



# *REPORT TO THE CONGRESS*



## Savings Available If Shipping Containers For Military Electronic Equipment Are Reused

8-146917

Department of the Army

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FEB. 15, 1968



COMPTROLLER GENERAL OF THE UNITED STATES  
WASHINGTON, D.C. 20648

B-146917

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

The General Accounting Office has reviewed the utilization by the Department of the Army of reusable containers for electronic equipment. This report presents our findings and the corrective actions taken by the Army on our **proposals**.

We found a need for improvement in the Army's procedures for identifying containers and making them available for transfer to manufacturers of electronic equipment for the shipment of newly produced electronic equipment. Such use of Government-furnished shipping containers would aid materially in reducing procurement **costs**,

From **June** 1962 through July **1965**, the Army purchased various types of shipping and storage containers even though similar reusable containers valued at about \$1.1 million **were** available in Army depots at the time the procurements **were made**. During the same period, reusable containers valued at about \$327,000 **were** disposed of. We found that containers were not being utilized because Army procedures did not require procurement **and** supply personnel to coordinate their efforts and identify containers already available in the Army **supply** system.

We discussed the potential utilization of containers with appropriate Army officials during our review and pointed out specific instances in which these containers could be supplied to contractors **as** Government-furnished material. In response, the Army did furnish containers **valued** at **\$489,880** to **various** contractors.

In commenting on our findings **and** proposals, the Deputy Assistant Secretary of Defense (**Supply and Services**) **agreed** in **October** 1967 that **additional** actions must be taken to improve the management of reusable containers for all types of equipment. He informed us that controls over the management of **such** containers at the various Army Commands **would** be assessed **and** revised **as** necessary. He also **stated** that **all** the **military** services and the Defense **Supply Agency** had been directed to **conduct** a review and to correct any deficiencies found. In **future** **audit, work, we** will inquire into the **effectiveness** and **adequacy** of the corrective actions taken,

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We are reporting these matters to the Congress because of the potential for significant improvement in the management and use of reusable containers.

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 cursive script, reading "Thomas P. Abate".

Comptroller General  
of the United States

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REPORT ON  
SAVINGS AVAILABLE IF SHIPPING  
CONTAINERS FOR MILITARY  
ELECTRONIC EQUIPMENT ARE REUSED  
DEPARTMENT OF THE ARMY  
INTRODUCTION

The General Accounting Office has examined into the utilization by the Department of the Army of certain types of reusable containers (transit cases) for electronic equipment. Our examination, made pursuant to the Budget and Accounting Act, 1921 (31 U.S.C. 53), and the Accounting and Auditing Act of 1950 (31 U.S.C. 67), was directed primarily toward those matters apparently needing attention in the management of containers, and it did not include an overall evaluation of the management of inventories by the Army Electronics Command.

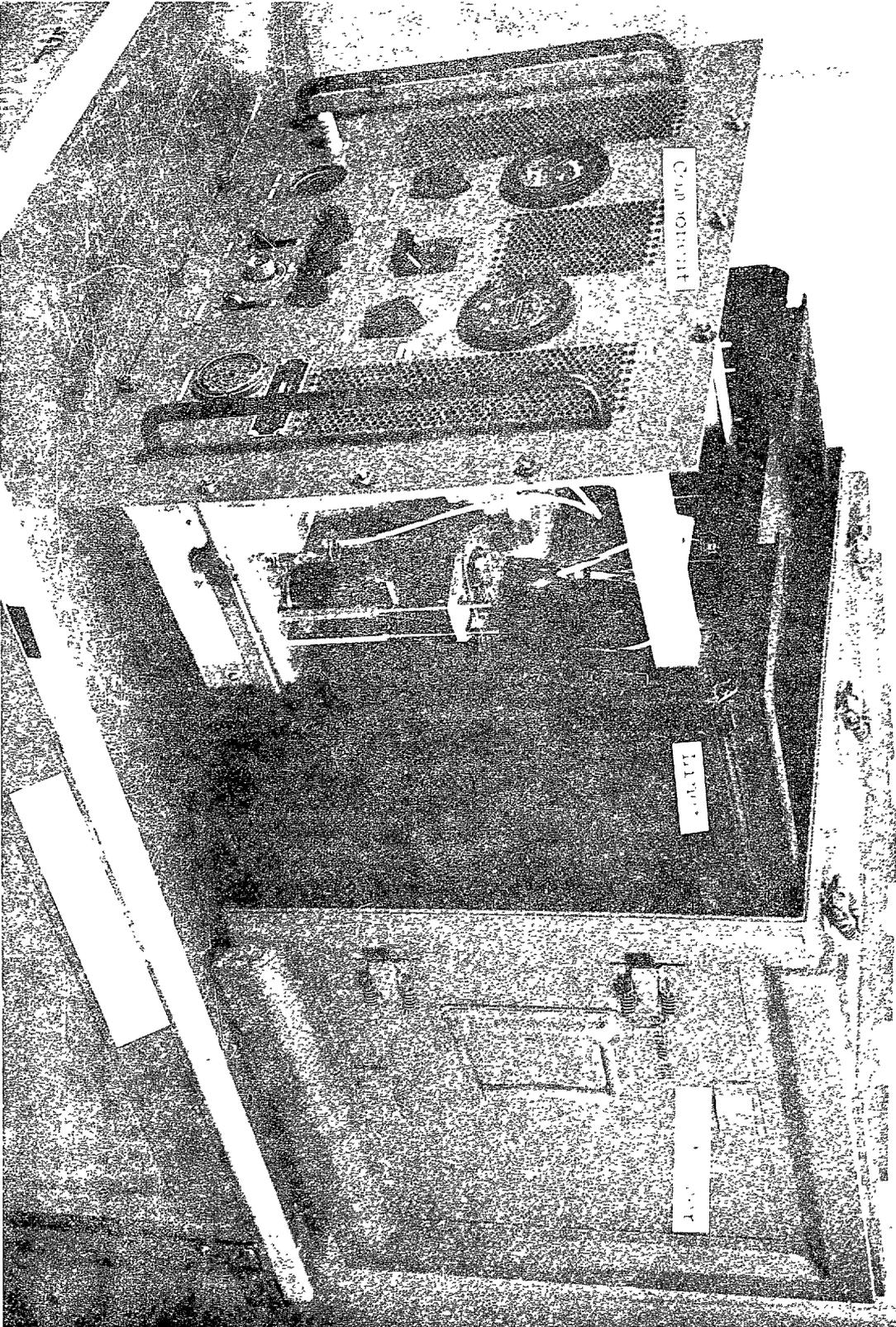
We examined records and reports on the utilization of reusable containers for selected electronic equipment procured during the period June 1962 through July 1965. We completed our review in November 1967. Our examination was made at the United States Army Electronics Command, Fort Monmouth, New Jersey, and Philadelphia, Pennsylvania; the Tobyhanna Army Depot, Tobyhanna, Pennsylvania; the Lexington-Blue Grass Army Depot, Lexington, Kentucky; and the Sacramento Army Depot, Sacramento, California.

The reuse of containers has been a continuing problem in the Department of Defense. We previously reported on similar situations in the Navy in July 1964 and February 1965 (B-146917).

BACKGROUND

A transit case is a reusable container which is procured in varying sizes and weights. It consists of an outer shell and a cover. A liner, which is usually suspended by springs within the case is required to protect the contents from shock during shipment. (See photograph on p. 2.) Hereinafter, transit cases are referred to as containers. Initially, these containers were intended to house electronic components during shipment, storage, and usage.

POWER SUPPLY PP-685 A/TRC  
PART OF AN/TRC-24



In September 1960 a procedure was instituted which provided for the removal of the components from containers for installation into shelters and for the reutilization of cases as Government-furnished shipping containers. A shelter is generally constructed of metal, is large enough to house the completely assembled electronic equipment and operating personnel, and is usually transported by helicopter or truck. Because of the shelter program, containers are now being used primarily as shipment containers.

The United States Army Electronics Command (ECOM)--a major subcommand of the United States Army Materiel Command (AMC)--is responsible for the research, design, development, testing, and supply management of electronic equipment, including those components which are shipped and stored in containers.

The Procurement and Production Directorate of ECOM is responsible for procuring electronic equipment and for providing necessary engineering support. The Materiel Readiness Directorate is responsible for management of worldwide inventory and maintenance of electronic equipment for the Army.

The containers included in our review are used for components of the AN/TRC-24, AN/TTC-7A, AN/TCC-3, AN/TTC-7, TA-182/u, and TH-5/TG electronic systems.

A list of the principal officials of the Department of Defense and the Department of the Army responsible for the administration of activities discussed in this report is shown in appendix I.

## FINDINGS

### IMPROVEMENT NEEDED IN PROCEDURES FOR UTILIZING REUSABLE CONTAINERS

Improvement was needed in the Army's procedures for identifying **available** containers for electronic equipment so that the containers could be utilized as Government-furnished material in connection with future procurements.

From June 1962 through July 1965, the Army procured containers costing about \$2.2 million even though similar containers valued at about \$1.1 million were on hand in Army depots and could have been furnished to contractors at the time the procurements were made. Furthermore, during the same period, containers valued at about \$327,001 were disposed of which could have been utilized. Our review indicated that the containers were not furnished to the contractors because ECOM's procedures did not require procurement and supply personnel to coordinate their efforts and identify containers that were in the supply system,

On September 30, 1960, the Department of the Army notified ECOM that, because of increased emphasis on mobility in the field, most communication electronic equipment would thereafter be mounted in shelters, making it unnecessary to use the shipping containers in the field. In May 1962 the Army directed all field organizations to return to the storage depots containers that would become available as a result of the shelter installation program, stating that they were urgently needed to be furnished to contractors as shipping containers.

We discussed the utilization of containers with ECOM personnel in August 1964 and later identified specific instances in which available containers could be furnished to contractors. Subsequently, the Army did furnish containers valued at \$489,000 to various contractors, but we noted additional instances in which cases were still being procured even though similar items were available. A summary of the values of containers available during the period June 30, 1962, through July 30, 1965, is shown as appendix 11.

Further details of our findings follow.

#### Reusable containers not utilized effectively

During our review,, we identified about 54,000 units of different types of containers stored at the Tobyhanna, Lexington, and Sacramento Army depots, many of which could

have been utilized in lieu of new procurements. These containers, valued at over \$2 million were used primarily for shipping components of AN/TRC-24, AN/TTC-7A, AN/TCC-3, AN/TTC-7, TA-182/u, and TH-5/TG electronic equipment, Some examples follow.

1. Seven contracts had been awarded by ECOM from August 1962 through March 1964 for the procurement of components of the AN/TRC-24, including containers valued at about \$993,000. Even though similar cases valued at about \$600,000 were available at the time procurements were initiated, they were not furnished to any of the contractors, For example, 1,476 cases (Federal stock number 5820-392-8077) were procured with the AN/TRC-24 radio set in August 1962. At the time of the procurement, 1,221 of these containers were available in depot stock and could have been supplied to the contractor, In July and August 1964, a large quantity of containers for components of the AN/TRC-24 were available, and in some instances the containers were being donated to several States or were being disposed of at a fraction of their initial cost. This set utilizes 13 different types of containers, (See app. III.)
2. In January 1965 containers for AN/TTC-7A components valued at about \$91,000 were in stock at Tobyhanna. At that time, ECOM issued a solicitation for bids for additional AN/TTC-7As, including containers valued at about \$58,000. We called this fact to the attention of management personnel at Tobyhanna in January 1965 and they advised ECOM that available containers could be utilized. ECOM subsequently advised us that the containers had not been used because they had been assigned temporary control numbers instead of Federal stock numbers and ECOM had been unable to identify them as being applicable to the AN/TTC-7A. (See p. 6 for further discussion.)

Need for improved procedures for  
determining availability of containers

ECOM procedures did not require the inventory managers to ascertain whether containers were available prior to the procurement of electronic equipment. Under ECOM procedures, stock availability data are compared with procurement parts lists to determine what items can be furnished to contractors. These parts lists indicate the various components and subassemblies of the items being procured,

**but we found that** containers were not separately shown (except those for components of the **AN/TRC-24**). In many instances, therefore, ECOM personnel could not identify applicable containers and **could not determine** whether available **stocks** of containers could be supplied to **contractors**. As a result, new containers **were** being purchased.

Shipping containers for the **AN/TRC-24** were listed on the parts lists but the stock on hand was **not** utilized because the lists **were** not reviewed by ECOM personnel. They **apparently had requested the parts lists from the ECOM library** but **had not received them**. In addition to the parts lists, however, there are other publications which **show** the components for electronic equipment; but ECOM procedures did not require a review of **other available** publications,

There was **also** a need for improved guidance in ECOM's procedures for identification and utilization of containers without liners. Liners are required within the cases to protect the components from **shock** during shipment. Since the containers without liners were not **separately reported from those with liners**, the entire stock of containers was considered as not **being** available for contractor utilization.

In September 1966 there were in stock \$1.5 million worth of containers, both with **and** without liners, for the **AN/TRC-24**, which could **have** been utilized, **However**, ECOM's procedures did not provide for the depots either to **separately** identify reusable containers with liners so that **they could be** used or to determine the practicability of fabricating or procuring liners separately for those containers for which no liners were on hand.

**Many** of the containers were eventually authorized for **disposal** because they did not have liners. For example, records at Tobyhanna showed that about 3,200 containers for the **AN/TRC-24** were disposed of during **fiscal** years 1963, 1964, and 1965 because they had no liners. Most of **these** cases could have **been furnished** to contractors during **fiscal** years 1965 and 1966 if new liners had been obtained. Generally, those **cases** disposed of either were **donated** to various State governments or were **sold** for a fraction of their cost.

#### Complete asset identification not obtained

ECOM was not able to identify the availability of some containers because they **were** stored in depots under depot control numbers rather than **Federal** stock numbers (FSNs).

Our examination showed that 1,014 reusable containers, valued at \$110,000 had been assigned depot control numbers and were therefore not identified as being available when new cases were procured. For example, in January 1965 we suggested to ECOM that certain containers be furnished to contractors. ECOM, however, was unable to identify and utilize these cases because they had not been assigned FSNs and descriptive data had not been requested from the depots. As a result 700 new containers were procured at a cost of \$58,000 although similar containers were in depot stock, Tobyhanna disposed of 193 units of one type for about \$318, while 210 of the same type were being procured at a cost of \$46,200.

Prior to February 1, 1965, if material was delivered to an Army depot but was not identified by an FSN, the depot would assign its own identification numbers for stock control purposes. Since that date the responsibility for assigning control numbers and for maintaining the descriptive data has been delegated to ECOM. In September 1966 we were informed that ECOM personnel had been assigned to review and identify all major items assigned depot control numbers, including containers, in order to determine what stocks were on hand in the depots.

## Evaluation of internal audit

We examined into the work performed by the Army Audit Agency (AAA) in the area of supply management. We found that AAA had issued a special report on its Audit of Supply Management at ECOM on March 15, 1965. This audit had been made for the primary purpose of evaluating the effectiveness with which ECOM accomplished the supply management of repair parts.

One section of this report dealing with the utilization of transit cases, stated:

"A combination of unresolved, long-standing problems concerning major component transit cases and inadequate coordination between the PEMA Division and the Stock Fund Division has: (i) precluded the use of major component outer metal cases and covers as Government-furnished property (GFP); (ii) resulted in significant usable quantities being exceeded; (iii) made the proper identification of incomplete **cases** difficult and expensive because of incorrect condition reservation classification \*\*\*."

We were advised that ECOM had taken certain specific actions in response to the conditions reported by the Army Audit Agency. Our review indicated, however, that further improvement in the management of containers was needed. The Army agreed that additional actions were required and stated that controls and procedures at all commodity commands would be revised as necessary.

- - - -

We have in the past reported on other instances where available reusable containers have not been advantageously utilized to fill existing requirements. In one instance, the available containers were disposed of and procurements were made to satisfy existing requirements by the Navy. In another instance, procurement of containers was initiated by the Navy for existing requirements when there were cases already available in the **supply** system. These matters are contained in our reports of February 1965 and July 1964, respectively (B-146917).

In our prior reports we made recommendations for improvements, and corrective actions were taken or initiated. We believe, however, that the prior cases, coupled with the matters discussed in this report, show the need for management personnel to look into possibilities for increased

utilization of containers at all other inventory control points in the military services.

#### Agency comments

There was general agreement on the need to improve the management of containers **after** we brought these matters to the attention of the Secretary of Defense on August 7, 1967, and actions were taken or initiated, as discussed below. We were advised, however, that the Army did not agree with our estimates of the potential **savings** which might **have** been realized through better utilization of containers. Specifically, the Department of Defense **commented:**

"**Many** of the containers involved were without liners and it has been found that in such cases the **cost** of providing liners and of bringing the containers **up to** usable conditions **often** closely approaches **or exceeds** the cost of procuring new containers complete **with liners.**"

During the course of our review, ECOM officials stated that it was uneconomical to either fabricate or procure new liners for those containers not having liners. **When** we requested cost data in support of this opinion, however, we were advised that ECOM had no cost estimates for in-house fabrication of liners. Moreover, we found that in the **past** the Army had, on at least one occasion, obtained a limited number of **separate liners** in order to utilize available containers.

We recognize that the costs of procuring or fabricating a small number of liners could exceed the costs of new containers with liners, We believe, however, that the potential savings **inherent** in the acquisition of a large quantity of liners **to** facilitate the reutilization of available containers valued at over \$1 million could have been substantial, In our opinion, the possible savings warranted greater management attention than was given to this problem,

#### Recommendations and agency actions

In view of the need for improvement in the management of reusable containers, we recommend in line with our proposals brought to the attention of the Secretary of Defense on August 7, 1967, that (1) the **Secretary of the Army** take appropriate actions to improve the **management** of reusable containers for electronic equipment and (2) the Office of **the** Secretary of Defense consider the need for a Defense-wide review and evaluation at other appropriate inventory

control points of their procedures regarding the **recovery and reutilization** of shipping **and/or** storage containers.

The Deputy Assistant Secretary of Defense (**Supply and Services**), by letter dated **October 16, 1967** (copy included as **app. IV**) commented on our findings and proposals. In **general**, he informed us that the Army agreed that additional actions must be taken to **improve** the management of reusable containers, not just at the Army Electronics **Command**, but at all other Army commodity commands. To ensure that improvements are made, controls **and procedures** in effect at these **commands** will be **assessed and revised as necessary**. The Deputy Assistant Secretary **also** informed us that all the military services and the **Defense Supply Agency** had been directed to conduct a review of their **procedures** for recovery and utilization of containers and to correct any deficiencies uncovered.

We will inquire into the effectiveness **and adequacy of these** actions in **our** future audit work.

**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	Aug. 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
UNDER SECRETARY OF THE ARMY:		
David E. McGiffert	July 1965	Present
Stanley R. Resor	Mar. 1965	July 1965
Vacant	Dec. 1964	Mar. 1965
Paul R. Ignatius	Mar, 1964	Dec. 1964
ASSISTANT SECRETARY OF THE ARMY (INSTALLATIONS AND LOGISTICS) :		
Dr. Robert A. Brooks	Oct. 1965	Present
Daniel. M. Luevano	July 1964	Oct. 1965
CHIEF OF STAFF, UNITED STATES ARMY :		
Gen. Harold K. Johnson	July 1964	Present

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

	<u>Tenure of office</u>	
	<u>From</u>	<u>To</u>
<u>DEPARTMENT OF THE ARMY</u> (continued)		
DEPUTY CHIEF OF STAFF <i>FOR</i> LOGIS- TICS:		
Lt. Gen. Lawrence 3. Lincoln, Jr.	Aug. 1964	Present
COMMANDING GENERAL, UNITED STATES ARMY MATERIEL COMMAND:		
Gen. Frank s. Besson, Jr.	July 1962	Present

SUMMARY OF VALUES OF CONTAINERS  
 FOR THE PERIOD  
 JUNE 30, 1962, TO JULY 30, 1965

<u>Electronic equipment</u>	Value of procurements		<u>Total</u>
	Prior to August 1964	Subsequent to August 1964	
AN/TRC-24	\$ 992,950	\$362,790	\$1,355,740
Less disposals			
AN/TTC-7A	136,130	58,100	194,230
AN/TCC-3	260,850	-	260,850
AN/TTC-7	84,650		84,650
TA-182/u	247,590	-	247,590
TH-5/TG	30,720	-	30,720
	<u>\$1,752,890</u>	<u>\$420,890</u>	<u>\$2,173,780</u>

<sup>a</sup>Cases furnished subsequent to August 1964; none prior to that date.

Value of cases available as GFP not furnished			Total	Value of cases furnished as GFP (note a)
<u>Prior to August 1964</u>	<u>Subsequent to August 1964</u>			
\$ 600,250	\$352,530	\$ 952,780	\$397,410	
	<u>327,210</u>	<u>327,210</u>		
<u>600,250</u>	25,320	625,570		
51,730	58,100	109,830	28,010	
93,080	-	93,080	64,000	
74,280	-	74,280	-	
181,260	-	181,260	-	
<u>30,720</u>	<u>-</u>	<u>30,720</u>	<u>-</u>	
<u>\$1,031,320</u>	<u>\$ 83,420</u>	<u>\$1,114,740</u>	<u>\$489,420</u>	

**APPENDIX III**

**REUSABLE CONTAINERS INCLUDED IN OUR EXAMINATION**

<u>Federal stock number</u>	<u>Corresponding management control number (note a)</u>	<u>Electronic equipment</u>
5820-264-7568		AN/TRC-24
5820-284-0357 (note b)	5820-G54-0675	
5820-295-7125		
5820-392-8074	5820-G54-0678	
5820-392-8075 [note b)	5820-G54-0679	
5820-392-8076		
5820-392-8077		
5820-392-8078		
5820-393-2030	5820-G54-0677	
5820-504-7187	5820-G54-0133	
5820-510-4759)	5820-G54-0674	
5820-537-7899) (note b)	5820-G54-0676	
5820-566-4915		
5805-392-8080		AN/TTC-7A
5805-392-8081		
5805-534-3052		
5805-545-8242		
	5805-G51-0019)	
	5805-G53-2314) (note c)	
	5805-G98-4861)	
	5805-G53-2312) (note c)	
	5805-G98-4862)	
	5805-G53-2310) (note c)	
	5805-G98-4863)	
	5805-G53-2303) (note c)	
	5805-G98-4864)	
	5805-G53-2311) (note c)	
5805-306-2309	5805-G54-1951	
5805-306-2310	5805-G54-1888	AN/TCC-3, AN/TTC-7
5805-306-2311	5805-G54-1938	
6130-284-0358		
5805-682-951.1		TA-182/u, TH-5/TG

<sup>a</sup>G51 and G98 designate Tobyhanna Army Depot.  
 G53 designates Lexington Army Depot.  
 G54 designates Sacramento Army Depot.

<sup>b</sup>Included in AAA report No. PH-65-25.

<sup>c</sup>Identical case6 stored in different depots,



ASSISTANT SECRETARY OF DEFENSE  
WASHINGTON, D.C. 20301

16 OCT 1967

SR  
INSTALLATIONS AND LOGISTICS

Mr. William A. Newman, Jr.  
Director, Defense Division  
General Accounting Office  
Washington, D.C. 20548

Dear Mr. Newman:

Reference is made to your letter of August 7, 1967 which forwarded for review and comment a draft report on utilization of reusable shipping containers for electronic equipment by the Department of the Army (OSD Case #2640).

The report states that additional costs of \$1.4 million were incurred at the Army Electronics Command (ECOM) in the period June 30, 1962 to July 30, 1965 because ECOM, through procedural deficiencies, did not provide available transit cases as government furnished property (GFP) to contractors. The report also indicates that these deficiencies were pointed out in an Army Audit Agency (AAA) report, but that no corrective action was taken prior to the time of your review. You recommend to the Secretary of the Army that action be taken by ECOM to assure more effective management of reusable transit containers and that the Commanding General, ECOM, re-emphasize the need to take timely and positive corrective action on findings and recommendations of internal audits.

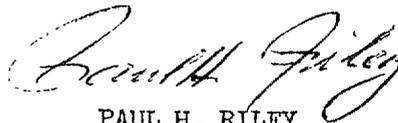
The Army agrees that additional actions must be taken to improve the management of reusable containers, not just at ECOM, but at all commodity commands. To assure that these improvements are made, controls and procedures in effect at these commands will be assessed and revised as necessary.

The Army does not agree with your contentions as to the possible savings which might have been incurred through better utilization of containers. Many of the containers involved were without liners and it has been found that in such cases the cost of providing liners and of bringing the containers up to usable conditions often closely approaches or exceeds the cost of procuring new containers complete with liners.

[See GAO note.]

In regard to your final recommendation that the Office of the Secretary of Defense consider the need for a Defense-wide review of this area, all of the Services and DSA have been directed to conduct a review and correct any deficiencies uncovered.

Sincerely,



PAUL H. RILEY  
Deputy Assistant Secretary of Defense  
(Supply and Services)

GAO Note: Comments relating to internal audit deleted in that the report recognizes that ECOM has taken certain specific actions on findings of internal audit,