REPORT TO THE CONGRESS


Department of Defense

BY THE COMPTROLLER GENERAL OF THE UNITED STATES

LCD-75-418

APRIL 2, 1975
To the President of the Senate and
the Speaker of the House of Representatives

In this report we are pointing out that better manage-
ment of secondary items by the Republic of Vietnam Armed
Forces would reduce the U.S. investment.

We made our examination pursuant to the Budget and
Accounting Act, 1921 (31 U.S.C. 53), and the Accounting and

We are sending copies of this report to the Director,
Office of Management and Budget; the Secretary of Defense;
and the Secretaries of the Army, Navy, and Air Force.

Comptroller General
of the United States
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ABBREVIATIONS

ARVN Army of Vietnam
DAO Defense Attache Office
DOD Department of Defense
GAO General Accounting Office
RVNAF Republic of Vietnam Armed Forces
VNAF Vietnamese Air Force
VNN Vietnamese Navy
WHY THE REVIEW WAS MADE

In late 1974, GAO reported that stronger controls were needed over major types of equipment provided to the Republic of Vietnam Armed Forces. GAO also observed serious problems in the management of secondary items, which includes all other materiel except munitions, fuel, and lubricants.

The United States has provided a large inventory of secondary items, and it finances periodic resupply. For fiscal year 1974, $301 million was budgeted for secondary items. GAO wanted to know if the Vietnamese military was managing secondary items adequately and economically, particularly in view of reductions in U.S. funding.

FINDINGS AND CONCLUSIONS

Since 1972, the Vietnamese Armed Forces have reorganized their logistics systems, implemented computer-managed supply systems, and installed or upgraded their maintenance facilities. (See ch. 2.)

Although progress was apparent, GAO found that one of the most significant problems in the management of secondary items was that the Vietnamese forces had large quantities of major equipment items that exceeded unit and maintenance requirements. GAO identified vehicles worth more than $76 million that exceeded requirements and believes that, when Vietnamese Army equipment inventories are completed, many more millions of dollars of equipment exceeding requirements will be disclosed. (See pp. 7 and 8.)

Department of Defense (DOD) policy is to support this equipment. As a result, a great deal of money has been spent to repair unneeded equipment. DOD's policy also has resulted in the call forward of vehicles worth $20 million, all of which have exceeded Vietnamese military requirements. By the end of this review, over $6.8 million worth of these vehicles had been received in Vietnam. (See p. 8.)

Maintaining equipment that exceeds Vietnamese requirements not only has been costly but has also placed a heavy, unnecessary burden on supply, maintenance, and transportation facilities. Many of the Vietnamese problems exist partially because the burden of maintaining equipment exceeding requirements has consumed management attention and has delayed resolution of more urgent problems.

The first step in resolving these problems is to eliminate U.S. support of equipment exceeding requirements. (See pp. 9 to 11.)

Other major problems noted were:

--Vietnamese Army and Navy units did not cancel orders for unneeded materiel estimated at $22 million. (See pp. 11 to 15.)

--The Vietnamese Air Force depot was ordering new items from U.S. supply
sources although Vietnamese air-bases had excesses of the same items. (See pp. 15 and 16.)

--Vietnamese Air Force units did not turn in reparable assets promptly. Repair items valued at $4.9 million were kept at the airbases for excessive periods--over 1 year in some cases. (See pp. 16 and 17.)

--The Vietnam Army Arsenal accumulated about $29 million worth of excess repair parts because it used faulty consumption data in estimating its needs. (See pp. 17 to 19.)

--Estimated stock levels established by the Vietnamese Air Force and Navy to support new equipment were not reviewed periodically for reasonableness and continued need. Consequently, millions of dollars in unneeded stock were on hand or on order. (See pp. 19 to 21.)

--The Vietnamese Air Force Vehicle Overhaul Squadron had $3 million in excess vehicle parts. About $2 million worth was stored in the open, partly uncovered. Although these parts were excess, the Vietnamese Air Force depot was ordering the same parts from U.S. supply sources. (See pp. 21 and 22.)

--New materiel was deteriorating from exposure to the weather because the Vietnamese were not adequately protecting materiel that had to be stored outside. (See pp. 22 and 23.)

Vietnamese authorities took action to rectify many of these situations.

GAO found that the quantities of secondary items which Vietnamese Army and Navy supply units were permitted to stock were excessive and that a reduction in these depot stocks could result in savings up to $22.3 million in the U.S. investment. (See pp. 28 to 33.)

Vietnamese military units reported readiness rates that generally met or were close to standard rates, but the availability of large quantities of excess parts and equipment was instrumental in maintaining this state of readiness. As these stocks diminish, the efficiency of Vietnamese support must be increased to maintain current readiness. (See pp. 35 and 36.)

Finally, despite the large excess quantities described above, many other items were in short supply. These items included ammunition and fuels, as well as repair parts. (See p. 2.)

The large reductions in U.S. military aid are forcing Vietnamese officials to take a hard look at their materiel needs and to choose what materiel should have the highest priority. They must cut operating costs in ways that will have the least adverse impact on combat capabilities.

RECOMMENDATIONS

GAO recommends that the Secretary of Defense discontinue the current policy and practice of calling forward and supporting the maintenance of equipment that exceeds Vietnamese Armed Forces requirements and maintenance capability.

GAO also recommends that the Secretary of Defense direct the Defense Attache Office to:

--Work with the Vietnamese to establish maintenance priorities so that the available maintenance capabi-
lities are first used for required equipment.

--Screen all rebuild, overhaul, and maintenance programs and delete those items determined to be excess to Vietnamese requirements.

--Screen bills of materiel and requisitions and cancel those which are for the support of excess equipment.

--Assist the Vietnamese in reviewing requirements computations for secondary items to insure austerity and monitor the corrective actions for effective implementation.

--Assist the Vietnamese in reducing excessive requisitioning objectives.

Finally, GAO recommends that the Secretary of Defense direct the Defense Attache Office to assist the Vietnamese in maintaining reliable readiness data. A primary objective of this assistance should be to persuade the Vietnamese to have the readiness data regularly audited by personnel independent of the organizations being audited.

AGENCY ACTIONS AND UNRESOLVED ISSUES

GAO worked closely with Defense Attache Office officials during this review. That Office agreed with every major finding reported herein and initiated or promised corrective action on all deficiencies. Finally, as the result of a congressional request, GAO followed up in South Vietnam to determine the Defense Attache Office's and Vietnamese progress in implementing corrective action. GAO's report on this followup will be provided in the near future.

During the final processing of this report, DOD's response, dated March 10, 1975, was received. DOD agreed with the principal findings in this report. However, with respect to the one-for-one replacement policy, DOD said that fiscal year 1974 congressional budget limitations had forced it to be more selective in calling equipment forward and that in fiscal year 1975 no funds were available for equipment. Because of the fund ceilings, DOD believes that consideration should be given to attrition reserve quantities. GAO has recognized DOD's position on this point, as shown on page 11.

GAO believes that unserviceable equipment that is excess to short-term requirements could be placed in an attrition reserve but that only combat and other high-priority requirements should receive funds for spare parts and maintenance support.

MATTERS FOR CONSIDERATION BY THE CONGRESS

This report discloses serious excess quantities and values of materiel. The Congress should require DOD to fully justify future requests for authorization to deliver equipment and supplies to South Vietnam.

The Congress should be aware, however, that although this report describes the need for improving the management of secondary items, it is not intended to be an evaluation of the recent DOD request for a supplemental appropriation for military aid to South Vietnam. Although GAO found large quantities of excess parts and equipment, many other items were in short supply. The Defense Attache informed GAO that budget shortages would result in significant shortfalls in ammunition and fuel. In addition, fund shortages contributed to shortages of many other items at using units.
CHAPTER 1

INTRODUCTION

This is the fourth GAO report since January 1973 concerning the Republic of Vietnam Armed Forces' (RVNAF's) management of its $5 billion inventory of U.S.-furnished equipment and supplies. The first report, "Logistics Aspects of Vietnamization--1969-72" (B-159451, Jan. 31, 1973) provided a comprehensive overview of the status and goals of the Vietnamization Program. The report recognized the complexity of the efforts being made to help the Vietnamese assume control over the vast logistics activities needed to support its American-style mechanized armed forces. Also identified were several logistics problems for future audit attention, including the effectiveness of manpower training and the adequacy of accountability controls over materiel.

In June 1974, we issued a report to the Congress on "Improvements Needed in U.S. Contractor Training of Republic of Vietnam Armed Forces" (B-159451). At the time of our review, the Defense Attache Office (DAO) in Saigon was administering contracts valued at $43.3 million which provided logistics training for RVNAF personnel. The effectiveness of U.S. contractor training was limited and RVNAF self-sufficiency delayed because

--not enough people were being trained, nor was sufficient attention being given to training supervisory or middle-management personnel, and

--high percentages of trainees and those who had completed training were absent from assigned duties.

On December 18, 1974, we issued a report to the Congress entitled "Stronger Controls Needed over Major Types of Equipment Provided to the Republic of Vietnam Armed Forces." The report noted that the enormous amount of materiel provided to RVNAF just prior to the January 1973 ceasefire placed a tremendous accountability burden on RVNAF. When we finished our fieldwork late in 1973, RVNAF and DAO were establishing reliable inventory records for major items.
In April 1974, we began reviewing RVNAF's management of secondary items—all materiel except major items of equipment, munitions, fuel, and lubricants. RVNAF has improved its management of secondary items, but several serious shortcomings remain. These deficiencies have caused unnecessary expenditures and have limited the operational capability of critically needed equipment.

**NEED FOR ECONOMY**

The need for RVNAF to manage its materiel more economically was highlighted in fiscal year 1974 when the Congress refused to grant the administration's urgent request for an additional $474 million beyond the $1.126-billion ceiling set by the Congress for military aid to Vietnam. Department of Defense (DOD) officials advised the Congress that, if the additional funds were not provided, South Vietnamese forces would have to reduce their defenses against North Vietnam. The Congress did not authorize the additional funds, so all requisitions for the Army of Vietnam (ARVN) were suspended during January 1974. Although ARVN submitted some requisitions later in the fiscal year, most of ARVN's requirements for secondary items were deferred until fiscal year 1975.

The administration requested $1.5 billion for fiscal year 1975 military aid for Vietnam. The Congress, however, placed a $700-million limit on military spending for South Vietnam—about 47 percent of the request. South Vietnamese Government officials, recognizing that U.S. aid would decrease, told RVNAF to reduce its consumption of supplies, particularly munitions and fuel.

DOD again asked for a supplemental appropriation for the fiscal year 1975 budget, and this request was scheduled for review by the Congress at the time this report was being printed.

Although this review disclosed large quantities of excess parts and equipment, many other items were in short supply. DAO informed us that budget shortages would cause serious shortfalls in ammunition and fuel. In visits to using units, we noted many examples of long-outstanding requisitions for items considered critical by the units. One major cause was the lack of funds.
CHAPTER 2

STATUS OF THE VIETNAMIZATION PROGRAM

Before 1973 all three Vietnamese military services had independent storage and distribution systems, but they did not have the capability to provide the supply, maintenance, and transportation necessary to support RVNAF units. Consequently, RVNAF units frequently drew materiel directly from U.S. units in Vietnam and relied on U.S. Forces to repair equipment and transport materiel and other supplies.

This heavy reliance on U.S. Forces was largely the result of the inability of the RVNAF logistics system to keep pace with RVNAF's rapid growth. Between 1969 and 1974, RVNAF personnel increased from about 874,000 to 1.1 million. Reorganizing the supply system, installing maintenance facilities, and training personnel in the technical and management aspects of operating computerized logistics system was a complex task in itself.

The transition to a Vietnamized logistics system, however, was complicated by the 1972 North Vietnamese offensive which placed heavy demands on supply performance and delayed plans for reorganizing the logistics system. Further, during 1972, new deliveries of equipment—vehicles, aircraft, weapons, and parts—and the materiel turned over by departing U.S. Forces placed a tremendous accountability burden on ARVN and the Vietnamese Air Force (VNAF), again impeding RVNAF's progress in logistics management.

Since 1972, however, significant progress has been made in Vietnamizing RVNAF logistics. Following is a summary of major accomplishments.

MAJOR ACCOMPLISHMENTS IN THE LOGISTICS SYSTEM

ARVN

1. ARVN's National Materiel Management Agency began operating in June 1972 as the single inventory control agency for ARVN. The agency now controls all ARVN materiel requirements computations,
ordering, and stocks. The reorganization of the ARVN logistics system included the consolidation of 4 technical service depots and 193 support units into 2 depots and 33 supporting units.

2. The agency has established an intensive item management program for high-cost and critically needed items. The stock status of all intensively managed items is reviewed by a manager at least monthly. As of August 1974, 344 items were being intensively managed.

3. During 1972 the RVNAF's automated materiel management system began operating, replacing a manual system. A U.S. contractor developed this new system and continues to provide technical assistance to ARVN personnel in operating it. As of August 1974, ARVN had assumed about 68 percent of the programming/analysis effort.

4. ARVN's ability to rebuild ordnance equipment at the ARVN arsenal in Saigon has steadily improved since 1971. For example, the arsenal rebuilt 27 and 36 pieces of artillery equipment in fiscal years 1971 and 1972, respectively. In fiscal year 1973 it rebuilt 98 artillery pieces—more than were programmed for the year.

Progress at the arsenal is impressive because much of the equipment being rebuilt would have been scrapped in the United States because of the high labor rates. Since the labor rates are relatively low in Vietnam, the Vietnamese can afford to rebuild much of the equipment. We were told that an item is rebuilt if the cost is 60 percent or less of the acquisition cost.

Vietnamese Navy

1. During 1974, the Vietnamese Navy (VNN) began setting up a Navy Supply Command responsible for all supply systems, procedures, personnel, and related supply matters. This centralized management of the VNN logistics system is expected to improve efficiency.
2. The Vietnamese Navy Supply Center has had a warehouse refusal rate of less than 1 percent since early 1973, when U.S. military personnel were withdrawn from active involvement in VNN's supply operations. This indicates that the supply records are highly accurate.

3. Since January 1973, VNN has developed operating regulations to more clearly define functions, authority, and responsibility at various command levels. One program established since 1973 is the planned maintenance system, providing for VNN self-sufficiency in maintaining its assets. A program to improve the capabilities and production of the shipyard was also implemented and resulted in many changes in the management of personnel, materiel, and production.

VNAF

1. During the 6 months before January 1973, the United States provided VNAF with large quantities of materiel. Hundreds of tons of supplies and major items were delivered to VNAF bases, overloading the receiving areas. All storage areas, including aircraft parking ramps, were piled high with materiel. Much of this materiel was improperly packaged and identified. During 1973, U.S. Air Force personnel were brought to Vietnam on temporary duty to assist in sorting this materiel, and five large warehouses were moved from Cam Ranh Bay to Bien Hoa Air Base to store it.

2. As of January 1973, a major effort was underway to develop facilities at Bien Hoa Air Base so they could support the nine VNAF bases. Among the facilities now complete and in operation are shops for jet engine overhaul, power train and rotor blade repair, electroplating, instrument repair, avionics, and jet engine intermediate maintenance.
CHAPTER 3
SECONDARY ITEM MANAGEMENT NEEDS IMPROVEMENT

Many problems in the management of secondary items were caused by large quantities of major equipment items exceeding requirements. For example, in Vietnam there are vehicles worth more than $76 million that exceed requirements; we believe that, when ARVN equipment inventories are completed, many more millions of dollars in equipment exceeding requirements will be disclosed. DOD's policy is to support this equipment and, as a result, substantial costs have been incurred to repair or replace it. RVNAF, therefore, could significantly reduce U.S. military costs in Vietnam by implementing or improving controls to prevent unneeded materiel from being ordered.

Also the maintenance of this equipment has placed a heavy, unnecessary burden on supply, maintenance, and transportation facilities. In our opinion, many of the problems described below exist partially because the burden of maintaining equipment beyond requirements has consumed management attention and delayed resolution of more urgent problems. The first step in resolving these problems is to eliminate U.S. support of equipment exceeding requirements.

Other major deficiencies noted were:

--ARVN and VNN units did not cancel orders for unneeded material estimated at more than $22 million.

--VNAF did not consider available excess repair parts before placing new orders with depots in the United States. Our test of 185 items for which requisitions valued at $5.5 million had been sent to the United States disclosed that requisitions valued at $2.6 million could have been satisfied from available excess materiel.

--VNAF bases did not promptly turn in components for repair: repair items valued at $4.9 million were kept at the airbases for over 1 year in some cases.
ARVN maintenance depots used inflated factors in estimating repair parts requirements. As a result, excess parts worth more than $29 million had accumulated at the ARVN arsenal.

VNAF and VNN units did not review and eliminate unneeded stock. At the time of our review, VNAF and VNN had more than $65 million in special and reservation stock levels; much of this materiel was no longer needed.

The details of these and other findings are discussed below.

NEED TO REEVALUATE DOD'S POLICY FOR REPLACING AND SUPPORTING EXCESS EQUIPMENT

RVNAF units are authorized certain quantities of equipment (unit requirements) to perform their assigned missions. In addition, RVNAF units are authorized equipment to replace unserviceable items when the maintenance activity cannot immediately repair them. These requirements are referred to as maintenance float requirements. In this report, when we discuss excess equipment we are referring to equipment that exceeds both unit and maintenance float requirements.

During calendar year 1972, the United States delivered large quantities of new equipment to Vietnam partly in anticipation of the possibility that the terms of the peace treaty (then in the process of negotiation) would place a 1-year moratorium on deliveries of new equipment. In addition, as U.S. Forces withdrew they turned over large quantities of equipment. As a result, RVNAF had equipment exceeding unit and maintenance float and attrition requirements.

In April 1973, the Secretary of Defense issued a memorandum to the Joint Chiefs of Staff establishing a policy of maintaining RVNAF equipment inventories at the level on hand at the time of the peace agreement. Under this policy, RVNAF equipment exceeding requirements and U.S. support for maintaining this equipment are authorized. This policy permits the replacement of equipment when it is lost in combat or consumed, even though it exceeds RVNAF requirements. Although the United States can replace RVNAF equipment on a
one-for-one basis, it has no legal obligation to replace or support items which exceed RVNAF requirements.

Until recently, it was impossible to make informed judgments as to whether equipment should be replaced or whether unserviceable equipment should be repaired, because RVNAF did not have reliable inventories of available equipment. But, during 1973 and early 1974, RVNAF conducted extensive equipment inventories. Although the inventories were still in process when we completed our work, we obtained preliminary summaries of vehicle inventories.

According to these summaries, RVNAF had on hand wheeled and tracked vehicles, valued at about $76 million, that exceeded requirements.

We believe that, as the remaining equipment inventories are completed, they will disclose many more millions of dollars of equipment exceeding requirements.

Replacement of equipment exceeding requirements

Until June 1974 RVNAF did not have reliable equipment inventory records and, consequently, DAO did not have adequate data to evaluate RVNAF requests for equipment replacements. From January 1973 through July 1974, the DAO Army Division processed "call forward" actions to replace 2,271 ARVN vehicles, valued at $20 million, which exceeded ARVN requirements. By the end of July 1974, 347 vehicles valued at $6.8 million had been delivered and 1,924 vehicles valued at $13.4 million were due in, as shown by the following schedule.

<table>
<thead>
<tr>
<th>Replacement Vehicles Called Forward</th>
<th>for ARVN as of July 31, 1974</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>Due in</td>
</tr>
<tr>
<td>Quantity (millions)</td>
<td>Value (millions)</td>
</tr>
<tr>
<td>Jeep</td>
<td>800</td>
</tr>
<tr>
<td>3/4-ton cargo truck</td>
<td>641</td>
</tr>
<tr>
<td>2-1/2-ton cargo truck</td>
<td>717</td>
</tr>
<tr>
<td>Armored personnel carrier</td>
<td>78</td>
</tr>
<tr>
<td>Tanks, M41</td>
<td>19</td>
</tr>
<tr>
<td>Tanks, M48</td>
<td>16</td>
</tr>
<tr>
<td>Total</td>
<td>2,271</td>
</tr>
</tbody>
</table>
ARVN inability to maintain equipment

Most ARVN equipment exceeding requirements is unserviceable. Although most of it can be economically repaired, the backlog of equipment awaiting repair at ARVN maintenance facilities is too much for the facilities to handle. On the basis of fiscal year 1974 production, it is unlikely that ARVN can repair all the excess equipment even if it makes a sustained effort over the next fiscal year.

Assuming that ARVN rebuild facilities can repair the same number of vehicles as in fiscal year 1974, there will still be sizable quantities of unserviceable equipment, as shown below.

<table>
<thead>
<tr>
<th></th>
<th>FY 1975</th>
<th>Projected backlog as of July 1, 1975</th>
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<tr>
<td></td>
<td>Backlog as of July 1, 1974</td>
<td>Unservicable generations</td>
</tr>
<tr>
<td>Jeeps</td>
<td>909</td>
<td>828</td>
</tr>
<tr>
<td>3/4-ton trucks</td>
<td>314</td>
<td>336</td>
</tr>
<tr>
<td>2-1/2-ton trucks</td>
<td>311</td>
<td>1,080</td>
</tr>
<tr>
<td>Armored personnel carriers</td>
<td>21</td>
<td>84</td>
</tr>
<tr>
<td>Tanks, M41A3</td>
<td>13</td>
<td>36</td>
</tr>
<tr>
<td>Tanks, M48A3</td>
<td>9</td>
<td>24</td>
</tr>
</tbody>
</table>

RVNAF's inability to repair all this equipment is not necessarily a bad situation because, in our opinion, repairing equipment exceeding requirements is wasteful.

During our visits to ARVN direct support groups, we found more than 400 vehicles, exceeding unit equipment authorizations and having an acquisition value of about $1.5 million, that were being repaired and maintained at substantial cost. For example, at 1 support group 56 excess
Unserviceable jeeps awaiting rebuild
at the 41st Medium Maintenance Center, Da Nang.

M88 tank retriever which had been deadlined for over 1 year
prior to our visit to the 20th Tank Squadron, Camp Evans.
vehicles had been repaired at a cost of about $40,000 for parts. When we questioned the repair of this equipment, DAO said those actions were in full accord with DOD policy.

Additionally, the United States spent about $2.2 million during fiscal year 1974 for the offshore rebuild of 46 armored personnel carriers and 27 M48 tanks. Although this equipment exceeded ARVN requirements, it was to be returned to ARVN after being rebuilt. According to DAO estimates, the cost of repairing the July 1974 backlog of equipment, which is excess to unit and maintenance float requirements, will total over $3 million.

Maintaining this equipment not only has been costly but has also placed a heavy, unnecessary burden on other ARVN resources. The commanding officers at all supply and maintenance units visited complained about the lack of personnel. Although ARVN units have insufficient storage space for equipment and spare parts, DOD's policy results in the units' ordering and storing unneeded repair parts. The same is true of the strains placed on ARVN transportation resources.

The support of RVNAF equipment exceeding requirements places an unnecessary drain on the reduced U.S. aid to South Vietnam as well as a hardship on the RVNAF logistics system.

We believe that equipment which may be surplus to short-term requirements should be placed in an attrition reserve to be maintained only after maintenance of combat and other high-priority items is done.

**IMPROVEMENTS NEEDED IN IDENTIFYING AND CANCELING ORDERS FOR UNNEEDED MATERIEL**

ARVN and VNN units ordered large quantities of unneeded materiel from U.S. supply points. Although the procedures for reviewing outstanding orders were satisfactory, using units did not identify and cancel unneeded orders. Further, depots were not following up to determine whether using units were canceling unneeded orders. We estimate that ARVN units had on order more than $22 million and VNN units about $130,000 in unneeded repair parts.
This is a problem which seems to plague military forces. The U.S. Armed Forces have had similar problems. (See our report entitled "Better Methods Needed for Canceling Orders for Material No Longer Required," B-162152, May 21, 1974.)

ARVN

During April 1974, the National Materiel Management Agency began revalidating all customer requisitions. It sent each customer a list of all requisitions more than 3 months old and instructed them to review each requisition and indicate on the list whether the items were still needed. The list contained about 70,000 requisitions with a value of over $50 million. The units canceled about 20 percent of the requisitions and notified the agency that the rest of the requisitions were for needed materiel.

Our tests of the unit revalidations showed that many more requisitions were not needed and should have been canceled. We visited four units and found that, even after the revalidation, about 49 percent of the outstanding requisitions in our sample were for unneeded materiel. For example:

--At the 331st Direct Support Group in Saigon, 56 percent of the requisitions in our sample were for unneeded items. Included were 32 jeep engines worth $22,260 and 85 vehicle generators worth $8,460. The Commander of this group told us he knew of pending funding cuts, and he wanted to make sure he had enough materiel to meet requirements.

--At the 18th Logistical Support Battalion in Long Binh, 44 percent of the requisitions in our sample were for unneeded items. Included were 14 windshields with a value of $1,185 and 332 brakeshoes with a value of $2,280. Sixty-eight of the excess brakeshoes were ordered for two of the battalion's customers. Although battalion officials said they had reviewed their due-outs before reporting to the National Materiel Management Agency, in our visit we found that the 68 brakeshoes were not needed. The battalion Commander attributed the failure to cancel the order to clerical error.
At the 41st Medium Maintenance Center in Da Nang, 62 percent of the requisitions in our sample were for unneeded items. Included were 3 oil gears worth $10,000 and 200 door assemblies worth $16,600. The Commander of the center said the failure to cancel these and other requisitions was due to clerical error and to the fact that maintenance shops were not canceling requisitions for items already supplied through cannibalization.

DAO officials followed up at these units and agreed with our findings.

Materiel Agency officials also agreed with our findings and said that they would help using units with future validations. Among actions taken by the Materiel Agency were (1) a message containing more specific instructions was sent to all customers and (2) an agency team was sent to all customers to test unit revalidation efforts. We believe these actions, when completed, will improve future revalidations.

VNN units

The VNN supply center began reconciling outstanding requisitions with all of its customers in April 1974 but was not successful because it did not provide adequate instructions or followup with customers that did not respond.

In April, the center sent listings to its customers covering $330,000 in requisitions outstanding for 75 days or more. Customers were instructed to indicate which requisitions were still valid; any requisitions that were not validated within 60 days were to be automatically canceled. Ninety-six days later, however, only 5 of 119 customers had replied. Further, the supply center did not cancel the requisitions of the 114 customers that did not reply, nor did they determine why the customers had not replied.

We visited two of the units that had not replied—the Logistics Support Base at Nha Be and the VNN shipyard. Nha Be officials told us they could not recall receiving the list. Shipyard officials said they had not received the instructions with the list, believed it was a list of canceled requisitions, and submitted new requisitions for the items they still needed.
A test of requisitions outstanding at these two units showed that about 40 percent of the requisitions in our sample were not needed and should have been canceled.

Overall, about $130,000 of the supply center's $330,000 in outstanding requisitions was not needed. We suggested that supply center officials insure that customers understand the validation procedure and apply it correctly. This suggestion was implemented.

Supply center

As of June 21, 1974, the VNN supply center also had over $1.5 million in known excess materiel due in from the United States. About $546,000 worth had been shipped from the United States and could not be canceled, but the remaining $1 million worth had not been shipped and could have been canceled. Some examples of the excesses follow.

<table>
<thead>
<tr>
<th>Item</th>
<th>Total on hand and due in</th>
<th>Total requirement</th>
<th>Excess due in</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Radar</td>
<td>21</td>
<td>2</td>
<td>19</td>
<td>$67,640</td>
</tr>
<tr>
<td>Pump</td>
<td>21</td>
<td>-</td>
<td>21</td>
<td>44,100</td>
</tr>
<tr>
<td>Switchboard</td>
<td>11</td>
<td>-</td>
<td>10</td>
<td>38,500</td>
</tr>
<tr>
<td>Radio set</td>
<td>22</td>
<td>7</td>
<td>15</td>
<td>37,800</td>
</tr>
<tr>
<td>Strainer</td>
<td>164</td>
<td>2</td>
<td>162</td>
<td>22,032</td>
</tr>
</tbody>
</table>

Included in the $1 million in excess due-ins that should have been canceled were:

--Materiel valued at $228,000 that supply center personnel had recommended canceling but that DAO consultants recommended not canceling because it was late in the fiscal year and there was not enough time to reuse the deobligated funds resulting from the cancellation.

--ARVN-managed common support items valued at $180,000. It is VNN practice not to cancel these items because of alleged poor supply support provided by ARVN.
Given the large investment in excess due-in materiel and the center's shortage of storage space and personnel to process receipts, we suggested that more positive actions be taken to cancel excess due-ins as soon as they were detected. Supply center and DAO officials agreed.

**NEED TO CONSIDER EXCESS MATERIEL ON HAND AT VNAF BASES BEFORE ORDERING NEW ITEMS FROM U.S. DEPOTS**

VNAF ordered supplies from U.S. depots when these same items were excess at the VNAF depot or one or more of VNAF's nine bases. VNAF did not have procedures for identifying excess materiel. Therefore, it was unable to determine whether items being requisitioned could be supplied from the excesses.

Our test of base stocks for 185 repairable items due in from the United States showed large amounts of excess materiel that could have been used instead, as shown below.

<table>
<thead>
<tr>
<th>GAO selected items</th>
<th>Orders which could be satisfied from base excess</th>
</tr>
</thead>
<tbody>
<tr>
<td>Line</td>
<td>Cost (millions)</td>
</tr>
<tr>
<td>------</td>
<td>----------------</td>
</tr>
<tr>
<td>185</td>
<td>$5.5</td>
</tr>
</tbody>
</table>

One example was aircraft radio receivers costing $3,916 each. The Air Technical Logistics Command had ordered 45 receivers although 40 excess receivers, worth $156,640, were at the various bases and the depot. After we brought this to the attention of DAO and VNAF officials, they canceled orders for 38 receivers valued at $148,808.

Although VNAF, with DAO assistance, canceled orders for excess due-ins worth over $618,000, many of these items will be received because the materiel was already in the process of being shipped.

DAO said that the lack of computer storage capacity contributed to VNAF's failure to consider excess repair cycle items before ordering new items from the United States. DAO also attributed part of the problem to lack of effective
VNAF supply discipline. At the end of our review, the Defense Attache informed us that, by July 1975, a computer program would be implemented to consider base excesses. Meanwhile, weekly computer listings of base excesses would be made available to VNAF item managers for manual review.

**UNSERVICEABLE ITEMS MUST BE PROMPTLY TURNED IN FOR REPAIR AND REUSE**

VNAF needs to improve its controls to insure that unserviceable items are promptly turned in for repair. VNAF regulations require that unserviceable components be turned in within 10 days after a replacement is received. However, millions of dollars in components needing repair were not being turned in for over 30 days from the day that the unit obtained a serviceable replacement.

Excessive delay in turning in reparable components increases the repair cycle time, which in turn increases the number of components required in the supply system.

Although computerized lists providing ample visibility over "delinquent" items were available, VNAF did not actively monitor the system. VNAF Manual 67-1 states that there should be a repair cycle support unit within the logistics command that is responsible for monitoring the time that assets, including items turned in late, are in the repair cycle.

We reviewed 7,593 unserviceable components, valued at $5.6 million, that units had not turned in after they received replacement items. We found that 6,953, valued at $4.9 million, had not been turned in within 10 days of receipt of replacements. The following table shows the amount of time that the 7,593 unserviceable components in our review were outstanding from the day that replacements were received until June 22, 1974.
<table>
<thead>
<tr>
<th>Time period</th>
<th>Number of components</th>
<th>Value (millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 to 10 days</td>
<td>640</td>
<td>$0.7</td>
</tr>
<tr>
<td>11 to 30 days</td>
<td>2,163</td>
<td>1.7</td>
</tr>
<tr>
<td>31 to 90 days</td>
<td>3,570</td>
<td>2.3</td>
</tr>
<tr>
<td>91 to 180 days</td>
<td>717</td>
<td>.5</td>
</tr>
<tr>
<td>181 to 365 days</td>
<td>464</td>
<td>.3</td>
</tr>
<tr>
<td>over 365 days</td>
<td>39</td>
<td>.1</td>
</tr>
<tr>
<td>Total delinquents</td>
<td>6,953</td>
<td>$4.9</td>
</tr>
<tr>
<td>Total</td>
<td>7,593</td>
<td>$5.6</td>
</tr>
</tbody>
</table>

Eliminating this unnecessary stock of unserviceable assets would greatly reduce the U.S. investment in these components.

**IMPROVEMENTS NEEDED IN ARVN'S CALCULATION OF REPAIR PARTS REQUIREMENTS FOR EQUIPMENT REBUILD PROGRAMS**

Stock records indicated that, in May 1974, the arsenal, ARVN's main equipment rebuild facility, had about $35 million in repair parts on hand and due in. Of this, about $29 million worth was excess to the arsenal's fiscal year 1975 equipment rebuild program requirements. An additional $5 million in parts not on hand or due in was reported as needed for the fiscal year 1975 program. The primary cause for the accumulation of excess repair parts was the arsenal's use of inaccurate and outdated parts mortality data in determining requirements.

Parts estimated to be required for rebuild of major items and assemblies are identified on bills of materiel. We examined the arsenal's bills of materiel for three major items and found that consumption rates for 64 percent of the repair parts requirements were estimated as being two or more times the standard consumption rates specified in U.S. Army technical manuals. The following table shows the results of our test.
Major items reviewed | Parts reviewed | Bills of materiel consumption rates two or more times technical manual rates

<table>
<thead>
<tr>
<th>Parts reviewed</th>
<th>Quantity</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-1/2-ton trucks (M35A2)</td>
<td>175</td>
<td>109</td>
</tr>
<tr>
<td>Armored personnel carriers (M113)</td>
<td>149</td>
<td>107</td>
</tr>
<tr>
<td>Howitzer cannon (105 mm)</td>
<td>55</td>
<td>27</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>379</strong></td>
<td><strong>243</strong></td>
</tr>
</tbody>
</table>

We do not expect that parts consumption rates for Army equipment rebuild programs in Vietnam should necessarily be the same as U.S. Army standard rates. Equipment in Vietnam is generally in worse condition than the U.S. Army equipment, upon which the standards are based. We believe, however, that parts consumption rates that are twice or more the U.S. Army standard rates are questionable.

Using the July 1973 bills of materiel, the Defense Audit Office examined parts consumption rates which the arsenal and two other ARVN depots used to develop the fiscal year 1975 equipment rebuild programs. The auditors found that the depots were using parts consumption rates that greatly exceeded U.S. Army standard rates.

Moreover, the auditors found that the use of excessive consumption rates resulted in an $11.9 million overstatement of parts requirements for the fiscal year 1975 equipment rebuild programs at the three facilities. Of the $11.9 million overstatement, $7.9 million (66 percent) was applicable to the arsenal. The Defense auditors noted in their report that inaccurate repair parts mortality data had been a problem for a long time. In two prior reports, the first published in 1971, the auditors disclosed that, because inaccurate mortality data was being used, large quantities of excess repair parts were accumulating.

The auditors recommended that the depots develop accurate data on actual repair parts consumption and use this data in preparing bills of materiel. They also recommended
that U.S. Army standards be used as a basis for determining the reasonableness of the mortality factors used.

DAO and ARVN officials agreed with the auditors' findings and recommendations and promised corrective actions. However, as of June 1974 little improvement had been made.

ARVN and DAO contractor officials told us that they had not been able to establish accurate repair parts consumption data because of computer programing and clerical errors. They also said that these problems were being corrected, that a wall-to-wall inventory was to be completed by the end of October 1974, and that excess stocks would be redistributed.

The continuing problem of inaccurate repair parts consumption data has resulted in the accumulation of millions of dollars in excess repair parts. Therefore, DAO representatives should monitor (1) the arsenal's progress in developing valid consumption factors and (2) its redistribution of excess stocks.

**NEED TO ELIMINATE UNNEEDED STOCK LEVELS**

Requisitioning objectives for most repair parts are normally based on actual consumption or "demand" experience. When new equipment is introduced and there is no demand experience for parts needed to support the equipment, VNN and VNAF regulations permit stock levels to be based on estimates. In VNAF, these estimated levels are called special levels, and in the VNN, reservation levels. Special levels are also used to override actual demand experience to adjust for changes in requirements, such as program increases or decreases and seasonal fluctuations. We did not review ARVN's special or reservation levels.

Since special stock levels are estimates, they should be periodically reviewed for reasonableness and continued need, but VNAF and VNN were not doing so. As a result, millions of dollars in unneeded stock were included in the requisition objectives used as the basis for maintaining stock on hand.
VNAF special levels

As of July 26, 1974, VNAF had minimum special levels established for 32,230 items at the Air Technical Logistics Command depot and the airbases. The total value of these levels was $59.9 million. The total demand level, based on actual experience, was $8.6 million, as shown below.

<table>
<thead>
<tr>
<th>Location</th>
<th>Total value of minimum levels</th>
<th>Total value of demand levels</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depot</td>
<td>$45,736,422</td>
<td>$4,724,973</td>
<td>$41,011,449</td>
</tr>
<tr>
<td>Bases</td>
<td>14,130,570</td>
<td>3,883,319</td>
<td>10,247,251</td>
</tr>
<tr>
<td>Total</td>
<td>$59,866,992</td>
<td>$8,608,292</td>
<td>$51,258,700</td>
</tr>
</tbody>
</table>

VNAF did not maintain adequate documentation supporting its special levels; for example, one special level had minimum levels valued at $6.5 million. VNAF officials were unable to explain when the levels were established or for what reasons. VNAF officials agreed to review each of the levels and adjust them as appropriate.

We reviewed special levels for 798 line items established at the Da Nang and Phan Rang Air Bases. These levels were valued at approximately $1 million. Levels worth about $313,000 of this amount had been established over 2 years ago and were no longer valid. For example, at Da Nang Air Base, levels had been established in August 1970 to support A-37 aircraft. Although these special levels should have been canceled by July 1971, levels amounting to $113,700 existed as of the end of August 1974.

Although VNAF reviewed its levels in June 1973, many levels that should have been canceled were overlooked for unknown reasons. As a result of our work, VNAF began reviewing the special levels again and, as of August 30, 1974, had identified for cancellation $11.1 million in unneeded levels.

VNN reservation levels

At the time of our review, VNN had reservation levels for about 43,000 line items, of which material valued at $4.7 million was on hand and about $2 million due in.
About 9 months before our review started, the Defense Audit Office reported that about 30,000 of VNN's reservation level line items had had no demands for over a year. No action was taken, however, to reduce reservation-level stocks. VNN and DAO officials told us that they had begun reviewing these items but had terminated the review before completing it.

We tested 50 line items and found that 41 had had no demands during fiscal year 1974. The results of the Defense Audit Office's review and our test indicate that most of the U.S. investment in VNN's reservation level stocks is for unneeded items. The U.S. Navy supply system stocks 49 of the 50 line items in our test—an indication that U.S. Navy activities need the items.

When we briefed DAO and VNN officials, they agreed to resume their review of reservation levels. DOD should monitor this review to insure that it is quickly completed and that excess items needed by U.S. Navy activities are promptly redistributed.

OTHER PROBLEMS NOTED DURING OUR REVIEW

Unneeded stocks kept by VNAF's Vehicle Overhaul Squadron

In April 1974 VNAF's Vehicle Overhaul Squadron had excess vehicle repair parts worth $3 million. VNAF and DAO officials explained that, in January 1974, they had received a large quantity of vehicle parts and equipment from a contractor whose overhaul contract had been terminated. Parts valued at about $2 million were stored in the open, partly covered with plastic and tarpaulin, because VNAF did not have enough warehouse space.

A decision was made in January to have VNAF base vehicle maintenance squadrons obtain their parts support from the Air Technical Logistics Command depot instead of from the Vehicle Overhaul Squadron. Accordingly, the authorized stockage level for the squadron was reduced from 120 to 30 days of supply.
The logistics command depot was ordering automotive parts from U.S. supply sources while excess parts were at the Vehicle Overhaul Squadron and were recorded on the squadron's manual inventory records. After we brought this matter to the attention of DAO and VNAF officials, they began checking for available stock at the squadron before ordering additional parts from the United States.

DAO officials also stated that actions were in process to properly dispose of the excess material at the Vehicle Overhaul Squadron. These actions included (1) moving the materiel stored outside into a new warehouse which was completed on June 19, (2) identifying and recording each item on the depot's computerized inventory, and (3) eventually moving excess materiel to the depot's warehouses.

These actions should resolve the excess stock and storage problems at the Vehicle Overhaul Squadron. However, DAO officials informed us that, as of the end of August 1974, only 60 percent of the automotive parts that we found stored in the open had been moved into warehouses.

Materiel found deteriorating because of improper storage

At most of the RVNAF installations that we visited, new materiel was deteriorating from exposure to the hot and rainy weather of South Vietnam. For example:

--At the ARVN 1st Logistical Support Battalion near Da Nang, large quantities of gun barrels, truck axles, tank road wheels, tires, and many other items were stored in the open without protective cover and were deteriorating from exposure to the weather.

--At the ARVN 311th and 331st Direct Support Groups near Da Nang and Saigon, respectively, and at the 2d ARVN Associated Depot at Da Nang, about 185,000 dry batteries used for field radios were deteriorating in warm warehouses. These batteries should have been kept in cold storage at 35° F to 50° F.
--At the 331st Direct Support Group large quantities of metal office furniture in open storage were deteriorating from rust.

--At the 2d ARVN Associated Depot and the 41st Medium Maintenance Center at Da Nang, large quantities of new vehicle components were stored without cover and were deteriorating from the weather.

--At the Navy Supply Center storage area at Newport, large quantities of new tires and cans of paint were stored in the open and were deteriorating from the weather.

The general reason given for these storage deficiencies was the lack of adequate warehouse and cold storage facilities. However, the materiel that had to be put in open storage was not being kept dry by tarpaulins. After we brought these deficiencies to the attention of RVNAF officials, action was taken to correct them.

**Improvements needed in maintaining stock records on consumable materiel at VNAF bases**

VNAF uses a manual stock record system to manage stocks of consumable materiel at the air bases. We could not readily ascertain the value of these stocks, but at one base we visited—Da Nang—the reported value was $4.2 million. The consumable materiel is classified as economic-order-quantity items because most items have low unit values and are ordered in larger quantities than are repairable items. Some of VNAF's economic-order-quantity consumable items cost over $100 per unit, however. In trying to determine whether some bases had excess quantities of items that the VNAF depot was ordering from the United States to fill needs at other bases, we found that the records contained too many errors for us to determine the true stock status of economic-order-quantity items.

At the two airbases where wc reviewed economic-order-quantity item stock records (Phan Rang and Da Nang), for example, requisitions had not been recorded as due-ins, and receipts and issues of materiel were not recorded.
These clerical omissions and other errors not only made it impossible to determine the actual stock status but also resulted in inaccurate calculations of requisition objectives for the items.

Our test of requisition objectives for 72 economic-order-quantity items at Da Nang disclosed that 60 were inaccurate, as shown below.

<table>
<thead>
<tr>
<th>Line</th>
<th>Items</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total requisition objectives tested--</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GAO computation</td>
<td>72</td>
<td>$128,385</td>
</tr>
<tr>
<td>Excesses in requisition objectives</td>
<td>46</td>
<td>70,909</td>
</tr>
<tr>
<td>Shortages in requisition objectives</td>
<td>14</td>
<td>56,651</td>
</tr>
<tr>
<td>Net value of excesses</td>
<td>(a)</td>
<td>14,258</td>
</tr>
<tr>
<td>Correct requisition objectives</td>
<td>10</td>
<td>(a)</td>
</tr>
<tr>
<td>Not determinable</td>
<td>2</td>
<td>(a)</td>
</tr>
</tbody>
</table>

Not applicable.

VNAF should establish and maintain accurate stock records for economic-order-quantity items. These stock records should be periodically audited by VNAF and DAO personnel.

**Improvements needed in VNN criteria for adding new inventory lines**

VNN's policy of stocking items for which there have been at least two demands during a 6-month period has generated about $2 million in potentially excess stocks. U.S. Navy criteria state that new items may be added to stock when four or more demands have been experienced in 6 months but that during periods of austere funding it may be necessary to establish a more restrictive policy. For example, the U.S. Navy supply center at Pearl Harbor uses a criteria of six demands in 6 months.

The VNN supply center currently has about $2 million in supplies which were initially stocked under the liberal criteria. However, there has been no subsequent demand for the items, so they are likely to become excess and
Supplies and equipment which GAO found stored outside at the 1st Logistical Battalion.

candidates for return to the U.S. Navy. During fiscal year 1974, the supply center returned excess materiel valued at $4.4 million. Although this shows that efforts are being made to identify unneeded stocks, avoiding generation of excesses would demonstrate better management.

Supply Center and DAO officials agreed that the current criteria for establishing stock on new items may be too liberal, and they agreed to consider more restrictive criteria.

CONCLUSIONS

ARVN and VNAF are incurring substantial costs to maintain thousands of vehicles which exceed requirements. Because the United States has imposed funding limitations on its support of the Vietnamese military, RVNAF must cut its operating costs in ways that will have the least effect on combat capabilities. A policy of maintaining only required equipment is one of the more obvious ways to reduce costs and would have little or no effect on combat strength.
Because of major weaknesses in procedures for determining valid materiel requirements, RVNAF has been routinely ordering millions of dollars of unneeded materiel from the United States. In view of the reduced level of U.S. support, it is essential that the RVNAF logistics system be tuned to identify only materiel requirements that are absolutely valid, for even these may not be fully met by U.S. aid.

RECOMMENDATIONS

We recommend that the Secretary of Defense discontinue the current policy of calling forward and supporting the maintenance of equipment that is excess to RVNAF requirements and beyond its ability to maintain.

We also recommend that the Secretary of Defense direct DAO to

---work with the Vietnamese to establish maintenance priorities so that available maintenance capabilities are first used for required equipment,

---screen all rebuild, overhaul, and maintenance programs and delete items determined to be excess to RVNAF requirements,

---screen bills of materiel and requisitions and cancel those which are for support of excess equipment, and

---help RVNAF to review requirements computations for secondary items to insure austerity and monitor the actions taken to insure effective implementation.

AGENCY COMMENTS AND UNRESOLVED ISSUES

We worked closely with Defense Attache Office officials during this review. That Office agreed with every major finding we reported and initiated or promised corrective action on all deficiencies. Finally, as the result of a congressional request, we followed up in South Vietnam to determine DAO's and Vietnamese progress in implementing corrective action. Our report on this followup will be provided in the near future.
During the final processing of this report, we received DOD's response, dated March 19, 1975. DOD agreed with our principal findings. However, with respect to the one-for-one replacement policy, DOD said that fiscal year 1974 congressional budget limitations had forced it to be more selective in calling equipment forward and that in fiscal year 1975 no funds were available for equipment. Because of the fund ceilings, DOD believes that consideration should be given to attrition reserve quantities. We have recognized DOD's position on this point, as shown on page 11.

We believe that unserviceable equipment that is excess to short-term requirements could be placed in an attrition reserve but that only combat and other high-priority requirements should receive funds for spare parts and maintenance support.
CHAPTER 4

OPPORTUNITIES TO REDUCE INVESTMENT
IN SECONDARY ITEMS

DOD requested $1.5 billion for fiscal year 1975 military aid to Vietnam. However, the Congress placed a $700-million limit on all military aid for South Vietnam. At the time we were finishing our work, DAO was attempting to measure the impact of the limit on RVNAF operations and adjust to the reduced level of funding.

In conducting this review, we were looking for ways to reduce the investment in secondary items, not only because of congressional budget limitations but also in the interests of good management. We found several opportunities to reduce the investment in secondary items and improve the RVNAF logistics system at the same time. Specifically:

--The investment in secondary items could be reduced by about $21 million if order-ship time allowances permitted ARVN and VNN depots were reduced to 90 days, which is more than the standards established by the U.S. Army for its international logistics programs.

--Reducing allowances for in-country resupply would greatly reduce the investment in stock stored at using units.

--If the VNN supply center safety level were cut in half, about $1.3 million could be saved.

--The VNN shipyard was stocking more consumables than it needed. Since the supply source was located close to the shipyard, it is feasible to reduce stocks by an estimated $1.6 million.
EXCESSIVE ORDER-SHIP TIME
ALLOWANCES FOR SUPPLIES ORDERED
FROM THE UNITED STATES

Requisition objectives for most ARVN and VNN supplies are expressed in terms of days of supply; that is, sufficient quantities to meet expected customer requirements for a specified number of days.

Included in ARVN and VNN requisition objectives is an allowance of 120 days for order-ship time, which is the estimated number of days between the date an item is ordered and the date it is received and recorded. Both ARVN and VNN requisition objectives also provide an order-ship time allowance for an operating level and a safety level.

When U.S. Army depots were in Vietnam, they were permitted an order-ship time of 105 days; the U.S. Navy was permitted 90 days. In comparison, the ARVN and VNN allowances of 120 days appear excessive. Our tests, however, disclosed that the actual time required to receive supplies exceeded 160 days, well over the 120-day allowance.

Delays in processing ARVN requisitions

The reason that it took so long to get supplies was because of delays in processing requisitions and receipts. For example, it took the Materiel Agency 25 days to prepare a requisition and transmit it to the International Logistics command, the U.S. inventory control point. We consider this excessive because requisitions are transmitted electronically. A liberal allowance should not exceed 6 days.

In processing the requisitions the International Logistics Command made computer checks against tapes of excess materiel available at Okinawa. In most instances, Okinawa's tapes indicated that stocks were available, but when the command transmitted the requisitions to Okinawa, they were rejected because Okinawa did not, in fact, have the items. This process took an average of 20 days. Since the requisitions were transmitted electronically, we believe the transactions between the command and Okinawa could have been completed in 6 days.
ARVN caused another major delay by taking 26 days to process receipts. This and other delays are summarized in the schedule below.

<table>
<thead>
<tr>
<th>Actual processing</th>
<th>GAO criteria time</th>
<th>Excess time (number of days)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Requisition prepared and transmitted to the International Logistics Command</td>
<td>25</td>
<td>6</td>
</tr>
<tr>
<td>Requisition referred to Okinawa and denied</td>
<td>21</td>
<td>6</td>
</tr>
<tr>
<td>Requisition sent to U.S. depot and filled</td>
<td>25</td>
<td>13</td>
</tr>
<tr>
<td>Transportation from U.S. depot and loading on ship</td>
<td>20</td>
<td>14</td>
</tr>
<tr>
<td>Ship transit time to Vietnam</td>
<td>47</td>
<td>44</td>
</tr>
<tr>
<td>Receipt processed in Vietnam</td>
<td>26</td>
<td>7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>164</strong></td>
<td><strong>90</strong></td>
</tr>
</tbody>
</table>

The criteria we used is more liberal than the standards established by the U.S. Army for its International Logistics Program.

Thus, if inefficiencies in the supply system were eliminated and the order-ship time allowance was reduced from 120 days to 90 days, investments in ARVN inventories could be reduced by about $20.3 million.

**Delays in processing VNN requisitions**

The VNN Supply Center's processing times were also excessive as shown in the schedule below.
A major reason for the excessive time required to process VNN requisitions was that they had to be approved by a large number of officials. For example, a requisition for materiel valued between $1,000 and $5,000 must be approved by six officials. Other delays were caused by a VNN requirement that a physical inventory be taken for all materiel on requisitions exceeding $1,000. Since the supply center's inventory accuracy rate was 99.2 percent, a rate any U.S. Navy depot could be proud of, we believe a physical inventory represented an unnecessary delay.

Investments in VNN inventories could be reduced by about $700,000 if supply inefficiencies were eliminated and the order-ship time allowance reduced to 90 days.

After our review started, VNN inquired into the reasons it was taking so long to process materiel receipts. They attributed the delays to insufficient personnel.

**EXCESSIVE IN-COUNTRY ORDER-SHIP TIME**

An unreasonably high order-ship time was being used by some ARVN and VNN units to cover the time it took to obtain supplies from in-country depots. Significant
inventory savings could be achieved if standard allowances were based on the time it should take.

In-country order-ship times used by ARVN and VNN at the time of our review were:

<table>
<thead>
<tr>
<th>Days</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARVN:</td>
</tr>
<tr>
<td>Direct support groups</td>
</tr>
<tr>
<td>Logistical supply battalions</td>
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<tr>
<td>Medium maintenance centers</td>
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<tr>
<td>VNN:</td>
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<tr>
<td>Logistic support bases:</td>
</tr>
<tr>
<td>Bases near supply center (1)</td>
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<tr>
<td>Bases further from supply center (6)</td>
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<td>Intermediate support bases:</td>
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<tr>
<td>Bases near logistic support bases (4)</td>
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<tr>
<td>Bases further from logistic support bases (5)</td>
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</tbody>
</table>

In contrast, VNAF uses a 15-day order-ship time allowance for requisitions. In our opinion, a 15-day allowance for organizations located within a few days' cargo truck transport time from a depot appears reasonable.

DAO officials agreed that in some cases in-country order-ship time was excessive. For example, the base at Nha Be is about an hour by truck from the supply center in Saigon but has a 30-day order-ship time. DAO officials said that, since Nha Be picks up supplies daily, the allowance should be reduced to zero. They further agreed to study the situation and reduce in-country allowances as much as possible.

NEED TO REDUCE VNN SAFETY LEVEL INVENTORY

The safety level is the quantity of materiel required to be on hand to permit continuous operations in case of minor interruption in normal replenishment operations or unpredictable fluctuations in demand. The VNN Supply Center has a $2.7 million investment in a 120-day safety level which, in our opinion, is excessive. In fact, it is twice the allowance used by either the Army or Air Force. If it were reduced by at least 60 days the inventory investment could be reduced by about $1.3 million. However, DAO officials believe this
excessive investment is needed to maintain a 90 percent requisition fill rate for stocked items.

The rate includes issues for the supply center's fastest moving items, which are only 5 percent of the items normally stocked. These items have an additional 30-day safety level because of their high demand. But, even with the additional safety stock, the supply center has had difficulty keeping some of these items in stock. Our study of the demand history of 50 randomly selected fast-moving items showed that 14, or 28 percent, experienced a stock-out position during the period October 1973 through July 1974, while the average for all items was 14 percent. However, our study also showed that, during the same 10 months, the safety level stocks for 20 items, or 40 percent of our sample, were not needed at all.

We believe our study shows that a 5-month safety level for fast-moving items and a 4-month level for all other items is not warranted when only a very small portion of the stock is adversely affecting the requisition fill rate and the safety level stocks for some items are not needed.

Because of the inventory savings that could be achieved if these levels were reduced, VNN should consider using a 60-day safety level for most items stocked by the supply center. If necessary, adjustments could be made to provide additional stock for items which have had a high rate of shortages.

We suggested that the supply center study its stocked items to determine which ones needed a safety level greater than 60 days and what the optimum level for these few items should be. DAO officials agreed to do a study but not reduce the safety level. They claimed that a reduction in the safety level would increase the risk of running out of stock, a risk VNN would not want to take.

**REQUISITION OBJECTIVES FOR CONSUMABLES NEED TO BE REDUCED**

The VNN shipyard was stocking more consumables than it needed. Consumables include wiping rags, sandpaper, nuts and bolts, and ballpoint pens.
The shipyard has a requisition objective of 90 days, costing $3.1 million, even though its supply source--the VNN supply center--is less than 20 minutes away. Since the center's inventory provides a large, close supply source, we suggested that DAO officials consider reducing the shipyard's requisition objective. We believe a 45-day objective should be sufficient. This would provide the shipyard with a 30-day operating level and 15 days to order and receive consumables. It would also reduce the U.S. investment in consumables by $1.6 million.

VNN and DAO officials objected to any reduction in the shipyard's requisition objective because it would cause an increase in the number of supply transactions--requisitions and receipts--and, therefore, would require more VNN personnel. We believe, however, that less personnel may be required because, once the large inventories are reduced, fewer shipyard employees would be needed to manage them.

More important, however, the savings of $1.6 million in inventory investment would overshadow any insignificant increase in Vietnamese Government salaries.

CONCLUSION

Millions of dollars could be saved if inefficiencies in the ARVN and VNN supply systems were eliminated and if excessive order-ship time and safety level allowances were reduced.

RECOMMENDATION

We recommend that the Secretary of Defense direct DAO to help RVNAF reduce excessive requisition objectives.
CHAPTER 5
OPERATIONAL READINESS OF EQUIPMENT

RVNAF maintains operational readiness statistics for major classes of equipment. For July 1974, RVNAF's reported rates were generally close to required standards. RVNAF's satisfactory readiness rates were achieved during a period in which large quantities of excess parts and equipment were available for issue to units when equipment or components became unserviceable. At the time of our review, however, most equipment that exceeded requirements was unserviceable. It is our opinion that, to maintain satisfactory readiness rates in the more austere times it is entering, RVNAF will have to increase the efficiency of logistics support provided for its equipment.

The number of units of equipment counted for computation of readiness rates does not include all of the in-country equipment. ARVN's and VNAF's standard practice is to not count those units of equipment that are assigned to depots for repair. This practice produces a more favorable readiness rate than if the total number of units in the inventory were counted.

For example, the reported rates for light observation and utility aircraft were overstated because aircraft deadlined for repair were improperly assigned to depots. Many of these light aircraft were reported as "in depot status" for periods exceeding 1 year even though the aircraft were still physically located at the using units.

Readiness rates are usually presented in military reports and briefings without reference to the fact that the rates do not cover the total inventory of units.

We did not audit the accuracy of RVNAF's reported readiness rates and underlying data. However, because of incomplete reporting from field units, some reported rates for ARVN equipment indicated a higher state of readiness than was true. For example, we visited a tank squadron in the Da Nang area for which, at that time, only one M48 tank and five amphibious M548 cargo carriers were reported to higher echelons as inoperative. However, we found that:
--Weapons-sighting computers on 14 M48 tanks were inoperative. Although the weapons could be aimed and fired manually, the tanks' effectiveness was greatly decreased.

--Seven M48 tanks lacked batteries capable of starting their engines.

--Ten amphibious M548 cargo carriers could not "swim" because of missing or defective tailgates.

Equipment readiness data that is accurate, complete, and on time is vital management information for effective planning and control. RVNAF should have a system for assuring the reliability of reported readiness data.

CONCLUSION

RVNAF has made a good start in maintaining readiness rates on its major equipment. But, the usefulness of this information would be improved if the reliability of the data was assured through a continuous program of data validation.

RECOMMENDATION

We recommend that the Secretary of Defense direct DAO to assist RVNAF in maintaining reliable readiness data. A primary objective of the DAO assistance should be to persuade RVNAF to have the readiness data regularly audited by personnel independent of the organizations being audited.
CHAPTER 6

SCOPE OF REVIEW

We primarily concentrated on evaluating the policies and procedures employed by RVNAF in its management of secondary items.

Our work included reviews of requirements determinations, inventory controls, and requisition processing.

We did our fieldwork in South Vietnam from April through August 1974. A great deal of information and assistance was obtained from the American Embassy's DAO and the Defense Audit Office in Saigon. We also visited and obtained information from the following RVNAF organizations and various subordinate units logistically served by these organizations:

Central Logistics Command, Saigon

ARVN:
National Materiel Management Agency, Saigon
1st Area Logistics Command, Da Nang
1st ARVN Associated Depot, Long Binh
2d ARVN Associated Depot, Da Nang
41st Medium Maintenance Center, Da Nang
331st Direct Support Group, Saigon
311th Direct Support Group, Da Nang
312th Direct Support Group, Da Nang
332d Direct Support Group, Saigon
1st Logistics Support Battalion, Da Nang
18th Logistics Support Battalion, Da Nang
Collection and Classification Center, Long Binh

VNN:
Supply Center, Saigon
Naval Shipyard, Saigon
Logistic Support Base, Nha Be

VNAF:
Air Technical Logistics Command, Bien Hoa
1st Air Division, Da Nang
2d Air Division, Phan Rang
5th Air Division, Tan Son Nhut
Mr. Fred J. Shafer  
Director  
Logistics and Communications Division  
U.S. General Accounting Office  
Washington, D.C. 20548

Dear Mr. Shafer:

This responds to your letter of 19 December 1974 and Mr. Werner Grosshans letter of 21 February 1975 which requested the Department of Defense to comment on sections of the GAO draft report, dated 19 December 1974, "Better Management of Secondary Items by the Republic of Vietnam Armed Forces Would Reduce U. S. Investment, B-159451" (OSD Case #3974). Mr. Grosshans provided some revised pages and requested a security review of the report including the revised pages, deleting the classified sections.

In view of the GAO's reinvestigation of management of secondary items, specific and detailed comments are being withheld. The one objection of significance with respect to this report is contained in the attachment to this letter.

With the objective of maximum declassification, it has been determined that it can be published on an unclassified basis. In accordance with DoD Directive 5200.1, you are authorized to distribute this draft report to appropriate Congressional Committees, individual members of Congress and Executive agencies.

It is requested that this reply be published as an appendix to the final report.

Sincerely,

H. M. FISH
Lieutenant General, USAF  
Director, Defense Security Assistance Agency  
and  
Deputy Assistant Secretary (ISA), Security Assistance
DEPARTMENT OF DEFENSE

COMMENT ON GAO DRAFT REPORT DATED 19 DECEMBER 1974
"BETTER MANAGEMENT OF SECONDARY ITEMS BY THE RVNAF
WOULD REDUCE U.S. INVESTMENT"
(OSD CASE #3974)

DoD General Comment

(U) Defense, in general, concurs with the principal GAO findings and appreciates the outlining of the substantial progress and accomplishments of the Republic of Vietnam Armed Forces (RVNAF) Logistics Support System in the report.

Defense believes, however, that the report would be given a more even-handed tenor if the comments which attribute to DoD a (presumably) self-generated policy of maintaining RVNAF equipment "in excess of requirements" were corrected to take note of the fact that the DoD policy of "one-for-one" replacement was in implementation of U.S. national policy; in short, that DoD was acting under instructions on this point, for overriding reasons of national policy, and with an awareness of the logistical difficulties which this would involve. It should also be noted that, with recent reductions in the levels of assistance available, DoD has been unable to implement this policy. Equipment is now being provided only on a firm requirements basis.

The GAO suggestion that DAO provide more assistance to RVNAF in overcoming the identified logistic deficiencies is reasonable in principle; but it should be pointed out that the personnel restrictions imposed on DAO, and the funding restrictions imposed by Congress which have in turn led to a cut-back in civilian "techrep" type contracts, make it very difficult to accelerate this type of assistance to RVNAF. In brief, our desire to do more in this area is thwarted by fiscal and legal limits beyond DoD's control.

In view of the GAO's reinvestigation of management of secondary items, specific and detailed comments are being held for submission at that time. Only one objection of significance exists with respect to this report, as follows:

GAO Recommendation

We recommend that the Secretary of Defense reconsider the current policy and practice of supporting the repair, overhaul and rebuild and of calling forward equipment that is excess to RVNAF requirements and ability to maintain. (pp 6 & 46)

GAO note: The page numbers in this appendix may not correspond to numbers in the report.
DoD Comment

(U) Initially, after the cease-fire in 1973, the DoD "one-for-one" replacement policy was applied to some end items excess to TO&E, but as more reliable major item inventory data became available in late 1973, DAO and RVNAF became selective in call forward of replacements under the budget ceiling of FY 1974.

For FY 1975, funds have been unavailable for any replacement of major end items. Prospects for such replacement in the foreseeable future are remote. Accordingly, the recommendation is based on an unsound assumption in that it defines excess equipments as those above TO&E and maintenance requirements. In practice, an attrition quantity must be used for each equipment before an excess situation can be determined.

With the use of attrition quantities, which recognize past and anticipate future combat losses, the number of "excess" equipments becomes negligible. Thus, the validity of many GAO conclusions and recommendations becomes questionable. It is recommended that the attrition factor be considered in the current reevaluation.

Specific details, some of which are classified will be provided on completion of that review, or can be provided sooner, if requested.
# Principal Officials Responsible

## For Activities Discussed in This Report

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<tr>
<th>Tenure of Office</th>
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### Department of Defense

#### Secretary of Defense:
- James R. Schlesinger: June 1973 to Present
- Elliot L. Richardson: Jan. 1973 to April 1973

#### Deputy Secretary of Defense:
- William P. Clements, Jr.: Feb. 1973 to Present

#### Assistant Secretary of Defense (Installations and Logistics):
- Arthur L. Mendolia: Apr. 1973 to Present

### Department of the Air Force

#### Secretary of the Air Force:
- John L. McLucas: July 1973 to Present

### Department of the Army

#### Secretary of the Army:
- Howard Callaway: May 1973 to Present
- Robert F. Froehlke: July 1971 to May 1973

### Department of the Navy

#### Secretary of the Navy:
- J. William Middendorf, II: Apr. 1974 to Present
- John W. Warner: May 1972 to Apr. 1974
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