting activity prior to sending the FTE and that time expended by TACOM to manually register and enter the FTE into the computer.

(2) TACOM Processing - The time it takes TACOM to process the FTE. This interval begins when the FTE posts in the computer until an FTR is posted to close the record. This is the time interval against which the DA goal of 30 days for providing disposition instructions on an FTR is measured.

(3) FTR Transfer - The time interval from the date the FTR posts to the TACOM computer until the reporting activity receives it.

b. To obtain the three time intervals described above, the following four LCA data elements were used.

(1) Document Number Date - The Julian date from the document number was used to represent the base date for each record analyzed.

(2) FTE Post Date - The Julian date the FTE was recorded in the MRP file by LCA.

(3) FTR Transaction Date - The Julian date recorded at LCA as the date on which the FTR was processed for transmission to the reporting activity by TACOM.

(4) FTR Post Date - The Julian date on which the FTR was received and posted to the MRP file by LCA.

4. The LCA data was divided into two groups for purposes of analysis. Group I contains 379 records with data sufficient to analyze each of the three intervals described in paragraph 3 above. Group II contains the balance of usable records (1598-379 = 1219) which unlike Group I transactions do not contain the Julian date an FTE was posted to the Materiel Returns Program file.

a. It should be remembered that since the Report of Excess for major items requiring a technical inspection report must be mailed to the responsible Materiel Readiness Command, then LCA will not normally receive a copy of the FTE. The only exceptions to this are that either LCA is furnished a copy by mail or the FTE was sent to the MRC over AUTODIN; in which case, it could not be accompanied by the inspection report. While Group I data provides a more detailed picture of the records, it fails to portray the actual situation for the reasons just stated.

b. Group II data does not contain the Julian date an FTE was posted to the MRP file, indicating LCA did not receive the FTE. If the excess report was

mailed to the NICP but the reporting activity did not mail a separate copy to LCA, then naturally the FTE does not appear in the MRP file.

c. The fact that Group II data was mailed to LCA while Group I data was, at least in part, transceived indicates the two groups are different to some degree in the actual process involved. Statistical analysis of the two groups of data reveals that the two populations are in fact different. Therefore, Group II more accurately describes the correct process major item excess reports should follow if the technical inspection report is required.

5. Analysis of both groups of data reveals the average number of days required to process major item excess reports to be as indicated in Table 1 below:

| <u>Interval</u> | <u>Group I (Sample Size 379)</u> | <u>Group II (Sample Size 1219)</u> | <u>Total Population (Sample Size 1598)</u> |
|-----------------------------------|--------------------------------------|--|--|
| FTE Transfer | 19.0 | * } * } 167.5 | * } * } 163.7 |
| TACOM Processing | 132.4 | | |
| FTR Transfer | <u>6.6</u> | <u>7.2</u> | <u>7.0</u> |
| Average Number of Days to Process | 158.0 | 174.7 | 170.7 |

* Insufficient data exists to portray each interval.

Table 1. FTE PROCESSING INTERVALS

a. Even though Group I and Group II data are different from each other, they are subsets of the same data base. Table 1 above contains for the total population of usable records received from LCA a total Average Number of Days to Process major item excess reports of 170.7 days. Regardless of how Group I and Group II data were processed, the fact is that 170.7 days was the average time expended on 1598 records which contained 1,931 assets.

b. Because of the lack of total information for the total population, it is not possible to state a definite FTE Transfer time or a TACOM Processing time. However, some Group I records were transmitted over AUTODIN and the average FTE Transfer time was found to be 19 days. While impossible to state the actual FTE Transfer for mailed transactions, it is logical they would take longer than Group I records.

c. Since sufficient data exists for the total population of records to determine that the total of FTE Transfer and TACOM Processing was 163.7 days, TACOM Processing can be estimated. Using the FTE Transfer of 19.0 days, the average time it takes TACOM to process major item excess report is estimated to be 144.7 (163.7-19.0) days. This exceeds the 30-day goal established in AR 725-50 by 114.7 days; thus, it adversely impacts the readiness of the Army.

6. To determine the cost involved by failing to process major item excess reports within 30 days of receipt, it was necessary to determine the average number of days per asset it took to report, process, and provide disposition instructions. The 1,598 records of the total population of data analyzed contained 1,931 major items. The average number of days that each of these 1,931 assets were in the Materiel Returns Program process was 143.8 days.

a. Two sources of pricing information were used for the 30 stock numbers involved.

(1) The US Army Depot System Command (DESCOM) has developed Major Item Planning Prices for use in the Total Army Equipment Distribution Plan (TAEDP). These planning prices were developed to provide more up-to-date pricing information, especially for those major items for which the standard price is out of date. The prices used were extracted from a DESCOM letter dated 13 May 1981, subject: Draft DA Circular Major Item Planning Prices.

(2) Unit prices were obtained from SB 700-20 (Army Adopted/Other Items Selected for Authorization/List of Reportable Items) for those stock numbers for which TAEDP planning prices were not available.

b. Table 1 showed the length of time it takes to receive, process, and provide disposition instructions on the basis of FTE transactions. Table 2 below provides the same type of information using the average time it takes to process each of the 1,931 assets involved.

| <u>Interval</u> | <u>Total Population (Sample Size 1,931 assets)</u> | |
|------------------|--|------------------------|
| FTE Transfer | * | 19.0 ^A |
| TACOM Processing | * | 117.8 |
| FTR Transfer | * | <u>7.0^A</u> |
| Total Turnaround | 143.8 | 143.8 |

* Insufficient data exists to determine each interval

A Average Transfer (Table 1)

Table 2. ASSET PROCESSING INTERVALS

Analysis of the total file of 1,598 transactions by asset yielded a 143.8-day Total Turnaround for receiving, processing, and providing disposition instructions for 1,931 items. Subtracting the FTE Transfer from Group I data and the FTR Transfer from the analysis of each transaction (Table 1), an average TACOM processing time per asset was found to be 117.8 days (143.8-19.0-7.0).

c. Figure 4 below is useful for understanding this two-part analysis. Figure 4a depicts the average time intervals for each transaction while Figure 4b portrays the average time interval for each asset.

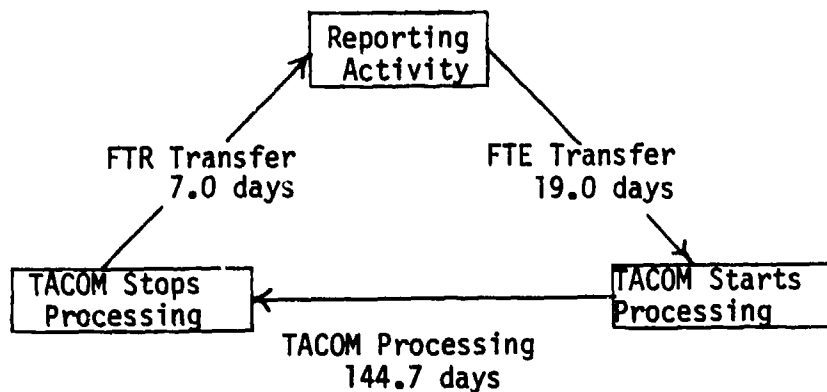


Figure 4a. TRANSACTION PROCESSING

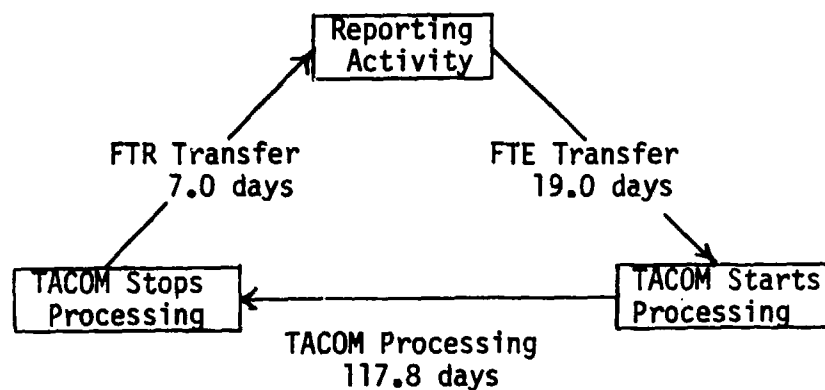


Figure 4b. ASSET PROCESSING

7. Analysis.

a. Implementation of the automated B-series inspection card in place of the US Mail should reduce the FTE Transfer time. Reduction from 19.0 days to an estimated high of 10 days gives a 9.0-day savings with the B-series card.

b. Implementation by TACOM of the TSARCOM procedures will reduce FTE processing to the 30-day goal and provide a total savings estimated to be 114.7 days for transactions and 87.8 days for each item.

(1) TSARCOM procedures (Chapter V) have been in effect for several years.

(2) Conversations with personnel at Fort Bragg indicate prompt disposition instructions are received for TSARCOM transactions while it takes TACOM "...about six months."

c. Implementation of both the B-series inspection card and TSARCOM procedures by TACOM will permit excess transactions to be processed approximately 123.7 days faster. This assumes that TACOM will provide disposition instructions in accordance with the 30-day DA goal.

d. The average number of days saved per asset by implementing the TSARCOM procedures at TACOM is estimated to be 87.8 days; i.e., the current "down-time" for those assets involved would be reduced by an average of 87.8 days. A total of 96.8 days per asset can be saved by also implementing the B-series inspection card. This 96.8-day reduction in administrative downtime should result in increased operational availability of major items; thus, those Army units with on hand assets less than their authorized number will receive faster satisfaction of requisitions. Therefore, total Army readiness is enhanced with no additional expenditure of procurement or maintenance money.

e. Table 3 identifies where savings can be made and their magnitude.

| | <u>Current</u> | <u>Savings</u> | <u>New Processing Time</u> |
|------------------|-------------------------|----------------|----------------------------|
| FTE Transfer | 19.0 | 9.0 | 10.0 |
| TACOM Processing | 144.7 | 114.7 | 30.0 |
| FTR Transfer | <u>7.0</u> | <u> </u> | <u>7.0</u> |
| Total | 170.7 | 123.7 | 47.0 |
| | <u>Asset Processing</u> | | |
| FTE Transfer | 19.0 | 9.0 | 10.0 |
| TACOM Processing | 117.8 | 87.8 | 30.0 |
| FTR Transfer | <u>7.0</u> | <u> </u> | <u>7.0</u> |
| Total | 143.8 | 96.8 | 47.0 |

Table 3. TRANSACTION PROCESSING

8. Appendix I contains a table which identifies for each NSN in the sample used in this study the savings on a per NSN and cumulative basis.

a. The life expectancy for each NSN was obtained from the item manager and was used to determine the value of each asset per day. It was determined that the value of all 1,931 assets over the average 143.8 days required to furnish disposition instructions was \$1,527,084.25. The average value of these 1,931 major items for each day they were in a non-usable status or condition was \$10,619.50 ($\$1,527,084.25 \div 143.8$).

b. Multiplying the average value per day by the number of days estimated to be saved by implementation of both the B-series inspection card, and implementation by TACOM of those procedures currently in use at TSARCOM, provides the following savings:

| | <u>Days Saved</u> | | <u>Non-Use Cost</u> | | <u>Estimated Dollars Saved</u> |
|--------------------------|-------------------|---|---------------------|---|--------------------------------|
| B-series inspection card | 9.0 | X | \$10,619.50 | = | \$ 95,575.50 |
| New TACOM procedures | 87.8 | X | \$10,619.50 | = | \$932,392.10 |
| Total Estimated Savings | 96.8 | X | \$10,619.50 | = | <u>\$1,027,967.60</u> |

9. Transaction volume and workload.

a. Data received from TACOM shows that for an 8-month period (November 1980 through June 1981) 7,628 major item reports of excess were received at TACOM. On an annual basis TACOM can be expected to receive 11,442 ($(7,628 \div 8) \times 12$) major item excess reports for an unknown number of assets. This is an average of 44 per day ($11,442 \div 260$ (average work days/year)).

b. Information obtained from TSARCOM indicates 8,580 major item excess reports will be received in 1981, an average of 33 per day ($8,580 \div 260$).

c. TSARCOM performs its centralized report of excess processing, described in Chapter V, with two full-time personnel, while TACOM's decentralized procedures (Chapter IV) are performed with five full-time personnel. Furthermore, TSARCOM employs this same concept with three full-time personnel for centralized major item requisition processing.

d. It is estimated that three fewer personnel would be necessary to process excess reports at TACOM if the excess processing procedures now in use by TSARCOM were implemented at TACOM. This would allow TACOM to place these personnel in other areas where they are needed. Additional personnel could be shifted to areas of greater need by decentralizing the major item requisition processing as done by TSARCOM. TSARCOM uses the same Edit Criteria listing for major item requisition processing as used for excess report processing.

10. Benefits from implementation of procedures.

a. No effort was made to estimate the total possible benefit for all TACOM managed major items if the B-series inspection card and new internal procedures were adopted and implemented. Benefits accrue in the form of Increased Usage Value rather than hard dollar savings. Increased Usage Value means the Army gets more use of its equipment (less downtime) which translates directly into improved readiness for no additional procurement expenditure. Benefits were estimated to exceed \$1 million for the 30 NSNs in this analysis using the two previously mentioned changes. Intuitively, this indicates that total accrued benefits would exceed the costs of implementation if benefits were estimated for all applicable major items. In addition, freeing personnel for other functions and increasing the value of LCA management data by more complete records are also benefits.

b. Increased readiness, while difficult to measure monetarily, can be measured through improved materiel availability. Reducing the time a major

item is unusable or unavailable for use without added cost will improve the readiness posture of units assigned low priorities in particular and of the total Army in general.

c. Implementation of an automated B-series inspection card will cause it and the FTE it accompanies to pass directly into the computer from the AUTODIN transmission. CCSS will then process the FTE as it does currently, interpret the B card and provide all the current output products plus the interpreted B card to the processing clerk. TACOM currently has five full-time personnel who send the FTEs to the computer and the output products to the inventory manager. It is estimated these could be reduced to two positions if CCSS received the FTEs directly and kept internal suspense records. These two personnel would then process the FTEs with TSARCOM procedures. Personnel savings would amount to \$36,798 (three GS-5 step 1).

d. Reducing the TACOM processing time for Reports of Excess by 114.7 days would reduce the number of Report of Excess Followups (FTF) generated by SAILS every 30 days. Considering that TACOM will receive an estimated 11,442 FTEs for the 12-month period ending 31 October 1981 and that SAILS should generate an FTF every 30 days, then conceivably 34,326 (3 X 11,442) could be avoided by on-time FTE processing. This yields a net savings in AUTODIN traffic when compared to the increase necessitated by the B-series inspection card and eliminates the automatic issue of a Reply to a Report of Excess Delay Status (FTD) in use by TACOM for each major item FTE received.

CHAPTER VIII
FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

1. Findings.

a. The Logistics Control Activity (LCA) does not receive all major item excess report transactions because many are sent to the DARCOM Materiel Readiness Command (MRC) by mail and not by AUTODIN which is LCA's principal method of data collection.

b. According to paragraph 7-12a of AR 725-50, "Disposition instructions will be furnished on an FTR to the reporting installation within 30 calendar days from date of receipt of the FTE."

c. The 60-day delay status (FTD) TACOM assigns to each major item excess report does not contribute to on-time processing and is contrary to the 30-day processing goal established by DA in AR 725-50.

d. The longer an asset awaits disposition instructions the greater the likelihood of cannibalization for repair parts, degradation of physical condition due to weather, and the reduced value placed on the asset by the reporting activity which contributes to the loss of asset visibility and control.

e. Limiting the number of major items reported on each FTE to one will avoid possible confusion when disposition instructions are issued.

f. TSARCOM currently processes major item requisitions using a centralized concept similar to that used to process major item excess reports.

2. Conclusions.

a. Implementation of a B-series card to automate the flow of technical inspection information will permit faster receipt of the Report of Excess at the wholesale level.

b. The inspection information necessary for the major item manager to process excess reports can be coded on an 80 column and sent over the AUTODIN with the Report of Excess more quickly than by mail.

c. On the basis of 30 NSNs alone, benefits from the B-series card are estimated to be \$95,575.50.

d. TACOM can provide disposition instructions at least 114.7 days faster per transaction and 87.8 days per asset by applying TSARCOM procedures.

e. Estimated avoidable non-use cost in administrative downtime of the 1,931 assets analyzed in this study was \$1,027,967.60 (96.8 days per asset in the Materiel Returns Program pipeline by using current TACOM procedures).

f. Technical inspection of major items should continue as the information is vital for determining the proper condition of materiel.

3. Recommendations.

a. Recommend, subject to the findings of a cost/benefit analysis, a B-series Document Identifier Code card be developed for transmitting technical inspection data for the Materiel Returns Program.

b. Recommend TACOM use TSARCOM developed excess report procedures to process major item excess reports.

APPENDIX A

LIST OF ACRONYMS AND ABBREVIATIONS

| | |
|--------------|---|
| AAO | Authorized Acquisition Objective |
| AR | Army Regulation |
| ARRCOM | US Army Armament Materiel Readiness Command |
| AUTODIN | Automatic Digital Network |
| CCSS | Commodity Command Standard System |
| CCSSOI | CCSS Operating Instruction |
| DA | Department of the Army |
| DAAS | Defense Automatic Addressing System |
| DARCOM | US Army Materiel Development and Readiness Command |
| DCF | Document Control File |
| DESI | Data Entry System Interface |
| DIC | Document Identifier Code |
| DRSTA-FDRM | Office Symbol for TACOM Major Item Supply Operation Section |
| DRSTS-SMMD-T | Office Symbol for TSARCOM Major Item Section |
| FTE | DIC for Report of Excess |
| FTR | DIC for Reply to Report of Excess |
| HEART | Headcore Entry and Routing Technique |
| LCA | US Army Logistics Control Activity |
| LIN | Line Item Number |
| LSO | Logistics Studies Office |
| MICOM | US Army Missile Command |
| MILSTRIP | Military Standard Requisitioning and Issue Procedures |
| MIMEX | Major Item Materiel Excess |

| | |
|---------|---|
| MISD | Management Information Systems Directorate |
| MRC | DARCOM Materiel Readiness Command |
| MRP | Materiel Returns Program |
| MTOE | Modification Table of Organization and Equipment |
| NSN | National Stock Number |
| NSNMDR | National Stock Number Master Data Record |
| PA | Procurement Appropriation |
| RIC-TO | Routing Identifier Code of Addressee |
| SAILS | Standard Army Intermediate Level System |
| TACOM | US Army Tank Automotive Command |
| TAEDP | Total Army Equipment Distribution Plan |
| TI | Technical Inspection |
| TOE | Table of Organization and Equipment |
| TSARCOM | US Army Troop Support and Aviation Materiel Readiness Command |
| VES | Value Engineering Study to Improve Disposition of Major Item Excess |

APPENDIX B

BIBLIOGRAPHY

- AR 11-8 Principles and Policies of the Army Logistics System
- AR 725-50 Requisitioning, Receipt and Issue System
- AR 750-1 Army Materiel Maintenance Concepts and Policies
- TB 43-0140 Instructions for Preparation of Request for Disposition or Waiver (DA Form 3590) for USATROSCOM Equipment
- TB 43-0002-81 Maintenance Expenditure Limits for Tactical Wheeled Vehicles Only FSC Group 23 FSC Classes 2320 and 2330
- SB 700-20 Army Adopted/Other Items Selected for Authorization/List of Reportable Items
- CCSSOI 18-725-100, Vol 8 Commodity Command Standard System Operation Instructions (Functional) Materiel Returns Program
- AR 710-2 Asset and Transaction Reporting System
- MIL-STD 482A Configuration Status Accounting Data Elements and Related Features, 1 April 1974
- TACOM VES Value Engineering Study to Improve Disposition of Major Item Excess
- LSO Study 903 Major Item Price Update Procedures, December 1979, Mr. Joseph A. Dodge

APPENDIX C
Inspection Forms

| VEHICLE CLASSIFICATION INSPECTION | | | | | | | | | | CLASSIFICATION CODE | | | | |
|---|------------------|---------------------|---------------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|---------------------|----------------------------|----------------|------------------------|----------------------|--|
| <small>For use of this form, see TB 730-94-21; proponent agency is U. S. Army Materiel Command.</small> | | | | | | | | | | | | | | |
| NOMENCLATURE | | | | | | | REGISTRATION NO. | | | DATE OF DELIVERY | | | | |
| MANUFACTURER | | | | MODEL | | SERIAL | | AGE | | RELEASE | | | | |
| REASON | | | | ECHELON OF REP | | INSPECTION STANDARDS | | CONDITION | | DATE OF UNECON REP | | | | |
| ITEM | DIAGNOSIS | SATISFACTORY | REPAIR | REPLACE | MAN-HOURS LABOR | COST OF PARTS | ITEM | DIAGNOSIS | SATISFACTORY | REPAIR | REPLACE | MAN-HOURS LABOR | COST OF PARTS | |
| | | | | | | | | | | | | | | |
| FRAME AND BRACKETS | | | | | | | RADIATOR | | | | | | | |
| BUMPERS | | | | | | | THERMOSTAT AND HOSES | | | | | | | |
| TYRING CONNECTIONS | | | | | | | WATER PUMP AND FAN | | | | | | | |
| FIFTH WHEEL | | | | | | | DRIVE BELTS | | | | | | | |
| BRUSH GUARD AND GRILLE | | | | | | | AIR COMPRESSOR | | | | | | | |
| HOOD AND FENDERS | | | | | | | AIR GOVERNOR | | | | | | | |
| BODY | | | | | | | AIR TANKS AND LINES | | | | | | | |
| CANVAS | | | | | | | GENERATOR OR ALTERNATOR | | | | | | | |
| PAINT | | | | | | | REGULATOR | | | | | | | |
| CAB AND DOORS | | | | | | | RECTIFIER | | | | | | | |
| WINDSHIELD AND WINDOWS | | | | | | | BATTERY | | | | | | | |
| WIPER MOTOR AND BLADES | | | | | | | STARTER AND SOLENOID | | | | | | | |
| HORN AND MIRROR | | | | | | | DISTRIBUTOR AND POINTS | | | | | | | |
| HEATER | | | | | | | IGNITION COIL | | | | | | | |
| SPEEDOMETER & TACHOMETER | | | | | | | SPARK PLUGS AND CABLES | | | | | | | |
| AMMETER OR VOLTMETER | | | | | | | EVIC AND BLACK-OUT HEADLIGHTS | | | | | | | |
| GAUGES AND SENDING UNITS | | | | | | | EVIC & BLACKOUT TAILLIGHTS | | | | | | | |
| SEATS AND UPHOLSTERY | | | | | | | CLEARANCE AND MARKER LIGHTS | | | | | | | |
| FLOOR | | | | | | | SWITCHES | | | | | | | |
| INTERIOR TRIM | | | | | | | WIRING AND CONNECTORS | | | | | | | |
| ENGINE | | | | | | | CARBURETOR AND GOVERNOR | | | | | | | |
| CYL HEAD AND BLOCK | | | | | | | AIR CLEANER | | | | | | | |
| VALVES AND PISTON RINGS | | | | | | | FUEL PUMP AND FILTER | | | | | | | |
| INT AND EXH MANIFOLDS | | | | | | | FUEL TANK AND LINES | | | | | | | |
| OIL PAN | | | | | | | MUFFLER | | | | | | | |
| OIL PUMP AND LINES | | | | | | | EXHAUST AND TAILPIPS | | | | | | | |
| OIL FILTER AND ELEMENT | | | | | | | CLUTCH | | | | | | | |
| SUBTOTALS | | | | | | SUBTOTALS | | | | | | | | |

DA FORM 461-5
JUL 50

PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE.

| ITEM | DIAGNOSIS | SATISFACTORY | REPAIR | REPLACE | MAN-HOURS LABOR | COST OF PARTS | MODIFICATIONS | |
|----------------------------|--------------|--------------|--------|---------|------------------------|-------------------------------------|---------------------|-------------------------------|
| | | | | | | | | \$ |
| TRANSMISSION | | | | | | | | |
| TRANSFER | | | | | | | | |
| POWER TAKEOFF | | | | | | | | |
| DRIVE SHAFTS AND U-JOINTS | | | | | | | | |
| DIFFERENTIAL | | | | | | | | |
| FRONT AXLE | | | | | | | | |
| INTERMEDIATE AXLE | | | | | | | | |
| REAR AXLE | | | | | | | | |
| WINCH AND CABLE | | | | | | | OTHER SHORTAGES | |
| HOOBY OR CRANE | | | | | | | | \$ |
| SVC BRAKE SYSTEM | | | | | | | | |
| MASTER CYLINDER | | | | | | | | |
| AIR-HYDRAULIC CYLINDER | | | | | | | | |
| WHEEL CYLINDERS | | | | | | | | |
| HAND BRAKE SYSTEM | | | | | | | | |
| STEERING GEAR AND CONTROLS | | | | | | | REMARKS | |
| SPRINGS AND SHACKLES | | | | | | | | |
| SHOCK ABSORBERS | | | | | | | | |
| WHEELS | | | | | | | | |
| TIRES AND TUBES | | | | | | | | |
| | | | | | | | | |
| | | | | | | | TOTAL REPAIR COSTS | |
| | | | | | | | COSTS DUE TO DAMAGE | |
| | | | | | | TOTAL MAN-HOURS LABOR | | COST OF LABOR AND OVERHEAD \$ |
| | | | | | | LABOR & OVERHEAD RATE PER MAN-HOUR | \$ | COST OF PARTS \$ |
| | | | | | | TOTAL COST OF LABOR & OVERHEAD | \$ | TOTAL COST \$ |
| | | | | | | TOTAL COST OF PARTS | \$ | OTHER COSTS (LIM) |
| | | | | | | TOTAL COST OF REPAIRS | \$ | \$ |
| | | | | | | INDIVIDUAL REPAIR EXPENDITURE LIMIT | \$ | \$ |
| | | | | | | TOTAL COST OF PREVIOUS REPAIRS | \$ | \$ |
| | | | | | | ACCUMULATED REP EXPENDITURE LIMIT | \$ | \$ |
| SUBTOTALS | | | | | | | | |
| DATE OF INSPECTION | INSTALLATION | | | | SIGNATURE OF INSPECTOR | | | |

USE TYPEWRITER OR PRINT FIRMLY ON HARD SURFACE WITH HARD PENCIL OR BALL-POINT PEN

★ U.S. GOVERNMENT PRINTING OFFICE: 1977 - 231 - 399

| MAINTENANCE REQUEST For use of this form, see TM 38-750; the proponent agency is Office of the Deputy Chief of Staff for Logistics. | | * See reverse of file copy for codes and additional data | PAGE NO. | NO. OF PAGES | REPORTS CONTROL SYMBOL CSGLD 1047 (R1) | | | |
|--|---|--|----------|---|---|--|---|--|
| SECTION I <input type="checkbox"/> WORK REQUEST <input type="checkbox"/> MWO <input type="checkbox"/> EIR <input type="checkbox"/> ORGANIZATION ISSUE PRIORITY DESIGNATOR CODE | | | | | | | | |
| CONTROL NUMBER 492995 | | 1. ORGANIZATION | | 2. LOCATION | | | | |
| 3. SERIAL NUMBER | | 4. NOUN NOMENCLATURE | | 5. LINE NUMBER | | | | |
| 6. MAINTENANCE ACTIVITY | | 7. UTILIZATION CODES* | | 8. NATIONAL STOCK NUMBER | | | | |
| 9. FAILURE DETECTED DURING (Select one - use Y or X) | | 10. SELECTED ITEM | | 11. HOURS 12. MILES 13. ROUNDS 14. STARTS | | | | |
| <input type="checkbox"/> A SCHEDULED MAINTENANCE <input type="checkbox"/> C TEST <input type="checkbox"/> E STORAGE <input type="checkbox"/> G FLIGHT <input type="checkbox"/> I HANDLING <input type="checkbox"/> K NORMAL OPERATION <input type="checkbox"/> M INSPECTION <input type="checkbox"/> O OTHER | | <input type="checkbox"/> 1 YES <input type="checkbox"/> 2 NO | | <input type="checkbox"/> 348 INOPERATIVE <input type="checkbox"/> 356 OVERHEATING <input type="checkbox"/> 360 OUT OF ADJUSTMENT <input type="checkbox"/> 364 NOISY <input type="checkbox"/> 367 LOW PERFORMANCE <input type="checkbox"/> OTHER | | | | |
| 15. FIRST INDICATION OF TROUBLE (Select one - use Y or X) | | | | | | | | |
| 16. DESCRIBE DEFICIENCIES OR SYMPTOMS ON THE BASIS OF COMPLETE CHECKOUT AND DIAGNOSTIC PROCEDURE IN EQUIPMENT TM (Do not prescribe repairs) | | | | | | | | |
| <p>PRIOR TO USING THIS FORM READ CAREFULLY THE STEP-BY-STEP INSTRUCTIONS IN TM 38 750.</p> <p>USES AND INSTRUCTIONS</p> <p>1. When all appropriate entries are made in Section I, THIS FORM BECOMES A FORM PECULIAR to a specific weapon system, item of equipment or its component or separate assembly, or a group of similar items with the same FSN. This Section, when combined with either Section II or III or a combination of all three, provides the basis for controlled maintenance actions. This form will be used for:</p> <table border="0"> <tr> <td style="vertical-align: top;"> <p>AT THE ORGANIZATIONAL LEVEL</p> <p>a. Requesting repairs and maintenance services.</p> <p>b. Reporting accomplishment of Modification Work Orders.</p> <p>c. Submission of Equipment Improvement Recommendations (EIR).</p> <p>d. Reporting receipt of defective materiel.</p> <p>e. It may be used to record maintenance accomplishments.</p> </td> <td style="vertical-align: top;"> <p>AT SUPPORT MAINTENANCE LEVEL</p> <p>a. Recording maintenance work and/or service actually performed.</p> <p>b. Reporting the installation of equipment modifications.</p> <p>c. Submission of Equipment Improvement Recommendations (EIR).</p> <p>d. Requesting repair of unserviceable components, assemblies and subassemblies as a result of direct exchange procedures.</p> <p>e. Reporting receipt of defective materiel.</p> <p>f. Requesting maintenance work and/or services between shops of a given field maintenance shop (Intra-Shop Maintenance Request).</p> <p>g. Requesting maintenance work and/or services of another field maintenance unit or activity within the same echelon or at a higher echelon (Inter-Shop Maintenance Request).</p> </td> <td style="vertical-align: top;"> <p>AT DEPOT MAINTENANCE LEVEL</p> <p>a. Reporting the installation of equipment modifications.</p> <p>b. Submission of Equipment Improvement Recommendations (EIR).</p> </td> </tr> </table> <p>2. SUBMITTING SEPARATE EQUIPMENT IMPROVEMENT RECOMMENDATIONS (EIR's).</p> <p>a. EMERGENCY EIR's will be submitted to the designated Department of the Army agency by electrical message. A follow-up DA Form 2407, checked "Emergency" in Section III will be submitted with the message number indicated as part of the narrative remarks in Block 35.</p> <p>b. URGENT EIR's will be air-mailed to the designated Department of the Army agency. Check "Urgent" in Section III.</p> <p>c. ROUTINE EIR's prepared as a separate action will require only normal mailing of the NMP Copy 2 to the designated Department of the Army agency. Check "Routine" in Section III.</p> | | | | | | <p>AT THE ORGANIZATIONAL LEVEL</p> <p>a. Requesting repairs and maintenance services.</p> <p>b. Reporting accomplishment of Modification Work Orders.</p> <p>c. Submission of Equipment Improvement Recommendations (EIR).</p> <p>d. Reporting receipt of defective materiel.</p> <p>e. It may be used to record maintenance accomplishments.</p> | <p>AT SUPPORT MAINTENANCE LEVEL</p> <p>a. Recording maintenance work and/or service actually performed.</p> <p>b. Reporting the installation of equipment modifications.</p> <p>c. Submission of Equipment Improvement Recommendations (EIR).</p> <p>d. Requesting repair of unserviceable components, assemblies and subassemblies as a result of direct exchange procedures.</p> <p>e. Reporting receipt of defective materiel.</p> <p>f. Requesting maintenance work and/or services between shops of a given field maintenance shop (Intra-Shop Maintenance Request).</p> <p>g. Requesting maintenance work and/or services of another field maintenance unit or activity within the same echelon or at a higher echelon (Inter-Shop Maintenance Request).</p> | <p>AT DEPOT MAINTENANCE LEVEL</p> <p>a. Reporting the installation of equipment modifications.</p> <p>b. Submission of Equipment Improvement Recommendations (EIR).</p> |
| <p>AT THE ORGANIZATIONAL LEVEL</p> <p>a. Requesting repairs and maintenance services.</p> <p>b. Reporting accomplishment of Modification Work Orders.</p> <p>c. Submission of Equipment Improvement Recommendations (EIR).</p> <p>d. Reporting receipt of defective materiel.</p> <p>e. It may be used to record maintenance accomplishments.</p> | <p>AT SUPPORT MAINTENANCE LEVEL</p> <p>a. Recording maintenance work and/or service actually performed.</p> <p>b. Reporting the installation of equipment modifications.</p> <p>c. Submission of Equipment Improvement Recommendations (EIR).</p> <p>d. Requesting repair of unserviceable components, assemblies and subassemblies as a result of direct exchange procedures.</p> <p>e. Reporting receipt of defective materiel.</p> <p>f. Requesting maintenance work and/or services between shops of a given field maintenance shop (Intra-Shop Maintenance Request).</p> <p>g. Requesting maintenance work and/or services of another field maintenance unit or activity within the same echelon or at a higher echelon (Inter-Shop Maintenance Request).</p> | <p>AT DEPOT MAINTENANCE LEVEL</p> <p>a. Reporting the installation of equipment modifications.</p> <p>b. Submission of Equipment Improvement Recommendations (EIR).</p> | | | | | | |
| 23. SUBMITTED BY | | 24. RECEIVED BY | | | | | | |
| JULIAN DATE | | JULIAN DATE | | | | | | |
| SECTION III - EQUIPMENT IMPROVEMENT RECOMMENDATION | | | | | | | | |
| 29. NORMAL REPLACEMENT (Select one - use Y or X) | | 30. EIR (Select one - use Y or X) | | 31. RECOMMENDATION (Select one - use Y or X) | | | | |
| <input type="checkbox"/> 1 YES <input type="checkbox"/> 2 NO | | <input type="checkbox"/> 3 EMERGENCY <input type="checkbox"/> 4 URGENT <input type="checkbox"/> 5 ROUTINE | | <input type="checkbox"/> A IMPROV. DESIGN <input type="checkbox"/> B REVISE PROCEDURE <input type="checkbox"/> C MODIFY <input type="checkbox"/> D OTHER (Specify) | | | | |
| 32. ORGANIZATION/ACTIVITY | | 33. LOCATION | | 34. UNIT IDEN CODE | | | | |
| 35. NATIONAL STOCK NUMBER | | 36. NOUN NOMENCLATURE | | 37. OPINION OR REMARKS - DESCRIBE CONDITIONS UNDER WHICH FAILURE OCCURRED. ATTACH PHOTOS OR SKETCHES IF AVAILABLE | | | | |

DA FORM 2407 106173

U.S. GOVERNMENT PRINTING OFFICE: 1977 - 231 - 399

G-4

RECEIPT COPY

1

REPAIR ELIGIBILITY DATA SHEET

For use of this form, see TB 750-97-01; the proponent agency is U. S. Army Materiel Command.

| | | | | |
|--|--|---|----------------------------|---|
| 1. TYPE OF REQUEST (Check appropriate box) | | | | |
| <input type="checkbox"/> DISPOSITION REQUEST | | <input type="checkbox"/> REQUEST FOR STANDARD ITEM DESCRIPTION AND FEDERAL STOCK NUMBER | | <input type="checkbox"/> REPAIR ELIGIBILITY DETERMINATION |
| 2. LOCATION OF EQUIPMENT | | | 3. DOCUMENT NUMBER | 4. DATE |
| 5. STANDARD ITEM DESCRIPTION AND FSN | | | | 6. CONDITION CODE |
| 7. STANDARDIZATION | 8. IF ITEM IS LISTED IN TB 750-97 SERIES, INDICATE NUMBER AND PAGE. ALSO INDICATE PERCENT AUTHORIZED FOR REBUILD. TB 750-97 _____ PAGE NUMBER _____ | | | |
| 9. END ITEM TECHNICAL DATA | | | | |
| a. MAKE | b. MODEL | c. SIZE/CAPACITY | d. SERIAL NUMBER | |
| e. REGISTRATION NUMBER | f. MAKE OF ENGINE | g. MODEL OF ENGINE | h. ENGINE SERIAL NUMBER | |
| 10. ATTACHMENTS | | | | |
| a. FEDERAL STOCK NUMBER | b. ITEM DESCRIPTION | c. MAKE | d. MODEL | e. SERIAL NUMBER |
| | | | | |
| | | | | |
| | | | | |
| 11. REPAIR ELEMENTS | | 12. ESTIMATED REPAIR COSTS | | |
| a. AGE | | b. COST OF PARTS AND MATERIAL | | |
| b. HOURS OF OPERATION | | c. COST OF MISSING TOOLS AND ATTACHMENTS | | |
| c. ESTIMATED COST OF REPAIR | | d. LABOR COST | | |
| | | | e. HOURS AT _____ PER HOUR | |
| d. ACQUISITION COST | | f. TRANSPORTATION COST | | |
| | | g. TOTAL COST OF REPAIR | | |
| 13. TYPE OF REPAIR REQUIRED | | | | |
| | | | | |
| 14. OVERHAUL/REBUILD DATA | | | | |
| a. DATE | b. CONTRACT OR JOB ORDER NUMBER | c. DEPOT | d. CONTRACTOR | |
| | | | | |
| 15. DISPOSITION INSTRUCTIONS (This information void after 90 days) | | | | |
| | | | | |
| 16. TYPED NAME AND ORGANIZATION OF INSPECTOR | | | 17. SIGNATURE | |
| | | | | |

APPENDIX D

DEPARTMENT OF THE ARMY
United States Army Logistics Management Center
Fort Lee, Virginia 23801

DRXMC-LSO

23 March 1981

SUBJECT: Expedited Return of Major Item Excess

Commander
Logistics Control Activity
Building 650
ATTN: DRXLC-MC (Mr. Forrest Frame)
Presidio of San Francisco, CA 94129

1. Reference telephone conversation, 23 March 1981, Mr. Frame of LCA and Mr. Higgins of LSO.
2. This office has been tasked by DARCOM to perform a study, subject as above. As part of this effort, LSO is attempting to analyze specific data regarding processing of TACOM managed Reports of Excess.
3. Your office previously furnished LSO a magnetic tape (returned herewith) which we are unable to interpret.
4. Request you provide this office two hardcopy printouts from the tape for Line Item Numbers (LIN) listed below. The first printout should be for calendar year 1979 and the second for calendar year 1980. The LIN may be found in the Unit Price field on the tape.

| | |
|---------|---------|
| W 38562 | X 40077 |
| W 38592 | X 40146 |
| W 38639 | X 40794 |
| W 94030 | X 40831 |
| W 94441 | X 40968 |
| X 39432 | X 59600 |
| X 39447 | X 59874 |
| X 39735 | X 63436 |
| X 40009 | |

5. Mrs. Ethel Higgins of LCA is familiar with this effort and assisted in providing the first tape. POC within LSO is Mr. Peter J. Higgins, AV 687-3264/3568.

DRXMC-LSO
SUBJECT: Expedited Return of Major Item Excess

23 March 1981

6. Return address is:

Commandant
ALMC
ATTN: DRXMC-LSO (Higgins)
Fort Lee, VA 23801

FOR THE COMMANDANT:

1 Incl
as

J. ALLEN HILL
Director
Logistics Studies Office

UNCLASSIFIED

APPENDIX E

231830Z
Jan 81

CDRDARCOM ALEX VA //DRCPS-S//
CDRARRCOM ROCK ISLAND IL //DRSAR-MM/DRSSA-MA//
CDRCERCOM FT MONMOUTH NJ //DRSFL-MM/DRSEL-MA//
CDRMICOM REDSTONE ARS AL //DSSMI-S/DRSM-M//
CDRTACOM WARDEN MI //DRSTA-S/DRSTA-M//
CDRTSARCOM ST LOUIS MO //DRSTS-S/DRSTS-M//

UNCLAS

SUBJ: EXPEDITED RETURN OF MAJOR ITEM EXCESS

1. THIS COMMAND IS CONDUCTING AN ANALYSIS OF THE DATA ELEMENTS AND THE REQUIREMENTS FOR THOSE DATA ELEMENTS AS REFLECTED/SHOWN IN THE DA FORMS LISTED BELOW:

- a. DA FORM 461-5 VEHICLE CLASSIFICATION SECTION
- b. DA FORM 2404 EQUIPMENT INSPECTION AND WORKSHEET
- c. DA FORM 2407 MAINTENANCE WORKSHEET
- d. DA FORM 3590 REPAIR ELIGIBILITY DATA SHEET

2. TO PERMIT A COMPLETE REVIEW OF DATA NEEDED TO EXPEDITE THE RETURN OF MAJOR ITEM EXCESSES, IT IS REQUESTED THAT ADDRESSEES IDENTIFY TO THIS HEADQUARTERS ALL USAGES AND USERS OF SPECIFIED FORMS.

DRCMM-RM

DRCMM-SP

MR. GRAVELY, DRCPS-S, 48246

VERLE B. HAMMOND, ASSOC. DIR/SYS.
48245

E-1

DTG 231830Z
JAN 81

UNCLASSIFIED

3. REQUEST POC AND AUTOVON NUMBER BE IDENTIFIED FOR EACH USE AND USER OF EACH FORM IN YOUR REPORT NLT 5 FEB 81.

4. POC FOR THIS ACTION IS MR. SHERL GRAVELY, AUTOVON 274-8246.

UNCLASSIFIED

E-2

APPENDIX F

SUGGESTED "B-SERIES" CARD DESCRIPTION

- cc 1-3 Document Identifier Code (DIC) - The document identifier code provides a means of identifying a given product or transaction to the system to which it pertains and further identifies such data as to its intended purposes and usage.
- cc 4-6 Routing Identifier Code (RIC) - Identifies a specific supply and distribution organization as to its military service or governmental ownership and its geographic location.
- cc 7-10 Estimated Labor Hours to Repair - The estimated number of labor hours required to return the asset to serviceable condition based on the deficiencies determined by inspection. This entry of whole hours to repair will be right justified (e.g., 25 hours entered as 0025).
- cc 11-16 Estimated Cost of Parts and Materiel - The whole dollar estimated cost of parts/components and materiel required to return the item to serviceable condition. This entry will be right justified (e.g., \$5000 entered as 05000).
- cc 17-22 Total Estimated Cost to Repair - The whole dollar estimate of all labor and materiel costs to repair the item based on deficiencies determined by inspection.
- cc 23-28 Vehicle Registration Number - The Vehicle Registration Number (USA Number) as described in AR 710-3, Chapter 7.
- cc 29 Corrosion - The code describing the degree to which the item is affected by corrosion.

| <u>Code</u> | <u>Condition</u> |
|-------------|--------------------------------------|
| A | No visible corrosion |
| B | Surface corrosion |
| C | Structural corrosion, frame |
| D | Structural corrosion, body |
| E | Structural corrosion, frame and body |

- cc 30-43 Document Number (DOC-NO) - A non-duplicative number so constructed as to identify the Military Service Requisitioner, Requisition, Date, and Serial Number. (Note: The DOC-NO on the B-series inspection data card must duplicate the DOC-NO on the Report of Excess (DIC FTE) so that the two cards can be matched in the computer by the addressee Materiel Readiness Command.)

cc 44-58

Serial Number - The unique notation (A/N) which identifies a single unit of a family of like units, normally assigned sequentially. (For items with fewer than 15 digits the entry should be zero filled from the left; e.g., Serial Number ABC123456789 will be entered as: 000ABC123456789.)

cc 59

Age - The length of time in years since manufacture of the item.

| <u>Codes</u> | <u>Description</u> |
|--------------|--------------------------------|
| 0 | Less than 1 year old |
| 1 | Over 1 year but less than 2 |
| 2 | Over 2 years but less than 3 |
| 3 | Over 3 years but less than 4 |
| 4 | Over 4 years but less than 5 |
| 5 | Over 5 years but less than 6 |
| 6 | Over 6 years but less than 7 |
| 7 | Over 7 years but less than 8 |
| 8 | Over 8 years but less than 9 |
| 9 | Over 9 years but less than 10 |
| A | Over 10 years but less than 15 |
| B | Over 15 years but less than 20 |
| C | Over 20 years but less than 25 |
| D | Over 25 years but less than 30 |
| E | Over 30 years but less than 35 |
| F | Over 35 years but less than 40 |

cc 60

Mileage - The total number of miles the vehicle has been driven.

| <u>Codes</u> | <u>Description</u> |
|--------------|----------------------|
| 0 | 0-500 miles |
| 1 | 501-1000 miles |
| 2 | 1001-2500 miles |
| 3 | 2501-5000 miles |
| 4 | 5001-7500 miles |
| 5 | 7501-10,000 miles |
| 6 | 10,001-15,000 miles |
| 7 | 15,001-20,000 miles |
| 8 | 20,001-25,000 miles |
| 9 | 25,001-30,000 miles |
| A | 30,001-35,000 miles |
| B | 35,001-40,000 miles |
| C | 40,001-45,000 miles |
| D | 45,001-50,000 miles |
| E | 50,001-60,000 miles |
| F | 60,001-70,000 miles |
| G | 70,001-80,000 miles |
| H | 80,001-90,000 miles |
| J | 90,001-100,000 miles |
| K | Over 100,000 miles |

cc 61

Hours of Operation - The total number of hours of operation registered on the attached hour meter.

| <u>Codes</u> | <u>Description</u> |
|--------------|---------------------|
| Ø | Less than 100 hours |
| 1 | 101 to 200 hours |
| 2 | 201 to 300 hours |
| 3 | 301 to 400 hours |
| 4 | 401 to 500 hours |
| 5 | 501 to 600 hours |
| 6 | 601 to 700 hours |
| 7 | 701 to 800 hours |
| 8 | 801 to 900 hours |
| 9 | 901 to 1000 hours |
| A | 1001 to 1250 hours |
| B | 1251 to 1500 hours |
| C | 1501 to 1750 hours |
| D | 1751 to 2000 hours |
| E | 2001 to 2250 hours |
| F | 2251 to 2500 hours |
| G | 2501 to 2750 hours |
| H | 2751 to 3000 hours |
| J | 3001 to 3250 hours |
| K | 3251 to 3500 hours |
| L | 3501 to 3750 hours |
| M | 3751 to 4000 hours |
| N | 4001 to 4250 hours |
| P | 4251 to 4500 hours |
| Q | 4501 to 4750 hours |
| R | 4751 to 5000 hours |
| S | 5001 to 5250 hours |
| T | 5251 to 5500 hours |
| U | 5501 to 5750 hours |
| V | 5701 to 6000 hours |
| W | 6001 to 6500 hours |
| X | 6501 to 7000 hours |
| Y | 7001 to 7500 hours |
| Z | Over 7500 hours |

Diagnostic Condition Codes - Codes used to express the condition of the major applicable components of the assets listed in cc 62-75 below.

A Satisfactory/Serviceable
B Not applicable to this asset
C Component Missing

| | Fair Wear & Tear | Accident | Missing Parts |
|---------------------------------|---------------------|----------|------------------|
| Reparable at User Level | D | E | F |
| Reparable at Intermediate Level | G | H | J |
| Reparable at Depot Level | K | L | M |
| Beyond Repair | N | P | - |

Major Components:

- cc 62 Frame
- cc 63 Engine
- cc 64 Transmission
- cc 65 Transfer
- cc 66 Drive Shaft and U-Joints
- cc 67-69 Routing Identifier Code-From (RIC-Fr) - Coded designation of
 the activity which initiated the transactions.
- cc 70 Axles
- cc 71 Body
- cc 72 Cable
- cc 73 Winch
- cc 74 Differential
- cc 75 Hydraulic System
- cc 76 Radio Wire Harness - For combat vehicles, enter the code
 specifying the radio wiring harness configuration necessary
 for the replacement vehicle.

| <u>Code</u> | <u>Configuration</u> |
|-------------|----------------------|
| A | VRC 12 |
| B | VRC 64 |
| C | VRC 46 |
| D | Dual; VRC 46/47 |
| E | Dual; GRC 106/VRC 46 |
| F | Dual; GRC 106/VRC 47 |
| G | VSC 3 |
| H | Dual; VSC 3 w/VRC 46 |
| J | Dual; VSC 3 w/VRC 47 |
| Z | None of the above |

cc 77-78 Blank

cc 79-80 Reject Code-From MRC to Reporting Activity - To be filled in only
 by the wholesale managing activity with the proper reject code
 when necessary. This action requires the entries in cc 4-6
 (RIC-To) and cc 67-69 (RIC-Fr) to be exchanged.

APPENDIX G



DEPARTMENT OF THE ARMY
UNITED STATES ARMY TANK-AUTOMOTIVE COMMAND
WARREN, MICHIGAN 48090

DRSTA-

SUBJECT: Disposition Instructions for Major Item Excess

1. Disposition instructions herein pertain to:

| MODEL | NSN | ITEM DESCRP |
|-------------|-----|-------------|
| EXCESS DCNs | | USA/SNs |

2. Process above item as indicated by

- Repair to TM- standards, complete with Basic Issue Items.
Use Priority for repairs and requisitioning required parts.
- Ship to activity in paragraph 3.
- Notify this office when repairs are complete. Instructions will follow.
- Use locally against Requisition
- MIMEX candidate. Await final disposition instructions.
- Item is serviceable:
 - Ship to activity in paragraph 3.
 - Use locally against Requisition
- Ship "as-is" to activity in paragraph 3.
- If desired, cannibalize LAW AR 750-1/710-2. Residue will be processed through local DPDO channels. See paragraph 6 for additional instructions.

DRSTA-

SUBJECT: Disposition Instructions for Major Item Excess

FTR/FTD card with status code is being transmitted separately to your address.

FTR/FTD card inclosed.

3. Ship item to:

MARK FOR:

PRIORITY:

PROJECT CODE:

UIC:

4. Fund citation for shipment will be held in abeyance pending receipt of estimated/actual cost of the shipment from the Transportation Officer servicing your organization. Cost information will be submitted to TACOM Finance and Accounting Division by message (ATTN: DRSTA-KFAM) or telephonically (AUTOVON 786-5975) within five days of the expected shipping date. Upon receipt of this information, a fund citation will be immediately furnished. Cited funds are to be entered on all Government Bills of Lading (GBL) and an obligation copy (copy #8 or stamped fiscal copy) of the GBL must be forwarded to TACOM (ATTN: DRSTA-KFAM).

5. Notification to this office will be made when:

Item is ready for shipping.

Item has been shipped. (Provide date, mode, carrier, & GBL.)

6. Special disposition instructions are:

7. POC is _____, DRSTA- _____, AUTOVON 786-

8. This letter advises consignee that follow-up status is directed to your installation in lieu of this NICP.

1 Incl

as

G-2

CF:

APPENDIX H

DATA SUMMARY

| LIN | NSN | NOMENCLATURE | UNIT/ TAEDP PRICE | NUMBER OF FTRS | NSN QTY (Fm FTR) | QTY X PRICE |
|--------|------------------|---------------------------------|-------------------------|----------------------|---------------------|----------------|
| W94030 | 2330-00-200-1785 | Tlr Ammo 1 1/2 Ton 2 Wheel M332 | 1,844 | 39 | 75 | 138,300 |
| W94441 | 2330-00-697-8102 | Tlr Uti 1 2 1/2 Ton 2 Wheel | 2,952 | 37 | 37 | 109,224 |
| X38562 | 2310-00-125-5679 | Trk Amb 1 1/4 Ton M893 | 9,329 | 1 | 1 | 9,329 |
| X38592 | 2310-00-579-9078 | Trk Amb 1 1/4 Ton M886 | 10,225 | 18 | 19 | 194,275 |
| X38639 | 2310-00-177-9256 | Trk Amb M718A1 | 10,185 | 6 | 6 | 61,110 |
| X39432 | 2310-00-782-6056 | Trk Amb 1/4 Ton M718 | 3,879 | 45 | 48 | 186,192 |
| X39447 | 2320-00-579-8942 | Trk Cgo 1 1/4 Ton M880 | 5,952 | 130 | 141 | 839,232 |
| X40009 | 2320-00-579-8957 | Trk Cgo 1 1/4 Ton M882 | 6,374 | 71 | 81 | 516,294 |
| | 2320-00-077-1616 | Trk Cgo 2 1/2 Ton M35A2 | 32,923 | 289 | 365 | 12,016,895 |
| | 2320-00-542-5633 | Trk Cgo 2 1/2 Ton M35A1 | 9,747 | 20 | 22 | 214,434 |
| | 2320-00-834-4507 | Trk Cgo 2 1/2 Ton M211 | 5,993 | 2 | 2 | 11,986 |
| | 2320-00-835-8463 | Trk Cgo 2 1/2 Ton M35 | 7,951 | 104 | 129 | 1,025,679 |
| X40077 | 2320-00-926-0873 | Trk Cgo D/S M35A2C | 32,422 | 34 | 43 | 1,394,146 |
| X40146 | 2320-00-077-1617 | Trk Cgo 2 1/2 Ton M35A2 | 34,871 | 257 | 303 | 10,565,913 |
| | 2320-00-542-5634 | Trk Cgo 2 1/2 Ton M35A1 | 10,059 | 11 | 20 | 201,180 |
| | 2320-00-834-4508 | Trk Cgo 2 1/2 Ton M211 | 6,378 | 3 | 3 | 19,134 |
| | 2320-00-835-8464 | Trk Cgo 2 1/2 Ton M35 | 8,374 | 24 | 30 | 251,220 |
| X40794 | 2320-00-050-8913 | Trk Cgo D/S 5 Ton M813A1 | 36,656 | 2 | 2 | 73,312 |
| | 2320-00-880-4614 | Trk Cgo D/S 5 Ton M54A1C | 11,685 | 2 | 2 | 23,370 |
| X40831 | 2320-00-835-8348 | Trk Cgo 5 Ton M54 | 21,773 | 7 | 7 | 152,411 |
| | 2320-00-050-8902 | Trk Cgo 5 Ton 6X6 M813 | 40,854 | 1 | 1 | 40,854 |
| | 2320-00-055-9266 | Trk Cgo 5 Ton M54A2 | 13,561 | 3 | 3 | 40,683 |
| X40968 | 2320-00-050-8890 | Trk Cgo LMB W/W M813 | 42,911 | 4 | 4 | 171,644 |
| | 2320-00-055-9265 | Trk Cgo LMB W/W M54A2 | 28,720 | 21 | 25 | 718,000 |
| | 2320-00-835-8335 | Trk Cgo LMB W/W M54 | 22,468 | 3 | 3 | 67,404 |
| X59600 | 2320-00-395-1875 | Trk Trac M123 W/WN | 52,861 | 2 | 2 | 105,722 |
| X59874 | 2320-00-226-6081 | Trk Trac M123A1C W/WN | 83,757 | 436 | 530 | 44,391,210 |
| | 2320-00-294-9552 | Trk Trac M123C W/WN | 25,813 | 5 | 6 | 154,878 |
| | 2320-00-879-6177 | Trk Trac XM123E2 W/WN | 40,933 | 20 | 20 | 818,660 |
| X63436 | 2320-00-873-5426 | Trk Wrk 10 Ton M553 | 139,672 | 1 | 1 | 139,672 |
| | | | | 1,598 | 1,931 | 74,652,363 |

APPENDIX I

CONSOLIDATED DATA

| A | B | C | D | E | F | G | H | I | J |
|------|--------|----|-----|-------|----------|--------|------|-----------|------------|
| 873 | 32422 | 15 | 43 | 4664 | 1394146 | 108.47 | 1.98 | 27619.40 | 27619.40 |
| 1616 | 32923 | 15 | 365 | 61194 | 12016696 | 167.65 | 3.06 | 367979.94 | 395599.31 |
| 1617 | 34871 | 15 | 303 | 66718 | 10565914 | 220.19 | 4.02 | 424935.75 | 620545.13 |
| 1785 | 1844 | 20 | 75 | 3837 | 138300 | 51.16 | .70 | 969.24 | 821504.38 |
| 1875 | 52861 | 14 | 2 | 103 | 105722 | 51.50 | 1.01 | 1065.50 | 822569.88 |
| 4507 | 5993 | 15 | 2 | 193 | 11986 | 96.50 | 1.76 | 211.26 | 622781.13 |
| 4508 | 6378 | 15 | 3 | 272 | 19134 | 90.67 | 1.66 | 316.86 | 623098.00 |
| 4614 | 11685 | 20 | 2 | 257 | 23370 | 128.50 | 1.76 | 411.38 | 623509.38 |
| 5426 | 139672 | 20 | 1 | 97 | 139672 | 97.00 | 1.33 | 1855.92 | 625365.25 |
| 5633 | 9747 | 15 | 22 | 6428 | 214434 | 292.18 | 5.34 | 11443.60 | 836808.88 |
| 5634 | 10059 | 15 | 20 | 4084 | 201180 | 204.20 | 3.73 | 7503.37 | 844312.25 |
| 5674 | 9329 | 7 | 1 | 37 | 9329 | 37.00 | 1.45 | 135.10 | 844447.38 |
| 6056 | 3879 | 12 | 48 | 6414 | 186192 | 133.63 | 3.05 | 5680.34 | 850127.75 |
| 6081 | 83757 | 14 | 530 | 29373 | 44391208 | 55.42 | 1.08 | 481447.00 | 1331574.75 |
| 6177 | 40933 | 14 | 20 | 3176 | 818660 | 158.80 | 3.11 | 25440.94 | 1357015.75 |
| 8102 | 2952 | 25 | 37 | 10377 | 109224 | 280.46 | 3.07 | 3357.03 | 1360372.75 |
| 8335 | 22468 | 20 | 3 | 258 | 67404 | 86.00 | 1.18 | 794.07 | 1361166.75 |
| 8348 | 21773 | 20 | 7 | 1859 | 152411 | 265.57 | 3.64 | 5544.66 | 1366711.50 |
| 8463 | 7951 | 15 | 129 | 37802 | 1025679 | 293.04 | 5.35 | 54897.48 | 1421609.00 |
| 8464 | 8374 | 15 | 30 | 7174 | 251220 | 239.13 | 4.37 | 10972.62 | 1432581.50 |
| 8890 | 42911 | 20 | 4 | 444 | 171644 | 111.00 | 1.52 | 2609.93 | 1435191.50 |
| 8902 | 40854 | 20 | 1 | 63 | 40854 | 63.00 | .86 | 352.58 | 1435544.00 |
| 8913 | 36656 | 20 | 2 | 452 | 73312 | 226.00 | 3.10 | 2269.66 | 1437813.75 |
| 8942 | 5952 | 7 | 141 | 14633 | 839232 | 103.78 | 4.06 | 34088.30 | 1471902.00 |
| 8957 | 6374 | 7 | 61 | 9964 | 516294 | 123.01 | 4.81 | 24857.35 | 1496759.25 |
| 9078 | 10225 | 7 | 19 | 2747 | 194275 | 144.58 | 5.66 | 10993.38 | 1507752.75 |
| 9256 | 10185 | 12 | 6 | 461 | 61110 | 76.83 | 1.75 | 1071.98 | 1508824.75 |
| 9265 | 28720 | 20 | 25 | 3984 | 718000 | 159.36 | 2.18 | 15674.04 | 1524498.75 |
| 9266 | 13561 | 20 | 3 | 296 | 40683 | 98.67 | 1.35 | 549.87 | 1525048.50 |
| 9552 | 25813 | 14 | 6 | 403 | 154878 | 67.17 | 1.31 | 2035.74 | 1527084.25 |

ALL ITEMS. AVERAGE DAYS/ITEMS= 143.845
 ALL TRANS. AVERAGE DAYS/TRANS= 170.715
 NUMBER OF ASSETS IN FILE= 1931
 NUMBER OF TRANSACTIONS IN FILE= 1598

TABLE HEADER IDENTIFIERS (PERTAIN TO HEADINGS ONLY)

| | | | |
|---|---------------------------------|---|--|
| A | NSN | G | AVERAGE EXCESS DAYS PER ITEM IN NSN |
| B | ITEM COST | H | TOTAL NSN EXCESS DAYS AS PERCENT OF AN ITEM'S LIFE |
| C | LIFE OF ITEM IN YEARS | I | NON-USE COST PER NSN |
| D | NUMBEK OF ITEMS IN NSN | J | CUMULATIVE NON-USE COST FOR ALL NSNS |
| E | TOTAL EXCESS DAYS FOR NSN | | |
| F | NUMBER OF ITEMS TIMES ITEM COST | | |