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REPORT TO  
THE CONGRESS OF THE UNITED STATES

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REVIEW OF  
THE ACQUISITION AND INSTALLATION OF COMPUTERS  
BY THE  
UNITED STATES ARMY, PACIFIC

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DEPARTMENT OF THE ARMY



BY  
THE COMPTROLLER GENERAL  
OF THE UNITED STATES

APRIL 1967

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

B- 160417

APR 28 1967

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

The General Accounting Office has made a review of the acquisition and use of computers in supply operations by the United States Army, Pacific, a subject of special interest to the Congress. The details of this review are provided in the accompanying report.

The situation may be summarized as follows:

During 1965 and 1966, the United States Army, Pacific, replaced data processing equipment used in supply and related transactions at important command depots with large-scale computer systems. Benefits expected to be derived from these computers could not be fully realized, we concluded, because improvements and corrections of supply management problems had not been completed prior to their installation.

Because of many continuing problems, a large percentage of United States Army, Pacific, supply transactions cannot be processed routinely by the computers. Transactions must be manually researched, edited, and reprocessed as in the past. The volume of manual handling of supply documents by the Army slows the processing and limits significantly the advantages of a computer system,

These difficulties are due primarily to long-standing problems disclosed in numerous previous reports by this Office. In general, we reported that:

1. Inventory procedures were not adequate to ensure accuracy of inventory and warehouse location records.
2. Management practices led to excesses of some supply items and critical shortages of others.

On April 14, 1966, we brought the findings contained in this report to the attention of the Secretary of Defense. We proposed that implementation of the plan to install large-scale computers at command depots

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be delayed until an effective program had been instituted to correct problems inherent in the supply system,

The Assistant Secretary of the Army (Installations and Logistics), commenting on our draft report, stated on July 7, 1966, that the Army concurred in the findings generally but disagreed with our recommendation. He said that a standard supply system, supported by computers, was essential to correct the problems identified.

The Assistant Secretary has stated also that the Army's objective is to achieve an efficient and automated supply system in the Pacific and that, since the equipment has been installed, withdrawal would be retrogressive, costly, and disruptive of supply operations during a critical period. He advised that the results presently achieved at subordinate command depots indicate that substantial improvement had been made.

On completion of planned improvements, the Assistant Secretary added, inventory control activities and installations in the four Pacific commands will be reassessed and necessary additional improvements initiated.

We agree that computer equipment is essential for effective management of large inventories and great numbers of supply transactions; however, we do not believe that the full benefits of this costly equipment can be realized until the underlying system **and data are improved.**

Current information shows that Pacific theater supply operations under the new automated system are characterized by problems similar to those discussed in this report: out-of-stock positions have substantially increased; stock balances and related records are inaccurate; requisition processing is delayed; and numerous errors in customer requisitions continue.

In view of the problems that would accompany withdrawal of the computers at this time, we are not recommending this course of action. We are recommending that the Secretary of Defense bring this report to

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the attention of all military agencies to illustrate the need for correcting basic weaknesses in operating systems if the most effective utilization of automatic data processing equipment is to be realized.

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

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REPORT ON  
REVIEW OF  
THE ACQUISITION AND INSTALLATION OF COMPUTERS  
BY THE  
UNITED STATES ARMY, PACIFIC

INTRODUCTION

During the past several years, the General Accounting Office has issued a number of reports concerning supply management problems within the United States Army, Pacific. A listing of these reports is included as appendix IV.

This review was undertaken to evaluate the consideration given to these problems in the Army's decision to install large-scale computer equipment for processing supply and related transactions in the Pacific Area commands.

Our review was 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). The scope of our review is set forth on page 20.

BACKGROUND

The United States Army, Pacific (USARPAC), with headquarters at Fort Shafter, Hawaii, is the major command responsible for Army operations throughout the Pacific area. To carry out its logistic and operational responsibilities prior to the hostilities in Vietnam, USARPAC had four major subordinate commands as follows:

U.S. Army, Hawaii (USARHAW)  
U.S. Army, Japan (USARJ)  
U.S. Army, Ryukyu Islands (USARYIS)  
Eighth U.S. Army (EUSA), Korea

After the initiation of hostilities in Vietnam, the United States Army, Vietnam, was also established as a subordinate command of

USARPAC, except that USARPAC has no direct control over the military operations in Vietnam.

Logistics support for the Army in the Pacific is provided through depots under the control of the four major subordinate commands. Most supply support for the forces in Vietnam is provided either through direct shipments from the United States or from the USARYIS depot located on Okinawa. The overall management of inventories, including the computation of requirements, ordering of replenishment stocks, redistribution of assets, and control of disposal actions, had been assigned to an Inventory Control Point (ICP) located at USARPAC Headquarters in Hawaii.

On November 1, 1966, the responsibility for the computation of requirements and ordering of replenishment stocks for USARYIS was assumed by that Command in a move designed to improve supply support for Vietnam. The ICP in Hawaii has retained these responsibilities with respect to the other three Commands.

In general, requisitions for most supplies and material are forwarded by customer units to the depots for processing. If material is on hand at the depot, it is issued to the requisitioner. If material is not on hand, high-priority requisitions are forwarded to the supply sources in the United States and low-priority requisitions are back-ordered at the depot.

Until recently, the subordinate command depots had been utilizing punch-card data processing equipment for supply and financial accounting data processing. Punch-card equipment, as compared to computers that utilize magnetic tape and electronic "memory" units for storage and processing of data, is relatively slow and has limited processing capabilities.

At the present time, large-scale computer equipment is in use at the Army depots in Japan, Korea, and Okinawa, and the computer

capability of USARPAC Headquarters has been enlarged to enable the depot in Hawaii to process its transactions at that location. The data processing programs being utilized were designed primarily to expedite the flow of requisitions and related documents and to provide information for financial accounting purposes.

Standardization of the supply system at the subordinate command depots had been under consideration for several years. After a series of studies, a USARPAC concept for a standard supply system, commonly referred to as Project 3S, was evolved. The basic concept of the project was to standardize depot supply functions through the use of automatic data processing equipment (ADPE). The system was designed to meet the accounting requirements of the subordinate commands and to support the USARPAC ICP. It incorporates the Military Standard Requisitioning and Issue Procedures (MILSTRIP), the Uniform Materiel Issue Priority System (UMIPS), and the Military Standard Transaction Reporting and Accounting Procedure (MILSTRAP).

Logistics management in the Pacific area encompassed over 603,000 different items valued at more than \$1.3 billion at June 30, 1966, as follows:

	Inventory on hand and due-in ( <u>millions</u> )
USARHAW	\$ 58.4
USARJ	94.7
USARYIS	913.1
EUSA	<u>234.8</u>
	<u>\$1,301.0</u>



## FINDINGS AND RECOMMENDATION

### NEED FOR CORRECTION OF ..SUPPLY SYSTEM WEAKNESSES PRIOR TO ACQUISITION OF' LARGE-SCALE COMPUTERS

During the latter part of calendar year 1965 and the early portion of 1966, the United States Army, Pacific (USARPAC), replaced its data processing equipment with large-scale computer systems for the processing of supply and related transactions at its major subordinate command depots. In our opinion, the benefits expected to be derived from the installation of the computers could not be fully realized because needed system improvements and correction of significant supply management problems were not instituted prior to their installation. Because of these many problems, a great percentage of the supply transactions cannot be processed in a normal manner by the computer and must be manually researched, edited, and reprocessed. A significant volume of manual handling of supply documents, such as the Army has been experiencing, slows the processing of these documents and greatly limits the advantages of a computer system.

The supply problems now being experienced by the Army in the Pacific area are due to a variety of causes, many of which have existed for a number of years and have been the subjects of reports issued by this Office. (See app. IV.) Some of the more significant of these problem areas having a direct effect on the ability of the subordinate commands to process supply transactions in an effective and timely manner, involve:

1. The accuracy of inventory records,
2. The accuracy of warehouse location records,
3. The computation of realistic stockage objectives.

Many Army officials in USARPAC realized that the installation of computers would not correct the supply problems, but they proceeded with plans for acquisition of the equipment because they believed that the large volume and complexity of transactions at the subordinate commands could be processed more swiftly by computers and that this would eventually result in improved supply operations.

Although we are in general agreement with the need for computers to effectively process supply transactions, we believe that the ability to process transactions in shorter periods of time than was previously possible is of limited value to supply operations especially when a substantial portion of the input data being processed is erroneous with consequent inaccuracy in the output data to be used for supply management.

Details of our findings, both prior to and subsequent to the utilization of the new computers, follow,

Stock balances and related records are inaccurate

Effective utilization of computers requires that basic source data to be used in the processing system be accurate and reliable. Our review disclosed that stock records were frequently incorrect and often the actual quantities on hand were overstated, thereby distorting the true supply status. In other instances, material which was shown as being on hand in the inventory records was not found in the warehouses.

At USARYIS, the results of our physical inventory of 27 items revealed that the stock records could be reconciled with the actual quantities for only 9 of the items. Upon examining into the remaining 18 items, depot officials found that the stock records were overstated by \$1,388,900. The overstatements occurred because

issues and direct shipments to using units were posted as receipts at the depot and because other posting errors were made. After these posting errors in the stock records were corrected, inventory adjustments totaling \$406,500 were still required to correct imbalances on the records for which the causes were unidentifiable.

During August 1965, the Army made a study of the problem of warehouse denials at USARYIS. A warehouse denial results when the inventory records indicate that stock is on hand and a shipping order is issued but warehouse personnel cannot locate the designated items in the warehouse. This situation results generally from either incorrect inventory records or erroneous warehouse location data. Each time a shipping order cannot be filled, an investigation must be made to determine whether the inventory or warehouse location records require correction or whether the material was actually on hand but not located by warehouse personnel.

The Army's study of this matter indicated that, from a total of about 338,000 shipping orders issued, almost 18,000 warehouse denials had occurred during the period April 10 to August 21, 1965. At the time of the study, a backlog of 6,000 items was on hand to be investigated. The study concluded that, in addition to better training of personnel, a complete inventory and location survey would have to be accomplished to correct the records. A location survey was completed during calendar year 1966, but regularly scheduled inventories have not yet been initiated.

Our limited inventory verification at USARHAW disclosed that the quantities on hand were not in accord with the inventory records for 10 percent of the items examined. In addition, we found numerous instances where receipt documents had been misplaced for several months and where large quantities of unprocessed requisitions were on hand. Our test of some of the older requisitions

showed that they had been at the depot an average of **36** days and had not been processed to the point where the necessary supply action could be determined,

We believe that the inaccuracies in the inventory records could have been greatly reduced by better supply management procedures. Continued surveillance, through periodic physical inventories and location surveys, is necessary to ensure that inventory records are in agreement with the quantities actually on hand and that related stock records are accurate. Since accurate input is a prerequisite to the proper functioning of both manual and computerized systems, it seems evident that a substantial improvement is required in management and supervision of inventories to achieve improved supply performance. In view of inaccurate inventory records and the lack of adequate system procedures, the utilization of computers would not provide management with accurate information needed for effective supply management.

The Inventory Control Point did not issue replenishment requisitions for authorized stocks

**Any** attendant benefits from the installation of computers are minimized if replenishment of stocks is **not** routinely made. In this respect, our review disclosed that the Inventory Control Point (ICP) did not issue replenishment requisitions, as required, for the subordinate command depots during fiscal year 1965. **As** a result, a large number of items were out-of-stock and not available when requisitioned by using units, leading to the processing of a great **many** high-priority requisitions by the ICP for small quantities of items. In addition to the obvious effects of supplies not being available when needed, the processing of many requisitions **for** small quantities increases the workload throughout the supply system.

As of June 30, 1965, about 97,000 separate authorized inventory items were in out-of-stock positions (zero balances) at the major subordinate command depots in Hawaii, Japan, Korea, and Okinawa. This total represents about 22 percent of the 444,000 active items managed during the fourth quarter of fiscal year 1965 and is an increase in zero balances of 60 percent over the third quarter. Directly related to the number of out-of-stock items are the back orders, which are orders for material that is not on hand when the requisitions are received.

The total value of back orders in the Pacific commands at June 30, 1965, was \$223 million, of which \$85 million worth was for items that were authorized for stockage. By December 31, 1965, the value of back orders for items authorized for stockage had increased to \$141 million. **As** a further indication of the serious supply situation, **over** half of the requisitions processed for

USARYIS and EUSA during the 5-month period ending November 30, 1965, were on a priority basis rather than for routine stock replenishment, indicating that most of the items needed were not on hand at these locations at the time the requisitions were received.

The **most** significant effect of the shortages of stock was the inability of the four depots to fill their customers' requisitions in a timely manner. The Army has established a criterion of filling 85 percent of requisitions for stocked items on time--the due date depending on the priority of the individual requisition. As illustrated by the following schedule for the month of April 1965, all of the four Pacific area depots were experiencing difficulty in meeting this criterion.

<u>Commodity</u>	<u>Percent of requisitions filled on time-- April 1965</u>			
	<u>USARHAW</u>	<u>USARJ</u>	<u>USARYIS</u>	<u>EUSA</u>
Air	18%	5%	<b>11%</b>	7%
Electronics	23	9	7	18
Missile	19	0	8	12
Munitions and chemical	10	0	13	11
Tank-automotive	17	3	10	7
Weapons and fire control	17	4	12	8
<b>All other (note a)</b>	<b>34</b>	<b>4</b>	<b>29</b>	<b>34</b>

<sup>a</sup>Includes general supplies, subsistence, petroleum, medical items, and clothing.

To illustrate, in 1965 the ICP did not issue adequate replenishment requisitions for the EUSA subordinate command depot, and, as a result, a large number of items reached zero stock balances. When materials were required by HONEST JOHN missile battalions in

Korea, they were **not** available, and **EUSA** was required to issue individual requisitions to the ICP for the needed materials.

Our review of **49** selected requisitions for the above missile system disclosed that about 50 percent had been filled, but only after delays of from **39** to **234** days. The remaining requisitions were still back-ordered as of June 22, 1965, and had not been filled after periods ranging from 77 to 263 days. A further review disclosed that the ICP had no record for half of these unfilled requisitions.

ICP officials stated that one of the primary reasons for not issuing replenishment requisitions for subordinate command depots was a shortage of stock funds. We found that a shortage of funds did exist at USARPAC during the latter part of fiscal year 1965; further, other supply management problems such as the failure to cancel requisitions for items no longer required, duplicate requisitioning, and failure to repair items which were already on hand contributed to the shortage of funds.

Subsequently, when the ICP obtained additional funds from the Department of the Army, thousands of replenishment requisitions were generated by the ICP on which early delivery was specified. This large volume of high-priority requisitions further overburdened the supply system and resulted in distorted demand information. Moreover, since these replenishment requisitions were based on requisitioning objectives, many of which the ICP acknowledges were erroneous, further excesses and **long supply may have been generated**.

Thus, the Army had not developed and employed a method whereby replenishment requisitions are routinely processed. Instead, a great many high-priority requisitions for small quantities of items

had to be processed. The benefits to be derived by management through utilization of computers are negated in that problems concerning the acquisition of stocks for authorized inventory and delays in processing requisitions because of funding are still present.

Requisitions not canceled  
for items no longer required

Continuous managerial review and the taking of necessary actions relating to stockage requirements are necessary for effective supply management. Our review disclosed that excesses resulted when neither the ICP nor the depots canceled requisitions after being notified, by the using units, that the items were no longer required, requisitioning objectives were reduced, or necessary items had been obtained from stocks turned in by other using units. The requisitions for items which were no longer needed contributed to the fact that funds were subsequently not available to requisition needed materials.

As of June 30, 1965, excess stocks valued at about \$67 million had accumulated in the several depots. This amount represented nearly 9 percent of the total value of inventories on hand in the Pacific depots. To the extent that funds have been utilized for excess stocks, they are not available to requisition necessary quantities of those items which are out-of-stock.

We found that a Department of the Army team had recommended that the ICP review significant outstanding due-in requisitions to determine whether the requirement for which they were issued still existed. As a result of this review, almost \$13 million became available through the cancellation of requisitions and the correction of erroneous records and obligations. In spite of these



corrective actions, many requisitions for material no longer needed were still outstanding at **the** time of our review, and receipt of these requisitioned stocks would create additional excesses.

On a test basis we questioned the need for some of these stocks at USARHAW and USARJ. As a result, additional cancellation actions amounting to about \$144,500 were initiated by the depots. For example: The stock control records at USARHAW showed that three shop equipment sets for guided missiles, at a unit price of \$29,166, were on order and due-in from the continental United States (CONUS). We found no evidence of a requirement for this quantity.

In response to our request that depot officials ascertain whether or not an actual requirement existed, we were advised that the quantity had been requisitioned by a unit and had subsequently been canceled but that the cancellation had not been recorded. Depot officials initiated immediate cancellation of **this** requisition in the amount of \$87,498,

The example cited above and similar instances noted during our examination show that there are no procedures in effect for a continuing review by the depots of quantities on requisition. We believe that a continuous management review procedure, if properly implemented, should help to minimize recurrences of the failure to cancel requisitions for items no longer required.

#### Unserviceable items not scheduled for repair

One of the functions of supply management involves the classifying and scheduling of unserviceable items for overhaul and repair. An effective system for this function must be devised so that the full **benefits** of a Parge-scale computer system can be achieved. Our review showed that on June 30, 1965, USARPAC depots

had a total of \$75 million in repairable materials on hand and an additional \$4 million in materials which had not been classified as to their repairable status. A majority of the materials had not been scheduled for repair even though many of the same items were being requisitioned from CONUS sources. As a result, repairable parts were held in stock while available funds were unnecessarily earmarked for new items.

Stock records at USARHAW indicated that seven central office telephones costing \$8,119 each were on hand and that, although four of these telephones were in need of minor repairs, only one was scheduled for repair. In order to fill requirements for seven telephones, six new telephones had been requisitioned. Since sufficient quantities appeared to be on hand, we questioned USARHAW officials as to the need for requisitioning the six new telephones. As a result of their analysis, they determined that two telephone sets were required for another requisition, the remaining five were available to fill part of the requirement for the seven telephones, and only two new items were needed. The depot officials also advised us that they were initiating a cancellation action on the requisitions for four new telephones totaling \$32,476.

Failure to repair items on hand results unnecessarily in having available funds earmarked for new items while repairable items are held in inventory. In addition, delays in scheduling parts for repair may result in the repairables becoming excess in the event that demand for the items decreases.

On the basis of our review, we believe that the ICP originally overestimated its capabilities for managing the inventories in the Pacific. As a result, certain activities such as scheduling the repair and overhaul of parts were largely ignored. Instead of

authorizing the various depots to institute their own programs until the ICP was capable of assuming the responsibility, this alternative was disregarded. It is apparent that the problems relating to the management of unserviceable repairables must be resolved before the full advantages of any computerized system can be achieved.

### Current problems

Events subsequent to the time our field work was completed have indicated that the problems inherent in the supply system have not been solved and that supply support has not been as effective as it should be. During the period from January 1 to June 30, 1966, we found that 30-40 days were required to fill a requisition in Korea; that about 16 percent of all material release orders for the depot on Okinawa could not be filled because of erroneous inventory and warehouse location records; and that inordinate delays in the processing of all types of supply and related transactions resulted from programming difficulties.

Computer Science Corporation was awarded a contract to study the computer system and recommend changes toward improving its efficiency. As a result, short-term improvement has been effected in the time required to process supply transactions by elimination of some records, by program modifications, and by deletion of certain processing requirements. In November 1966, the existing contract with Computer Science Corporation was modified, at a cost of about \$1.6 million, to provide for, among other things, redesigning and reprogramming the entire system.

### Previous General Accounting Office reviews in the Far East

Since 1961 the General Accounting Office has issued twelve reports dealing with supply management problems in the Pacific area. A list of these reports is attached as appendix IV. Although these reports were related to particular installations or weapon systems, they disclosed a pattern of **supply management problems** encompassing numerous instances of unreliable records, the failure of responsible personnel to act on the basis of available knowledge, and the

serious effects of these conditions in terms of readiness or unnecessary costs.

The problems discussed in our previous reports are similar to those discussed in this report. For instance, our report on "Review of Supply Activities of the United States Army Signal Depot, Ascom City, Korea," May 1961 (B-132990), disclosed:

1. The ordering of major items from **CONUS** to replace unserviceable items, although the items being replaced were in excess of actual requirements.
2. Establishment of improper stockage objectives because estimated replacement factors were used although adequate actual demand data were available for use in such computations.
3. Failure to satisfy needs for end items by assembly of available excess components.
4. Inaccurate stock records.
5. Failure to fill requisitions when stocks were available for issue.

The work on this report was first completed in November 1959 and a follow-up was made in June 1960.

Also, our report on "Ineffective Supply Management Causing Shortages and Excesses of End Items and Repair Parts in **Okinawa**" dated December 23, 1964, B-133245, disclosed substantial ordering and retention of unneeded material, and the failure to order needed material. We found that this condition occurred because erroneous data was utilized, controls were lacking to check on the validity of the data, and prior decisions were not being reviewed in the light of more current information.

### Agency comments and our evaluation

We brought our findings to the attention of the Secretary of Defense on April 14, 1966, and proposed that the plan to acquire large-scale computers for the USARPAC subordinate commands be reconsidered until such time as an effective program was instituted to correct the basic problems in the supply system.

The Assistant Secretary of the Army (Installations and Logistics) commented on our findings by letter of July 7, 1966, a copy of which is included as appendix II to this report, and generally concurred in our findings. The Assistant Secretary, however, has stated that a standard supply system, supported by computers, is essential to the correction of deficiencies identified by our report and that, since the computers have been installed, withdrawal now would be retrogressive, inordinately costly, and unduly disruptive of supply operations during a critical period of support to the Pacific area. He has stated also that the Army's objective is to achieve an efficient and automated supply system in the Pacific area and that the equipment to accomplish this objective is now installed.

The Army acknowledged the existence of the problems disclosed by our review and advised that they will be corrected through the introduction of various system improvements, such as decentralization of retail-type functions and revised data handling procedures. Moreover, the Army advised that the results achieved by the uniform system at the subordinate commands indicated that substantial improvement had been made in reported deficient areas and that, on completion of planned improvement actions, all inventory control activities and installations in the four Pacific commands will be reassessed and necessary additional improvements initiated.

Recognizing the problems that would accompany withdrawal of the computers, we are not recommending this course of action. Although we agree with the need for computers in supply operations, we believe that correction of basic supply management problems is essential so that the full benefits of their utilization can be achieved. The ability to process large volumes of transactions in shorter periods of time than was previously possible is of limited value to supply operations when a substantial portion of the data processed is erroneous with consequent inaccuracy in the output data to be used for supply management.

As illustrated in our report, theater supply operations at the time of the installation of the computers were characterized by many long-standing deficiencies. Though the Army commented that computers were needed to improve supply operations, our recent work in the Pacific area has shown that theater supply operations under the new automated standard supply system are still characterized by the serious problems similar to those discussed in this report. Out-of-stock positions have increased substantially; stock balances and related records are still inaccurate; requisition processing is being delayed; and the identification of numerous errors in customer requisitions continues.

### Conclusions

The installation of large-scale automatic data processing equipment is of limited value unless existing basic weaknesses in operating systems are corrected. The failure to take such action negates or seriously reduces the effectiveness of such equipment. In our opinion, the acquisition and/or installation of large-scale computers, by the United States Army Pacific at its subordinate command depots, without correcting the serious problems in supply management negated many of the benefits which can be derived from

the computers. We believe that, while the computers will serve to increase the physical volume of documents processed, they will be of limited value without substantial improvement in other facets of management control within the supply system.

Recommendation

In view of the problems that would accompany the withdrawal of the computers at this time, we are not recommending this course of action. However, we recommend that the Secretary of Defense bring this report to the attention of military operating agencies to illustrate the need for correcting basic weaknesses in operating systems if the most effective utilization of automatic data processing equipment is to be realized.



### SCOPE OF REVIEW

Our review consisted primarily *of* an examination of selected USARPAC subordinate command depot stock control reports and records. Our effort was directed mainly toward the identification of supply management problems and an analysis of the extent to which the standardization of the USARPAC depot supply system would have a constructive bearing on these problems.

Our field work, which was completed in October 1965, was conducted at the following locations:

- United States Army, Pacific, Fort Shafter, Hawaii
- Eighth United States Army, Korea
- United States Army, Ryukyu Islands
- United States Army, Hawaii
- United States Army, Japan

**APPENDIXES**

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

	<u>Tenure of office</u>	
	<u>From</u>	<u>To</u>
<u>DEPARTMENT OF DEFENSE</u>		
SECRETARY OF DEFENSE:		
Robert S. McNamara	Jan. 1961	Present
DEPUTY SECRETARY OF DEFENSE:		
Cyrus R. Vance	Jan. 1964	Present
Roswell L. Gilpatric	Jan. 1961	Dec. 1964
ASSISTANT SECRETARY OF DEFENSE (INSTALLA- TIONS AND LOGISTICS):		
Paul R. Ignatius	Dec. 1964	Present
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	June 1965
Cyrus R. Vance	July 1962	Jan. 1964
ASSISTANT SECRETARY OF THE <b>ARMY</b> (INSTALLA- TIONS AND LOGISTICS) :		
Dr. Robert A. Brooks	Oct. 1965	Present
Daniel M. Luevano	July 1964	Oct. 1965
A. Tyler Port (acting)	Mar. 1964	July 1964
Paul R. Ignatius	May 1961	Feb. 1964
CHIEF OF STAFF, UNITED STATES ARMY:		
Gen. Harold K. Johnson	July 1964	Present
Gen. Earle G. Wheeler	Oct, 1962	June 1964

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>

DEPARTMENT OF THE ARMY (continued)

**DEPUTY CHIEF OF STAFF FOR LOGISTICS:**

Lt. Gen. Lawrence J. Lincoln, Jr.	Aug. 1964	Present
Lt. Gen. R. W. Colglazier, Jr.	July 1959	July 1964

UNITED STATES ARMY, PACIFIC

**COMMANDER IN CHIEF, U.S. ARMY, PACIFIC:**

Gen. Dwight E. Beach	Sept. 1966	Present
Gen. John K. Waters	Mar. 1964	Sept. 1966
Gen. James F. Collins	Apr. 1961	Feb. 1964

**ASSISTANT CHIEF OF STAFF, G-4:**

Maj. Gen. Oren E. Hurlbut	June 1966	Present
Maj. Gen. Andrew J. Adams	Sept. 1963	June 1966

**COMMANDING GENERAL, EIGHTH U.S. ARMY:**

Gen. Charles H. Bonesteel, III	Sept. 1966	Present
Gen. D. E. Beach	June 1965	Sept. 1966
Gen. Hamilton H. Howze	Aug. 1963	June 1965

**COMMANDING GENERAL, U.S. ARMY, RYUKYU ISLANDS:**

Lt. Gen. Ferdinand T. Unger	Oct. 1966	Present
Lt. Gen. Albert Watson, II	Aug. 1964	Oct. 1966

**COMMANDING GENERAL, U.S. ARMY, HAWAII:**

Maj. Gen. Roy Lassetter, Jr.	Aug. 1966	Present
Maj. Gen. C. Darnell, Jr.	Mar. 1963	Aug. 1966

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

Tenure of office  
From                      To

UNITED STATES ARMY, PACIFIC (continued)

COMMANDING GENERAL, U.S. ARMY, JAPAN:

Maj. Gen. Lloyd E. Fellenz

Apr. 1965      Present

Maj. Gen. Chester W. Clark

Sept. 1963      Apr. 1965



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

7 JULY 1966

Mr. R. W. Gutmann  
Associate Director  
Defense Accounting and Auditing  
Division  
U. S. General Accounting Office  
Washington, D. C. 20548

Dear Mr. Gutmann:

This is in response to your letter of 14 April 1966, to the Secretary of Defense requesting comments on your draft report titled: "Effect of Computers on Supply Deficiencies, United States Army, Pacific (USARPAC)" (OSD Case #2438).

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 "R. A. Brooks".

Robert A. Brooks

Assistant Secretary of the Army  
(Installations and Logistics)

1 Incl  
Army Position  
Statement

## DEPARTMENT OF THE ARMY POSITION

## ON

GAO DRAFT REPORT, DATED APRIL 14, 1966

"EFFECT OF COMPUTERS ON SUPPLY DEFICIENCIES  
UNITED STATES ARMY, PACIFIC (USARPAC)"

(OSD Case # 2438)

I. POSITION SUMMARIESA. GAO Position Summaries

The complicated funding and supply procedures and other significant problems found at USARPAC locations lead to erroneous stock balances, incorrect depot location records, and out-of-stock positions. As a result, many thousands of supply transactions are delayed or cannot be processed because they are improperly prepared, the inventory data is incorrect, or no stock is available. In each instance where a transaction cannot be automatically processed through a computer, manual research becomes necessary. A significant volume of manual handling of supply documents such as USARPAC has been experiencing, slows the processing of supply documents and limits the value of any increase in the speed with which the data can be processed, USARPAC is in the process of replacing punch-card data processing equipment with faster, large-scale computer systems to be used for processing of supply transactions at the four major subordinate commands. The installation of these computers, which will cost at least two million dollars annually, is premature because of the serious deficiencies in USARPAC supply management that preclude or greatly limit their effective use.

B. Army Position Summary

The Army generally concurs in the report findings but nonconcur in the recommendation. Deficiencies described in the report primarily assess supply operations of the USARPAC Inventory Control Point. Although the mission of the ICP was oriented toward wholesale management, during its formative period the ICP assumed responsibility for centralized performance of a number of retail type operations previously performed in part or in whole by the subordinate commands. Although data errors

reported by GAO were substantially caused by erroneous source documents emanating from the subordinate commands, voluminous and escalating workloads precluded adequate control by the ICP. Positive action had been initiated to correct deficiencies prior to the GAO survey. Installation of compatible ADPE and uniform systems and procedures at the subordinate commands, decentralization of retail type functions, and revised data handling procedures are major steps planned for improvement of operations. ADPE has been installed and data errors substantially reduced since the report. Decentralization of reorder computations and replenishment requisitioning are in progress. The type of system improvements being introduced meets common GAO/Army objectives. On completion of planned improvement actions, all inventory control activities and installations in the four Pacific commands will be reassessed and necessary additional improvements initiated. The GAO recommendation is not considered appropriate for the following reasons:

- a. A standard supply system supported by computers is essential to the correction of deficiencies identified by the report.
- b. The computers have been installed; withdrawal now would be retrogressive, inordinately costly, and unduly disruptive of supply operations during a critical period of support to the Pacific area.

## II. BACKGROUND FOR ARMY POSITION

USARPAC supply operations addressed by the report are carried out in four very different environments of the Pacific: Hawaii (USARHAW), Korea (EUSA), Japan (USARJ) and Okinawa (USARYIS). Over a number of years, each of these commands evolved their own supply and related funding procedures which, although based on DA regulatory guidance, were designed to meet individual area requirements. During the past three years, USARPAC has conducted an intensive program to improve and standardize supply Operations within the theater. Program concept provided for the centralization at the USARPAC ICP of supply control and financial management of the wholesale materiel inventories of the theater, and the decentralization of stock control and related financial inventory accounting functions to the major subordinate commands.

The initial phase of the program was the establishment of the USARPAC ICP in September 1963. Although the ICP was intended to function as a wholesale manager, the closure of the oversea supply agencies coupled with the lack of a computerized capability in the subordinate commands resulted



in the assumption by the **ICP** of the responsibility for centralized performance of a number of retail type operations inclusive of: processing of subcommand requisitions, receipt, processing and distribution of supply and shipment status and follow-up; financial transaction accounting (less billing); and centralized maintenance of stock record balances. Addition of these functions broadened the ICP's scope of operations to a point where involvement in day-to-day transactions became a serious deterrent to performance of its basic mission of wholesale inventory management. The GAO report clearly describes the problems accruing from attempted assimilation of a voluminous and escalating workload. Although the preponderance of errors were caused by invalid source documents emanating from the subordinate commands, the heavy workload precluded adequate control on the part of the ICP.

The second phase of the program was the establishment of a uniform computerized system at each of the four subordinate commands. This system was carefully designed to satisfy the needs of these commands for improved operational systems and equipment to account for and provide valid data for internal management and for input to the USARPAC ICP and the **CONUS** wholesale structure, and to accommodate an increasing workload. By having compatible equipment and standard systems at all of the subordinate commands, the wholesale management functions of the USARPAC ICP could be performed with greater assurance. Policies could be established and operational requirements set with better knowledge of the capabilities and limitations of the subordinate commands.

ADP equipment for the subordinate commands has been installed as follows: USARHAW (Sep 1965), USARYIS (Nov 1965), USARJ (Feb 1966) and EUSA (Mar 1966). The net annual increase in direct cost is estimated at \$280,000 excluding additional cost resulting from increased logistic activity in support of **SEA**.

Operation of the new system has permitted identification of deficiencies on a day-to-day basis, and supply management now reacts to current problems rather than historical reports. Reaction to identified problems has been met by assistance from CONUS based teams with resultant changes in the computer operated system. Special attention to supply and maintenance problems has materially improved theater logistic support including correction of reported deficient areas. For example, the GAO report states that the ICP detected over 20 million errors of various types prior to February 1966. The majority of these errors in input were caused by card handling and punching

deficiencies together with garbled radio transmission. Currently, output from the subordinate commands is prepared under program control and is provided the ICP by airmailed tapes. Accordingly, the ICP input error rate has dramatically declined. Duplicate requisitioning and failure to cancel requisitions for items no longer required are also major findings of the report. The uniform system at the subordinate commands integrates supply record keeping; thus a customer cancellation results in automatic preparation of a cancellation request on the CONUS supply source. Similarly, a duplicate customer request is detected by reference to a 90-day open requisition file and processing action stopped, thus eliminating duplicate shipment and expenditure of manpower, materiel and transport for unneeded supplies.

Results achieved by the uniform system at the subordinate commands indicate substantial improvement has been made in reported deficient areas. Action is currently under way to decentralize the aforementioned retail type functions from the ICP to the subordinate commands. This should result in still further improvement in theater supply operations. Upon completion of this functional adjustment, both the wholesale ICP and retail subordinate command missions will be critically reviewed in determining necessary follow-on action.

### III. ARMY POSITION ON GAO RECOMMENDATION

The Army nonconcurs in the recommendation that "the present plan to computerize the four USARPAC commands be reconsidered until such time as an effective program is instituted to correct the basic deficiencies in the present supply system" since our objective is to achieve an efficient and automated supply system in the Pacific area and the equipment to accomplish this objective is already installed. The system deficiencies stated in the report will be corrected and reassignment of functions will occur. When these corrective actions are taken, the Army will reassess the entire USARPAC command system in order to determine what additional improvements need to be made.

SCHEDULE OF  
AUTOMATIC DATA PROCESSING EQUIPMENT  
SHOWING ESTIMATED ANNUAL RENTAL COSTS  
ATTRIBUTABLE TO THE STANDARD SUPPLY SYSTEM

Location and computer configurations (note a)	Estimated rental costs (note c)		
	Prime shift	Extra shift	Total
<b>HEADQUARTERS, USARPAC COMPUTER SERVICE CENTER (note b):</b>			
IBM 7010-100K/7010-80K	\$ 466,440	\$ 55,254	\$ 521,694
IBM 1460/1401C/1401E	79,312		79,312
IBM 1302-2/1302-2/1302-1	<u>39,606</u>		<u>39,606</u>
Subtotal	<u>585,358</u>	<u>55,254</u>	<u>640,612</u>
<b>EIGHTH UNITED STATES ARMY:</b>			
IBM 7010	286,440	196,289	482,729
IBM 1460/1460	124,974		124,974
IBM 1302-2	<u>94,800</u>	<u>21,660</u>	<u>116,460</u>
Subtotal	<u>506,214</u>	<u>217,949</u>	<u>724,163</u>
<b>UNITED STATES ARMY, RYUKYU ISLANDS:</b>			
IBM 7010	335,400	167,502	502,902
IBM 1460/1460	169,200	24,232	193,432
IBM 1302-2	<u>94,800</u>	<u>15,787</u>	<u>110,587</u>
Subtotal	<u>599,400</u>	<u>207,521</u>	<u>806,921</u>
<b>UNITED STATES ARMY, JAPAN:</b>			
IBM 1410	117,420	34,227	151,647
IBM 1460	72,101		72,101
IBM 1302-1	<u>67,200</u>	<u>6,525</u>	<u>73,725</u>
Subtotal	<u>256,723</u>	<u>40,752</u>	<u>297,473</u>
<b>GRAND TOTAL</b>	<u><b>\$1,947,693</b></u>	<u><b>\$521,476</b></u>	<u><b>\$2,469,169<sup>d</sup></b></u>

SCHEDULE OF  
AUTOMATIC DATA PROCESSING EQUIPMENT  
SHOWING ESTIMATED ANNUAL RENTAL COSTS  
ATTRIBUTABLE TO THE STANDARD SUPPLY SYSTEM (continued)

<sup>a</sup>Computer configurations were either proposed or installed as of September 25, 1965.

<sup>b</sup>The Headquarters, USARPAC Computer Service Center services USARHAW supply operations, the USARPAC Inventory Control Point, and miscellaneous headquarters' applications.

<sup>c</sup>These estimated rental costs are based on projected computer utilization and the General Services Administration Authorized Federal Price List for IBM equipment.

<sup>d</sup>This annual rental cost excludes:

1. All equipment on hand prior to initiation of Project 3S.
  - (i) Equivalent rental for Government-owned equipment--approximately \$490,000.
  - (ii) Maintenance costs for Government-owned equipment--approximately \$29,500.
  - (iii) Rental costs for non-Government-owned equipment--approximately \$130,200.
2. Possible reductions in costs through reduction in personnel and elimination of punch card machines as a result of installation of **ADPE**.

SCHEDULE OF  
GENERAL ACCOUNTING OFFICE REPORTS  
CONCERNING THE  
EFFECT OF SUPPLY DEFICIENCIES WITHIN  
THE UNITED STATES ARMY, PACIFIC

<u>Title</u>	<u>Number</u>	<u>Date</u>
Supply activities of the United States Army Signal Depot, Ascom City, Korea	E-132990	May 1961
Repair parts supply for ordnance tank-automotive vehicles, Eighth United States Army, Korea (CONFIDENTIAL)	B-132990	May 1962
Problems incident to the fielding of an air defense system overseas due to supply support deficiencies during 1962 and 1963 (SECRET)	E-132990	Apr. 1964
Impairment of combat capability and unnecessary costs due to inefficient and uneconomical supply and maintenance practices for communications and electronics equipment within certain units of the Eighth United States Army, Korea	B-132990	Apr. 1964
Unnecessary procurement due to the failure to identify and utilize available missile spare parts, Eighth United States Army, Korea	B-132990	May 1964
Deficiencies in maintenance and supply support of certain aircraft overseas during 1962 and 1963 (SECRET)	B-146899	June 1964
High deadline rate of air defense equipment and excess spare parts at an overseas location due to supply support deficiencies, Department of the Army	B-132990	July 1964

SCHEDULE OF  
GENERAL ACCOUNTING OFFICE REPORTS  
CONCERNING THE  
EFFECT OF SUPPLY DEFICIENCIES WITHIN  
THE UNITED STATES ARMY, PACIFIC (continued)

<u>Title</u>	<u>Number</u>	<u>Date</u>
Adverse effects of inefficient supply management at the United States Army Engineer Depot, Eighth United States Army, Korea	B-132990	July 1964
Ineffective supply management causing shortages and excesses of end items and repair parts in Okinawa	B-133245	Dec. 1964
Inadequate maintenance and supply support of aviation units of the Eighth United States Army, Korea (CONFIDENTIAL)	<b>B-132990</b>	Feb. 1965
Supply support deficiencies contributing to high deadline rate of <b>air</b> defense equipment at an overseas location (SECRET)	B-146901	Feb. 1965
Inadequate maintenance and supply support of aviation units of Eighth United States Army, Korea	B-132990	Apr. 1965