



REPORT TO THE CONGRESS

Need For Improvement In The Army's Supply System To Ensure The Recovery Of Repairable Spare Parts

B-146874

Department of the Army

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COMPTROLLER GENERAL OF THE UNITED STATES
WASHINGTON, D.C. 20548

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To the President of the Senate and the
Speaker of the House of Representatives

The General Accounting Office has reviewed the practices followed by the Department of the Army to control the return of repairable spare parts to depot or field maintenance centers for repair and reissue.

Our review of about 12,000 issues of spare parts at seven military installations, that should have resulted in the return of a like quantity of unserviceable parts, showed that some 70 percent of these parts were not returned to maintenance activities for repair and reissue. Many of the parts not returned to the supply system were, at various times, in short supply Army-wide.

We believe that the situation is responsible for unnecessary expenditures for spare parts purchased to replace those lost to the supply system. For example, during the period July 1964 through March 1966, the Army purchased \$7.9 million worth of spare parts of the types which we found were not being recovered, repaired, and reissued. The "loss" of these items to the Army supply system resulted principally from the following management weaknesses.

- Incorrect and inconsistent recoverability codings in publications issued by the National Inventory Control Points.
- Lack of effective action by supply activities to obtain the return of repairable items.

The Department of the Army, concurring in our findings, has taken action to improve its management of repairable spare parts. We believe that the Army's actions, properly carried out, should improve substantially the recovery of repairable items and reduce procurement costs.

We are reporting this matter to inform the Congress of the need for improvement in the Army's management of repairable spare parts and of the actions which it has taken in this direction.

B- 146874

Copies of this report **are** being sent to the Director, Bureau of
the Budget; the Secretary of Defense; and the Secretary of the Army.

A handwritten signature in black ink, appearing to read "James B. Argets". The signature is written in a cursive style with a large initial "J" and "A".

Comptroller General
of the **United** States

C o n t e n t s

	<u>Page</u>
INTRODUCTION	1
BACKGROUND	1
FINDINGS	3
Recoverable repair parts not being returned to the supply system for repair	3
Recoverability coding in Army publications	4
Procedures followed by installation supply and maintenance activities	7
Conclusions	8
Agency actions	9
SCOPE OF REVIEW	10
	<u>Appendix</u>
APPENDIXES	
Principal officials of the Department of Defense and the Department of the Army responsible for administration of ac- tivities discussed in this report	I 13
Letter dated October 19, 1967, from the Department of the Army to the General Accounting Office	II 14

REPORT ON
NEED FOR IMPROVEMENT IN THE ARMY'S SUPPLY SYSTEM
TO ENSURE THE RECOVERY OF REPAIRABLE SPARE PARTS
DEPARTMENT OF THE ARMY

INTRODUCTION

The General Accounting Office has reviewed the practices and procedures relating to the return of recoverable repair parts to Army repair facilities. The review was made pursuant to the Budgeting and Accounting Act, 1921 (31 U.S.C. 53), and the Accounting and Auditing Act of 1950 (31 U.S.C. 67). The scope of our review is shown on page 10.

BACKGROUND

The nature of certain military items of supply dictates that, as they become unserviceable, they are to be returned to designated locations for repair. Such items are classified as recoverable, repairable items, and they are assigned a recoverability code which denotes the level of maintenance to which they are to be returned in order to be restored to a serviceable condition.

Our review was directed toward items having the following two recoverability codes:

"R" items--Applied to repair parts and assemblies which are economically repairable at field maintenance activities.

"T" items--Applied to high-dollar-value recoverable repair parts which are subject to special handling and are issued on an exchange basis. Such repair parts are normally repaired or overhauled at depot maintenance activities.

The determination of an item's recoverability is made at the National Inventory Control Point (NICP) responsible

for managing the item. The recoverability information is furnished to user activities through Army publications, such as technical manuals (TMs) and supply catalogs.

Each Army troop installation has a post consolidated supply activity (hereinafter referred to as supply activity) that provides supply services for using activities on the installation. These supply activities have a responsibility for receiving repairable items turned in by the using activities and for repairing the items or shipping them to repair locations designated by the NICPs. However, Army regulations specify that each using unit has primary responsibility for turning in recoverable items for repair.

It is of primary importance in the management of recoverable items that users return unserviceable items to the supply system promptly so that they may be repaired and may become available for reuse. If the system is functioning properly, there should be an unserviceable turn-in for every replacement issue of a repair part coded "R" or "T". Exceptions occur when replaced items are lost or are considered uneconomically repairable and are to be scrapped; i.e., cost to repair exceeds 65 percent of acquisition cost.

The prompt return of recoverable items has been a matter of continuing interest to the Army, since the non-return of these items to the supply system causes the Government to buy new ones to meet requirements. To improve the return ratio, the NICPs periodically make reviews of recoverable items to identify using activities not returning unserviceable items. Notices are sent to these installations requesting that unserviceable items be returned. In addition, some NICPs publish a quarterly listing of repairable items which are in critical short supply.

The principal officials of the Department of Defense and the Department of the Army responsible for the administration of the activities discussed in this report are listed as appendix I.

FINDINGS

RECOVERABLE REPAIR PARTS NOT BEING RETURNED TO THE SUPPLY SYSTEM FOR REPAIR

The Army has established procedures governing the return of unserviceable recoverable repair parts to the supply system for repair and reuse; however, we found that substantial quantities of these parts were not being returned by using activities. In our review at seven troop installations of some 12,000 issues of replacement parts that should have resulted in the return of a like quantity of unserviceable parts, we found that about 70 percent of these parts had not been returned to the supply system for repair. Further, some of the unserviceable parts that were not recovered were, at various times, critical items in short supply Army-wide.

Our review showed that the principal reasons these parts were not returned were (1) incorrect and inconsistent recoverability codings in publications issued by the NICPs and (2) lack of action by supply activities to obtain the return of repairable items. The failure to return repairable parts results in unnecessary costs to procure new parts to meet requirements. If the recoverable parts had been returned, a large percentage could have been repaired at a substantially lower cost than that involved in procuring new assets.

We believe that the recovery of repairable parts that are currently being "lost"--not available--to the Army supply system would result in substantial cost savings. For example, from July 1964 through March 1966, the Army procured \$7.9 million worth of 13 parts that were included in our review. We found that significant quantities of these parts were not being recovered because of erroneous recoverability publications.

The detailed results of our review are discussed below.

Recoverability coding in Army publications

Our tests showed that, of the repair parts not recovered, about 61 percent resulted from incorrect and inconsistent codings in publications issued by the NICPs. The publications are used as guides at the installation level. We found also that recoverability codings published in technical manuals did not always agree with the codings shown in supply catalogs or other publications. Thus, supply analysts at NICPs considered some repair parts to be recoverable while using activities were disposing of these same parts because the publications they used indicated that the parts were not recoverable. On the basis of our review, we believe that the amount of assets erroneously disposed of in this way is substantial.

At the installations visited, several different publications were utilized by supply personnel in determining recoverability status of repair parts. For example, we found that four different publications were used as primary references by supply groups responsible for managing designated Federal Stock Classes at Fort Sill. A fifth set of publications was used as the primary reference in the field maintenance shops. In a review of 36 items in the reference publications utilized at Fort Sill, we found a difference in the recoverability codings for 18 items between technical manuals and supply catalogs, for 20 items between supply catalogs and the selected items master file, and for 17 items between supply catalogs and the supply activity's daily balance listing of recoverable parts.

Our review at Fort Rucker revealed that on many items the technical manuals either did not show recoverability codes or showed codes which conflicted with the coding shown in other current publications. Supply officials at Fort Rucker informed us that they considered items as nonrecoverable when they were not shown as recoverable in the technical manuals. The recoverability codings shown in technical manuals were used when they conflicted with the codings in other publications.

In our review at other installations, we found that the only source references utilized by using activities in

determining an item's recoverability status were technical manuals, although the supply activities at the installations used a variety of publications. However, in some cases, the recoverability status of the same item was coded differently in two or more technical manuals. For example, of 18 items reviewed at Fort Bliss that were managed by the Army Tank-Automotive Command, 14 were included in two or more technical manuals. Six of these items were coded recoverable in one or more technical manuals and nonrecoverable in the other technical manuals. In one instance, an automotive repair part--FSN 2920-953-9784--was shown as recoverable in two technical manuals and nonrecoverable in the other three technical manuals.

In addition, many of the technical manuals in use did not show current coding. In one case, as much as 39 months elapsed from the time an item was determined to be recoverable **by** maintenance personnel of the Weapons Command until the proper code appeared in the applicable technical manuals. Accordingly, in many instances using activities and supply activities were not aware that an item had been classified as recoverable.

At the Aviation Materiel Command (AVCOM), where special efforts have been made to conform the various publications, we found no differences in the recoverability codings. The data, from which technical manuals, supply catalogs, and other publications are compiled, are compared electronically at AVCOM; and any differences found are resolved by technical personnel. We also found relatively few errors in such codings by the Missile Command. However, the other NICPs did not have established procedures for comparing and compiling such information.

For example, officials at the Electronics Command (ECOM) made a review of procedures as a result of our audit. Their review revealed that information on recoverability was supplied by ECOM's technical and cataloging division; by the requirements branch of the stock fund division; and by the national maintenance point, Fort Monmouth, New Jersey. The information from these sources was not coordinated by ECOM; and, as a result, differences in codings often existed. At the time of our review, ECOM was establishing procedures to

conform such information and to resolve inconsistencies in the codings shown in its publications.

At the Mobility Equipment Command (MECOM), the information was so conflicting that it took MECOM officials over 5 months to furnish us information on the recoverability and end-item application of 59 selected repair parts. Even then, some of the information furnished was not in agreement with internal codes used at MECOM.

At the Weapons Command (WECOM), recoverability codes had not been included in supply catalogs although they were generally shown in the technical manuals. However, WECOM was updating its records so that the coding could be included in future supply catalogs. In April 1966, WECOM issued a listing of recoverable items not coded as recoverable in applicable technical manuals and supply catalogs, as an interim means of furnishing this information to the field until the publications could be revised.

In addition to erroneous disposals because of errors in NICP publications, we found that repairable items had been scrapped because locally prepared listings did not show the items as repairable, even though they were coded as recoverable in available supply catalogs. For example, the supply activity at Fort Sill was using locally prepared daily balance listings to determine the repairability of used parts. However, the activity had no procedures for the periodic verification of the codings shown on these listings. Our review showed that a number of these codings were in error.

In another instance, a contractor maintaining aircraft and related items at Fort Rucker was using a contractor-prepared publication, called an edit book, as a primary source for determining repairability. In this case, items shown as not recoverable in this publication were scrapped even though they were coded as repairable in Army publications issued by the NICPs.

Procedures followed by installation
supply and maintenance activities

Improved controls are needed at installations to ensure that recoverable items are turned in when they become unserviceable and to ensure the correctness of recoverability codings at the supply activity level. Our tests of repairable items that were not recovered showed that, in **39** percent of the cases, there was inadequate follow-up by the installation's supply activities to ensure that unserviceable items would be turned in when "R" and "T" coded items were issued as replacements.

For example, we found that some supply activities prepared listings of recoverable items and distributed the listings to responsible using activities with requests for explanations and justifications when issues of recoverable items exceeded assets turned in. However, many of the using activities neither turned in the listed items nor furnished explanations as to why the repairables had not been turned in. In most of these cases, we found that the supply activities took no further action.

This lack of positive action by supply activities is illustrated by the condition we found at Fort Sill. At that installation, we reviewed in detail 20 repairable items and found that the using activities had unserviceable stock on hand for four of the items. For example, one field maintenance activity had 22 unserviceable engine starters on hand which should have been turned in for repair. This item was in a critical short supply position Army-wide.

Officials at supply activities generally advised us that they had no authority or responsibility for ensuring that repairables were recovered. Pursuant to Army regulations, they depended on unit commanders to ensure that turn-ins were made. In this respect, regulations do specify that each using unit is responsible for turning in the repairables which are replaced with serviceable parts.

In addition, we found that a contractor at Fort Rucker was not turning in repairable items to the supply system as

required by Army regulations. Instead, the contractor was either repairing the items or scrapping them on the basis of its determination that they were not economically repairable.

After we called our finding to the attention of the installation officials at Fort Rucker, they informed the contractor that items coded as recoverable must be returned to the supply system and that requests for such items must be backed up with a turn-in of a like item. We were advised that the recoverable parts held by the contractor would be inventoried and that any excesses would be returned to the supply system.

Conclusions

We believe that, although Army regulations are basically sound in providing for the recovery of items that can be economically repaired and reused, the implementation of these regulations has been weak in a number of instances at both the NICP and the installation levels. The principal weakness at the NICP level appears to have been a lack of procedures to ensure correctness and consistency of codings in publications used by Army installations to determine recoverability.

At the installation level, the supply activities appeared to lack sufficient authority to enforce the turn-in of repairable items, although they are the logical organizations to effect such recoveries. As a result, these activities had generally not adopted a policy of performing adequate follow-up to ensure receipt of a repairable item when an "R" or "T" coded item was issued as a replacement. In our opinion, such a policy, with or without directional authority, could substantially improve the rate of recoveries and minimize overstocking by using maintenance activities.

We believe that a substantial increase in the recovery rate could significantly reduce the need for costly new procurements. This opinion is based on the following facts: (1) only about 30 percent of the repairable items included in our tests were actually turned in by the using units,

(2) procurements on some of the items that were not recovered have been significant, and (3) unserviceable items are generally repaired at substantially less cost than the cost to procure new assets.

Agency actions

We brought our findings to the attention of the Department of Defense and proposed to the Secretary of the Army that (1) the NICPs be instructed to design procedures to ensure the correctness of recoverability information in technical manuals, supply catalogs, and related publications and (2) the procedures at Army installations be reviewed and strengthened as necessary to provide the supply activities with an effective means of exercising local control over the stockage and turn-in of items coded as recoverable.

By letter dated October 19, 1967, the Deputy Assistant Secretary of the Army (Installations and Logistics) informed us that the Department of the Army concurred in our findings and proposals. (See app. II.)

In regard to our proposals, he stated that Headquarters, Army Materiel Command, would instruct the NICPs to review appropriate procedures and design new procedures where necessary to ensure compatibility of recoverability information in technical manuals, supply catalogs, and related publications and that this program would be closely monitored by the Department of the Army. He further stated that the Army had taken action to establish the necessary local controls which, when properly implemented, would ensure that unserviceable repairables are returned to the proper repair agencies expeditiously so that they can be repaired and returned to the supply system as efficiently as practicable.

We believe that the Army's actions, properly carried out, should improve substantially the recovery of repairable items and reduce procurement costs.

SCOPE OF REVIEW

Our review of recoverable items was directed primarily to the policies, procedures, and practices followed in the control and return of these items. For this purpose, we selected for review a sample of recoverable parts that appeared to warrant attention because of significant issue history, low return rates, and recent procurements. We identified, at seven Army National Inventory Control Points, selected supply transactions for further review at troop installations. These NICPs were the Army Weapons Command, the Army Ammunition Procurement and Supply Agency, the Army Tank-Automotive Command, the Army Aviation Materiel Command, the Army Electronics Command, the Army Mobility Equipment Command, and the Army Missile Command.

We then examined the selected recoverable parts and supply transactions at seven Army installations. These installations were Fort Bliss, Texas; Fort Rucker, Alabama; Fort Sill, Oklahoma; Fort Benning, Georgia; Fort Bragg, North Carolina; Fort Hood, Texas; and Fort Riley, Kansas. Our review covered the period March 1965 to November 1966.

In connection with our review at the installation level, we inquired into the extent of audit coverage given this area by the Army since 1965. We found no audits directly involving the recovery of repairable items, although various other aspects of supply activities had been reviewed. Subsequently, we have been advised by the Department of the Army that the Army Inspector General, the Army Audit Agency, and other inspection agencies have been directed to cover this function as one of the areas requiring special emphasis.

APPENDIXES

PRINCIPAL OFFICIALS OF THE
DEPARTMENT OF DEFENSE AND THE DEPARTMENT OF THE ARMY
RESPONSIBLE FOR ADMINISTRATION OF ACTIVITIES
DISCUSSED IN THIS REPORT

	Tenure of office	
	From	To
<u>DEPARTMENT OF DEFENSE</u>		
SECRETARY OF DEFENSE:		
Robert S. McNamara	Jan. 1961	Present
DEPUTY SECRETARY OF DEFENSE:		
Paul H. Nitze	July 1967	Present
Cyrus R. Vance	Jan. 1964	June 1967
ASSISTANT SECRETARY OF DEFENSE (INSTALLATIONS AND LOGISTICS) :		
Thomas D. Morris	Sept. 1967	Present
Paul R. Ignatius	Dec. 1964	June 1967
Thomas D. Morris	Jan. 1961	Dec. 1964
<u>DEPARTMENT OF THE ARMY</u>		
SECRETARY OF THE ARMY:		
Stanley R. Resor	July 1965	Present
Stephen Ailes	Jan. 1964	July 1965
ASSISTANT SECRETARY OF THE ARMY (INSTALLATIONS AND LOGISTICS):		
Dr. Robert A. Brooks	Oct. 1965	Present
Daniel M Luevano	July 1964	Oct. 1965
COMMANDING GENERAL, ARMY MATERIAL COMMAND:		
Gen. Frank S. Besson, Jr.	July 1962	Present



DEPARTMENT OF THE ARMY
OFFICE OF THE ASSISTANT SECRETARY
WASHINGTON, D.C. 20310

19 OCT 1967

Dear Mr. Bailey:

This is in response to your letter of August 15, 1967, to the Secretary of Defense requesting comments on your draft report titled: "Review of Management Controls Over Recoverable Repair Parts" (OSD Case #2647).

The inclosed statement provides the Department of the Army position on your report. This reply is made on behalf of the Secretary of Defense.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Vincent P. Huggard".

Vincent P. Huggard

Deputy Assistant Secretary of the Army (I&L)
(Materiel Systems)

1 Incl

Army Position
Statement

Mr. C. R. Bailey
Acting Director
Defense Accounting and Auditing Div
US General Accounting Office
Washington, DC 20548

DEPARTMENT OF THE ARMY POSITION

ON

GAO Draft Report No. SM-75, Dated August 1967

Review of Management Controls Over Recoverable Repair Parts

I. POSITION SUMMARIES

A. GAO Position Summary

The GAO contends that although the Army has established procedures for the return of unserviceable recoverable repair parts to the supply system for repair and reuse it was found that substantial quantities of these parts were not being returned by using installations. A review of some 12,000 replacement parts issued at seven troop installations showed that about 70% of these parts were not returned to the supply system for repair. Further, some of the unserviceable parts that were not recovered were, at various times, critical items in short supply Army-wide. The principal reasons these parts were not returned were (a) incorrect and inconsistent recoverability codings in publications issued by the National Inventory Control Points (NICPs) and (b) lack of action by supply activities to obtain the return of reparable items.

B. Army Position Summary

The Army concurs with the GAO in that: (1) the Army has established basically sound procedures concerning the return of unserviceable recoverable repair parts to the supply system for repair and reuse, (2) substantial quantities of these parts were not being returned by using installations, (3) the failure to return reparable parts results in unnecessary costs to procure new parts to meet requirements, and (4) a large percentage could have been repaired at a substantially lower cost than that involved in procuring new assets. In regard to the two recommendations, Army has taken action to establish the necessary local controls which when properly implemented will assure that unserviceable reparable items are returned to proper repair agencies or units expeditiously so that they can be repaired and returned to the supply system as efficiently as is practicable.

II. PROJ FOR A POSITION

The Army is for so it recognized the problem of failure of using ins ons to ly return k l k r parts to the system for repair and reuse. In i connection AR 50 Incl 1) 1 presently e "Return of Cri and tensive y Managed con tems has been i nd will be reissued under i : i ntensive Management of Secondary Items' This isic i the scope of ing

regulation by providing for application of intensive management principles and practices to critical secondary items and establishing the CONUS NICP's as the central controlling authority on these items, and provide a mandatory provision for CONUS NICP's to publish complete new Supply Letters each quarter listing the items selected for intensive management. The regulation also prescribes policies and outlines procedures for the automatic (as opposed to AR 755-1 "Reporting, Utilization, and Redistribution of Installation, USAMC, and Oversea Command Excess Personal Property") and timely return, to the designated sources of secondary items specified in the NICP Supply Letters. In addition, it advises major field commanders that continued support of field forces, by the NICP's, is contingent upon aggressive participation, by field forces, in the returns programs.

The Army has dispatched a command letter to all Major Commands (Incl 2)¹ which requested commands to review and strengthen procedures to insure that supply activities are provided with closer controls over stockage and turn-in of recoverable items.

To further assure expedited and balanced return of reparable with serviceable issues, a DA program has been established which places stringent control throughout the entire system, from unit to repair facility, and in supply, maintenance and transportation channels. This program, known as the Closed Loop Support (CLS) program is applicable to a very selective group of items and is now only operational for SEA. A new regulation is being developed which will expand the program world-wide and provide greater clarification and control. The CLS program is established to control the flow of critical serviceable and unserviceable end items, components, or assemblies to and from respective commands to maintain prescribed levels of readiness. It requires special management attention and the total integration of supply and maintenance activities within the Army's logistics system. The functions of supply, retrograde, overhaul and resupply are arrayed and closely supervised to provide the visibility for insuring that critical items are expeditiously retrograded to a designated overhaul/rebuild facility and returned to the command through the supply system. Necessary controls and reports will be established for each DA approved program to assure immediate response to planning, programming, funding and other management requirements. Entry of specific end items, components and assemblies is directed by DA or recommended by a major commander.

III. ARMY POSITION ON GAO FINDINGS

See IB and II, above.

IV. ARMY POSITION ON GAO CONCLUSIONS

a. Concur that Army Regulations are basically sound in providing for the recovery of items that can be economically repaired and reused.

b. Concur in principle that there appears to be some weakness at the NICP level in the lack of procedures to **assure** correctness and consistency of **codings** in publications used by Army installations to determine recoverability.

c. Concur that at installation level, the supply activities appeared to lack sufficient authority to enforce the turn-in of reparable items.

V. ARMY POSITION ON GAO RECOMMENDATIONS

Concur. Headquarters, US Army Materiel Command will instruct NICP's to review appropriate procedures and design new procedures where **necessary to assure compatibility of** recoverability information in technical *manuals*, **supply** catalogs, and related publications. This program will be closely monitored by DA.

Procedures at Army installations will be reviewed and strengthened as necessary, see Inclosure 2.(1)

VI. OTHER COMMENT

None,

¹GAO note: Inclosures not included.