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Report to Secretary, Department of Defense; by Fred J. Shafer, Director, Logistics and Communications Div.

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Organization Concerned: Department of the Air Force.
Congressional Relevance: House Committee on Armed Services; Senate Committee on Armed Services.

The Air Force can reduce funds that are tied up in inventories by getting rid of unnecessary special level and safety level stocks. Findings/Conclusions: Air Force policy allows bases to stock spare and repair parts for any part which fails at least twice in 12 months. Special stock levels consist of parts the need for which is not based on prior use but rather on their use in special projects or as emergency standby equipment. By relying more on the item manager to determine where to store and how to redistribute assets to meet various needs, the Air Force could free sizable funds invested in these special stocks to meet more critical supply needs. The item manager is in the best position to determine whether the worldwide stock level of reparable items at all supply echelons is sufficient to keep acquisitions at a minimum. Recommendations: To reduce its investment in special stock levels, the Secretary of Defense should instruct the Air Force to strengthen the review and approval process for special stock levels at its Air Logistics Centers. Item managers should determine if the system can respond to a special level need without acquiring additional assets. They should consider whether enough of the items are located at Air Force bases worldwide, actual or expected demand, and the potential to effectively support missions by promptly redistributing assets. The Air Force should also be instructed to eliminate from the procurement determination process all requirements that item managers have established to prevent stocks from being disposed of. (Author/SC)

UNITED STATES
GENERAL ACCOUNTING OFFICE

The Air Force Can Reduce Inventories By Eliminating Unneeded Stock Levels

Department of Defense

The Air Force can reduce its inventory investment by eliminating certain special stock levels. By relying more on the item manager to determine where to store and how to redistribute assets to meet various needs, the Air Force could free sizable funds invested in special stocks to meet more critical supply needs.

LCD-76-425

JUNE 17, 1977

UNITED STATES GENERAL ACCOUNTING OFFICE
WASHINGTON, D.C. 20548

LOGISTICS AND COMMUNICATIONS
DIVISION

B-133396

The Honorable
The Secretary of Defense

Dear Mr. Secretary:

We have previously reported on opportunities available to the Air Force for reducing its inventory investment, suggesting that it eliminate unneeded demand-supported and war reserve requirements. This report discusses ways for the Air Force to further reduce its inventories by eliminating unneeded stock levels. If the Air Force adopts our suggestions, it could reduce funds tied up in inventories by getting rid of unnecessary special level and safety level stocks.

The report points out the potential for eliminating redundant stockage levels by increased reliance on item managers to manage the item throughout the entire Air Force supply system redistributing assets when needed, instead of establishing additional stock levels.

As noted in our July 16, 1976, letter transmitting a draft of this report to the Department for comments, the effectiveness of our message depends on the timeliness and relevance of our reports. Therefore, we were disappointed that formal comments were not transmitted to us until March 25, 1977--over 8 months later--even though several discussions had taken place between the Air Force and GAO staffs to clarify certain matters in the report. I have recently been working with the Assistant Secretary of Defense (Comptroller) to improve liaison between our offices, with the objective of achieving more timely responses to our reports from the military departments. You could lend your support to this effort by notifying the military departments of the importance of timely responses.

After thorough consideration of Air Force comments, we still have recommendations to you which are set forth on page 15. As you know, section 236 of the Legislative Reorganization Act of 1970 requires the head of a Federal agency to submit a written statement on actions taken on our

recommendations to the House Committee on Government Operations and the Senate Committee on Governmental Affairs not later than 60 days after the date of the report and to the House and Senate Committees on Appropriations with the agency's first request for appropriations made more than 60 days after the date of the report.

We are sending copies of this report to the Director, Office of Management and Budget; the Secretary of the Air Force; and the Chairmen, House and Senate Committees on Appropriations and Armed Services, House Committee on Government Operations, and Senate Committee on Governmental Affairs.

Sincerely yours,

Fred J. Shafer

Fred J. Shafer
Director

GENERAL ACCOUNTING OFFICE
REPORT TO THE
SECRETARY OF DEFENSE

THE AIR FORCE CAN REDUCE INVENTORIES BY ELIMINATING UNNEEDED STOCK LEVELS

Department of Defense

D I G E S T

The Air Force policy allows bases to stock spare and repair parts for any part which fails at least twice in 12 months. However, it is necessary to reduce some stock levels. This can be done by giving item managers more control over spare and repair parts.

Items kept in stock by demand usually satisfy immediate needs. Yet the Air Force does allow bases to store parts whose need is not based on prior use. These stock levels are called special levels.

Special stock levels consist of additive and adjusted levels. Additive levels are war reserve stocks and adjusted levels are for peacetime use. Special levels in this report deal only with adjusted levels. The need for parts in the two categories is not based on prior use but on their use in special projects and as emergency standby equipment. (See p. 1.)

Since 1974 the Air Force has studied and audited special levels several times. This work showed that

--special stock levels represent a large dollar investment;

--many special level items have been inactive for over a year; and

--there are inflated requirements, inaccurate reporting, and inadequate justification for special stock levels.

The Air Force has acted on some of these problems. For example, after reviewing their needs, various bases eliminated special stock levels established for 20,000 items. (See p. 3.)

LCD-76-425

However, special stock levels continue to represent a considerable investment. On June 30, 1975, the Air Force's special level requirement for reparable items was $272 million. About $54 million of this was for parts to support new weapon systems. (See p. 6.)

In many cases, items authorized as special levels at one base are supported by demand at another. Demand-supported items already include a safety level allowance in the computation. The Air Force's peacetime safety level investment is considerable, and there is a potential to reduce it by using war reserve stocks to provide support when minor supply interruptions occur.

In addition, some special level items are stocked as war reserves. Unless adequately monitored and controlled, investments in various levels may become unnecessarily excessive and duplicative. The following examples illustrate this.

--About 8,700 items were required as special level items at certain bases and as computed demand or war reserve requirements at other bases. (See p. 7.)

--About 7,100 items with a special level requirement were stocked solely as negotiated special level items. Sixty-six percent of the 7,100 items had not been used at all in 2 years, and only 2 percent had caused an aircraft to be grounded for lack of a part. (See p. 13.)

--Item managers have arbitrarily established negotiated level requirements when such levels did not seem necessary. (See pp. 9 to 11.)

The Air Force's current requirement for adjusted special levels could be reduced further by relying more on the item manager to manage the item throughout the entire Air Force supply system, redistributing assets when needed, instead of establishing another stock level.

The item manager should play a greater role in the special level review and approval process, because he is in the best position to determine whether the worldwide requirement for reparable

items at all supply echelons is sufficient to keep requirements at a minimum. Supply officials at the base level are not in a position to determine this. The key issue is whether the Air Force has the right number of items and can obtain them within prescribed times.

To reduce its investment in special stock levels, the Secretary of Defense should instruct the Air Force to:

--Strengthen the review and approval process for special stock levels at its Air Logistics Centers. Item managers should determine if the system can respond to a special level need without acquiring additional assets. They should consider (1) whether enough of the items are located at Air Force bases worldwide, (2) actual or expected demand, and (3) the potential to effectively support missions by promptly redistributing assets.

--Eliminate from the procurement determination process all requirements that item managers have established to prevent stocks from being disposed of. (See p. 15.)

The Air Force feels that GAO did not specify which stockage system was being discussed--the base level or the wholesale requirements computation system. The Air Force does not agree that worldwide requirements and assets should determine approval or disapproval of special levels for a specific base.

The base level stockage system (including base special levels) is a distribution technique; the other is a system for computing asset requirements. In this context, approval or disapproval of a special level is based on specific justification for distributing assets to a specific location. The Air Force felt that the base level stockage system was well defined, and it has taken considerable action to correct previous base level problems.

The Air Force agreed, however, that item managers had improperly established special levels to protect assets from disposal, and it plans to strengthen procedures to keep this authority from being misused.

GAO recognizes the inherent difference between the two Air Force systems. However, Air Force supply requirements should be viewed in terms of one system, with the item manager knowing the location of all assets, whether stocked at the wholesale level or at bases worldwide.

The Air Force should start taking aggressive action to reduce unneeded stock levels and should spend its money on items in the system frequently used for aircraft operational problems.

Contents

ABBREVIATIONS

ALC	Air Logistics Center
BLSS	base level self-sufficiency spares
GAO	General Accounting Office
ISSL	initial spares support list
NORS	not operationally ready due to supply
WRSK	war readiness spares kit

CHAPTER 1

INTRODUCTION

The requirements computation is a procedure used to determine the quantity of spare parts to be bought, repaired, retained, canceled from procurement, transferred to other agencies, or otherwise disposed of. Having enough spare parts is essential for keeping Air Force weapons systems operational. If too few spare parts are bought, operational readiness may be impaired. If too many are acquired, money will be wasted.

Technical and logistics support for Air Force systems is the responsibility of the Air Force Logistics Command. It carries out its responsibilities at a headquarters and at five major installations or depots known as Air Logistics Centers (ALCs). At an ALC, each type of spare part is assigned to an item manager, who determines its worldwide requirement.

Almost every major piece of equipment owned by the Air Force has parts that periodically fail. If money were not a factor, spares of every part might be stored at each base so that when a part failed a new one would be readily available. But, since the amount of funds the Air Force receives annually is limited, the Air Force has developed a system that allows bases to store the parts that fail most often.

The system allows bases to compute a stock (demand) level for reparable items after two demands occur in a 12-month period. The formula for determining stock levels for reparable items consists of allowances for

--the base repair cycle, or the time between the removal of an unserviceable item until it is repaired at the base;

--order and shipping time, or the time between the request for a serviceable item and its receipt; and

--a safety level to permit continuous operation if resupply is interrupted or demand varies.

The computed stock levels are generally sufficient to satisfy immediate needs, but experience may not be the best indicator of future needs. The Air Force, therefore, allows bases to requisition and store some parts even when the need is not based on prior use. Stock levels of these parts are called special levels.

Special stock levels consist of additive and adjusted levels. Additive levels are war reserve material requirements. As of June 1975, war reserve spares and repair parts totaled $618 million.

Adjusted levels, which totaled $272 million as of June 30, 1975, can generally be considered in two broad groups--those which are initiated by a base and those which are predetermined. Predetermined levels are developed independently of an operating base. Examples are ALC-negotiated levels and levels directed by Air Force Headquarters and major commands. Adjusted levels are approved for both expense items and investment items, i.e., reparable items. Since the Air Force spends more on investment items, that is what our audit concentrated on.

Adjusted special stock levels initiated by Air Force bases represented 30 percent of the total requirement, while the remainder represented levels predetermined by major Air Force commands or by Air Force Headquarters. Many predetermined levels are initial spares support list (ISSL) items provisioned for new weapon systems or equipment.

The Air Force Logistics Command, which through its ALCs serves as the primary supply source for Air Force bases, will be provided with documentation to support special stock levels.

Base-initiated special levels are reviewed semiannually by the user to determine if the authorized levels are still needed. All special levels, with the exception of ISSLs, must be revalidated annually. ISSL levels are reviewed 2 years from the date that the full complement of the end article is operational at a base.

AIR FORCE STUDIES OF SPECIAL LEVEL REQUIREMENTS

Since 1974 the Air Force has studied and audited base special stock levels several times. As a result, the Air Force is aware that its policies and procedures for establishing and monitoring special stock levels need to be improved.

A 1974 Logistics Command study found that (1) special stock levels represent a large dollar investment and (2) items with special levels have very little demand--63 percent of the items were inactive for 15 months. The study

concluded that many special stock levels, although needed in some cases, were questionable and did not contribute much to supply support.

Two 1974 Air Force audit reports pointed out inflated requirements, inaccurate reporting, and inadequate justification for special stock levels. Item manager records did not agree with Air Force base documentation. And, over $1 million in excessive and unsupported levels had resulted at 17 Air Force bases.

Based on these findings, the Air Force took corrective action. In June 1974, the Air Force directed its major commands to review base-initiated special stock levels. This effort eliminated special stock levels for 20,000 items at various bases. In April 1975, the Air Force imposed more rigid criteria for bases to negotiate special stock levels. At the time of our review, bases were in the process of phasing out or rejustifying those items that did not meet the revised criteria.

Our own work on base-initiated special levels confirmed the Air Force's findings. At Hickam Air Force Base, Hawaii, for example, we tested 24 base-initiated levels having a total value of about $440,000. Our tests indicated that 17 of the 24 levels, with inventories valued at about $130,000, could have been reduced or eliminated for generally the same reasons that Air Force audits had identified.

Recent actions

In addition to the above actions, an Air Force management action group recently proposed to reduce the worldwide dollar investment in negotiated base special levels for repair items by a certain percentage. The objective is to achieve such reductions over a 2-year period ending September 1978.

The action group recommended that

--the process by which operating commands and the Logistics Command assess and approve requests for negotiated base level needs should be strengthened,

--the objective to reduce between 25 and 50 percent of the current requirement generated by negotiated levels should be established, and

--assessing and updating this objective and reporting progress to Air Force headquarters should be the Logistics Command's responsibility.

At the time of our review, the Air Force was analyzing the proposal to develop a realistic approach to achieving its objective. The Air Force concluded that the proposal had definite management-improvement and dollar-saving potential.

AIR FORCE STOCKAGE POLICY

In 1968, the Air Force decided to reduce the range and quantity of spare part inventories stocked at each base to save money. The Air Force realized when it initiated this step that equipment could be inoperable for a time if certain parts failed. To compensate for this, the Air Force established standard maximum times for the order-to-shipment process between bases and supply sources.

In essence, the Air Force base stockage system has been established on the premise that sufficient funds are not available to stock spares for every part at each base. Therefore, parts failures will cause some equipment to be inoperable for a time. However, the Air Force hoped to keep these occurrences to a minimum by stocking parts at a base after the part failed there twice in 12 months.

In addition to peacetime operating stocks, Air Force bases are authorized to requisition and store stocks for war. Two categories of war stocks are war readiness spares kits (WRSK) and base level self-sufficiency spares (BLSS). Both categories were established to support increased consumption in an emergency.

WRSK are air transportable packages of spares and repair parts and related maintenance supplies required in the first month of activity as identified in the war and mobilization plan. The kits are only authorized for units that will deploy during the first month of war. They are normally prepositioned with the unit and transported to the site when the unit deploys. The kits are not mingled with peacetime operating stocks at the bases.

BLSS are a reserve of parts primarily for overseas units that will conduct activities within their assigned theater. These stocks insure that a unit has parts immediately available to support the first month of activity in accordance

with the war and mobility plan. Unlike WRSK, BLSS quantities are limited to those amounts necessary to supplement peacetime stock levels. BLSS may be mingled with peacetime operating stocks, but inventory records should show which portion of the stocks are retained as BLSS to preclude unauthorized peacetime use.

While war reserve stocks were established to see that needed supplies would be available in case of a national emergency, these stocks can and are being used to some extent by the Air Force to support peacetime operations. War reserve assets are to be used only if their issuance will result in an inoperable aircraft becoming operable. For example, in a report to the Chairman, House Committee on Appropriations, entitled "An Analysis of Air Force Rates of Aircraft Not Operationally Ready Due to Supply" (B-179264, Mar. 29, 1974), we reported that Air Force bases do use war reserve stocks during peacetime to reduce not operationally ready due to supply (NORS) rates. During one 4-month period at a Tactical Air Command base, about 15 percent of the NORS items on the F-111 aircraft were eliminated by using war reserve material.

SCOPE OF REVIEW

We wanted to see if opportunities existed, from a worldwide asset standpoint, for the Air Force to reduce unneeded stock levels and still maintain a high readiness posture. To see how item managers managed special levels, we also obtained information on those adjusted levels developed independently of the operating base; specifically, we looked at ALC-major command negotiated levels.

During this audit we examined Air Force records, spoke with Air Force officials, and reviewed pertinent documents. The locations visited included:

--Headquarters, Air Force Logistics Command, Dayton, Ohio.

--Headquarters, Tactical Air Command, Langley Air Force Base, Virginia.

--San Antonio Air Logistics Center, San Antonio, Texas.

--Sacramento Air Logistics Center, Sacramento, California.

CHAPTER 2

AIR FORCE INVENTORY INVESTMENTS CAN BE REDUCED BY ELIMINATING UNNEEDED STOCKS

As of June 30, 1975, the Air Force's requirement in adjusted special stock levels totaled $272 million. Using the latest Air Force estimates, about $54.4 million of this was for ISSL items not covered by this audit. The Air Force stocks about 36,700 investment items worldwide, and of these, about 15,800 were classified as having a special level requirement.

As indicated previously, the Air Force's findings and our own work indicated that management of special levels should be strengthened. In many cases, the Air Force has a valid, defensible need for a special level item at a particular base, especially when the item is considered critical. The problem is how to best meet that need within current funding constraints.

One way, in our view, is for the Air Force to rely on the Logistics Center and the supply system to meet the unexpected demands for special levels through timely redistribution of assets, rather than establish another level. The need for a base to stock a special level item must be reviewed from the standpoint of the item manager's assessment as to whether he can supply the item in an emergency and how many assets of the item are in the total system.

Under the current system, item managers sometimes question the need to stock a special level item at a particular base, but the item will still be stocked if the base or its parent command can justify its criticality. Bases and ALCs do not normally weigh the trade-offs of stocking the item at the base or relying on the item manager to meet an emergency with assets from another base.

While base officials may feel that a special level item is justified, they are not in a position to determine how many assets are in the Air Force supply system for routing requests or emergencies. If the item manager has enough assets at other locations and can transfer them within the standard order and shipping time established by the Air Force, then we believe he should be given that discretion.

Likewise, the Air Force has a large investment in peacetime safety stocks, and there is potential to reduce this investment by using war reserve assets to provide necessary support for minor, temporary supply interruptions.

ARE REDUNDANT AIR FORCE STOCK LEVELS ESSENTIAL?

As of June 30, 1975, the Air Force's computed requirement for reparable items totaled almost $1.3 billion, of which over 20 percent represented special stock levels. 1/ The chart on the following page shows the Air Force's requirement for reparable items from 1970 to 1975 by supply category.

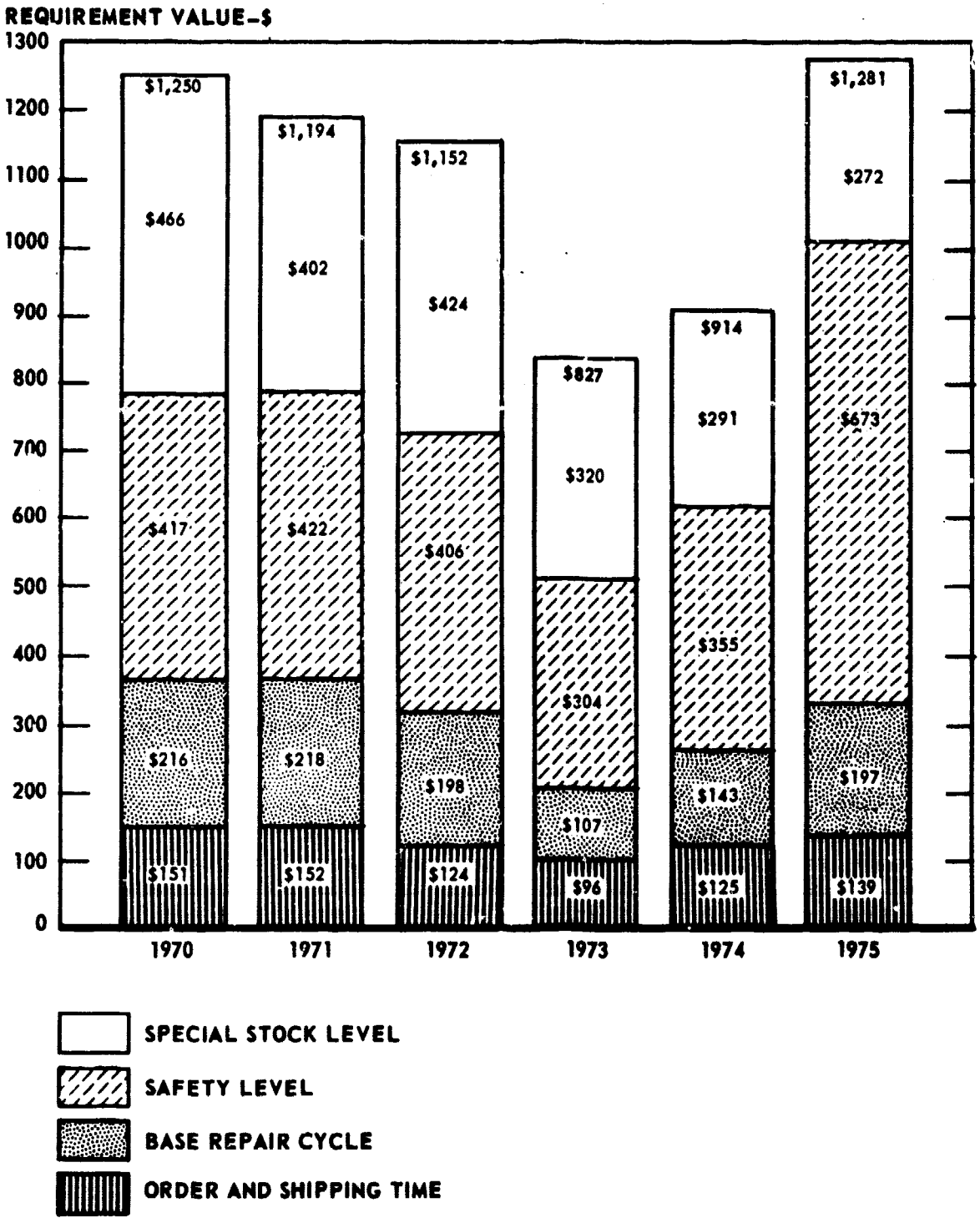
The Air Force had 8,700 items that represented not only special level requirements at specific bases, but also stockage requirements at other bases to support a computed demand or war reserve requirement, or combinations of both. Items with demand-supported requirements also have a safety level included in their computation. This means that the Air Force could have as many as four stock levels supporting the same item.

The Air Force justifies the various levels on the basis that each level serves a different purpose. For example, the demand-supported requirement supports normal operating needs; the war reserve requirement supports a future need in the event of a contingency; the safety level requirement recognizes demand surges and supply interruptions; and the special level requirement allows for stocking items whose need is not based on prior use.

However, viewing special level requirements from a total worldwide asset position often shows that assets in the supply system are sufficient to cover the need without establishing another stockage level. This would have to be determined by the item managers who are required to maintain visibility over reparable assets throughout the system.

1/ Includes only adjusted special levels, not additive special levels (war reserve stocks). As of June 1975, war reserve spares and repair parts totaled $618 million.

COMPUTED REQUIREMENT FOR REPARABLE ITEMS
JUNE 30, 1970 – JUNE 30, 1975
(in millions of dollars)



ITEM MANAGERS RETAIN SPECIAL LEVELS UNNECESSARILY

At present, the item managers do not actively evaluate the trade-offs between stocking or redistributing an item. Item managers retain additional assets for special level purposes although the supply system has sufficient assets available which could be used in an emergency.

In the course of our analysis, we noted that item managers have been arbitrarily establishing negotiated stock levels initiated under the "one-per-base" authority. Air Force Logistics Command regulations allow item managers some latitude when establishing special level requirements. For example, if the computed requirements are not enough to allow each base with a demand-supported requirement to have at least one of each item, the item manager can establish a special level equal to the difference between the computed requirement and the number of demand-supported users. In addition, if the item manager believes that other bases that do not have a demand-supported requirement should have the particular item available, he can increase the special level accordingly. Regulations explicitly state, however, that this provision should not be construed as a blanket authorization of one asset per base. The following examples show that this policy has not been followed as intended.

Amplifier (5820-00-921-6565)

As of September 1975, the computed Air Force stock position for the AN/TRC-97A amplifier, costing $1,180, was 211. It included a special level of 7, as shown below.

	Requirements	Assets
Peacetime operating level	19	a/ 27
Safety level	7	-
Special stock level	7	-
War reserve level	178	132
Due in from contract	-	b/ 51
Total	211	210

a/ Sixteen of these assets were inoperable and needed repair. Air Force records indicated that each quarter about 16 would malfunction, but they could be repaired at the same rate that they malfunctioned.

b/ Amount on contract was acquired principally to satisfy war reserve and special level needs.

As to the rationale for establishing a special level of 7, the item manager told us that he thought he could establish a special level anywhere from zero to 80 since there were over 80 users of the amplifier. He said that a review of the initial requirements computation indicated that by establishing a level of 7, the item would neither be in a buy nor excess position.

In our opinion, this interpretation of the Air Force policy is not correct. The regulation does permit the item manager to stock an item for a particular location if a demand-supported requirement does not exist. However, the item manager must have a sound basis for believing that stocking the item is necessary. In this case, a need did not exist and the item manager was basically protecting assets.

An analysis of the availability and location of war reserve assets demonstrates that a special level requirement for this item was not needed. There were 132 items on hand identified as war reserve stocks located at 43 bases throughout the world, including 11 of the 12 bases that had a demand-supported requirement. Consequently, if 1 of the 12 bases depleted its peacetime stock levels, war reserve assets would be available to satisfy its needs until the peacetime demand-supported levels could be filled. If any other base had an urgent need, the war reserve stocks at any of the 43 bases could be used to temporarily satisfy the need. Therefore, we question having various levels for the same item when an option exists to redistribute assets for meeting an emergency situation.

Telephone terminals (5805-00-935-0195)

The Air Force's computed stock position as of September 1975 for a $772 telephone terminal was as follows.

	Requirements	Assets
Peacetime operating level	2	5
Safety level	1	-
Special stock level	5	-
War reserve level	2	2
Due in from contract	-	2
Total	10	9

The item manager at the Sacramento ALC said that no real need existed for the special level requirement but that it was established to prevent the assets from being disposed of. In this regard we noted 25 other items for which the item managers had established special levels for the same reason. While we agree that parts should not be disposed of if there is a foreseeable need, we also believe that establishing an unrealistic requirement is not appropriate. Such a requirement could produce unnecessary procurements.

Amplifier (5820-00-921-6566)

The Air Force's computed stock position as of September 1975 for a $575 amplifier was as follows.

	Requirements	Assets
Peacetime operating level	2	a/ 13
Safety level	0	-
Special stock level	8	-
War reserve level	141	136
Due in from contract	-	6
Total	151	155

a/ One amplifier was inoperable and needed repair.

We asked the item manager how the special level of 8 was determined since the requirement computation showed that only two locations had a demand-supported requirement. He said that it was an arbitrary quantity determined after his review of the initial requirements computation showed that by establishing a special level of 8, the item would neither be in a buy nor excess position. He also said that the special level for the second quarter of fiscal year 1977 was reduced to 5 for the same season.

We believe the arbitrarily established special level requirement of 8 was unneeded. Further, the 136 available war reserve assets, located at 44 bases throughout the world, could be used in a peacetime emergency.

USE OF WAR RESERVE STOCKS TO FILL TEMPORARY SHORTAGES AND REDUCE THE NEED FOR SAFETY LEVELS

The formula used by Air Force bases to compute stock level requirements includes several factors, one of which

is a safety level. This is an additional number of spares and repair parts included in peacetime and wartime stock levels, which permits bases to requisition them to continue their operations if resupply is temporarily interrupted or if demand varies.

Over 50 percent of the Air Force's computed peacetime requirements for reparable items represented safety levels. At the same time, the Air Force had a considerable investment in war reserve stocks for many of the same items.

In our August 1976 report to the Congress on Air Force war reserve requirements, 1/ we suggested that the Air Force could reduce safety level stocks at overseas bases by computing one safety level for both the peacetime and war reserve requirements, rather than computing safety levels separately for each increment. In our opinion, the Air Force should take a new and different look at its need to invest substantial sums to meet both a safety level and war reserve requirement for the same items.

As indicated previously, war readiness spares kits represent a 30-day supply of parts in addition to the normal peacetime stock. This is a considerable source of support for temporary interruptions in the normal supply operations. In fact, the Air Force often uses war reserve stocks to support peacetime operations. The war reserves are to be used only if their issuance results in an inoperable aircraft becoming operable. We believe that using war reserve stocks for this purpose is practicable as long as immediate action is taken to replace them. This, in effect, fulfills the purpose of a safety level requirement because it permits continued operations for temporary supply interruptions.

In the case of the amplifier on page 9, the need for 7 safety level items is questionable when there are 132 war reserve items that can be used to fill temporary shortages, as long as the item manager replaces the item on a timely basis.

1/ The Air Force Could Reduce War Reserve Requirements of Spares and Repair Parts for Combat-Ready Units (LCD-75-444, Aug. 27, 1976).

The Air Force should consider using war reserve stocks as safety levels, as long as the item is replaced within a reasonable time. Since defense dollars are limited, minimizing inventory investment without impairing readiness is a viable and desirable option. We believe that the Air Force should consider eliminating peacetime safety level stocks when similar stocks are part of war reserves.

SELDOM USED ITEMS CREATE UNNECESSARY COSTS

Some items are stocked for special level purposes only. In other words, they neither have a computed demand requirement nor have they been designated as war reserves. According to 1975 Air Force statistics, about 7,100 items, or 45 percent of the special level requirement, were stocked solely as negotiated special levels. Sixty-six percent of the 7,100 negotiated levels had not been used in 2 years, and only 2 percent were in a status which had caused an aircraft to be nonoperational for lack of a part.

Seldom used items create unnecessary investment costs and do not contribute significantly to aircraft readiness. For example, the Strategic Air Command and the Military Airlift Command use an AN/GMS 133 check sequence programing set. The test set, composed of various circuit board assemblies, tests missile and avionics systems. When the sets were originally stationed at 13 Air Force bases, the two commands requested special stock levels for three circuit board assemblies at each base to prevent possible downtime. No demands have occurred for these components in the past 2 years.

Items strategically positioned (either operating stocks or war reserves) at key bases could fill demands without placing assets at every base. We believe this is a viable management alternative which could save the Air Force millions of dollars without appreciably degrading readiness.

In view of the limited funding for aircraft spare parts, we think the Air Force would be better off investing in items which are more critical and which can more effectively reduce NORS rates, rather than emphasizing special stock levels which are seldom used.

CONCLUSIONS

The current Air Force stockage policy allows a base to stock any part that fails at least twice during a 12-month

period. The formula for determining stock levels consists of repair cycle time and order and shipping time. Under normal conditions, quantities to support these time frames would be sufficient to satisfy needs. But because the Air Force recognizes that at times there will be demand surges and supply interruptions, the stockage formula also includes a safety level allowance. The Air Force's requirement for safety levels totals over $673 million.

Additionally, Air Force policy permits adjusted special level allowances for items whose need is not based on prior use. The Air Force's requirement for these special levels totals about $272 million. In many cases, items that are authorized as special levels at one base have demand-supported requirements at another base. Where the item has a demand-supported requirement, a safety level allowance has already been included in the requirements computation. In addition, some special level items are also stocked as war reserves. Unless adequately monitored and controlled, investments in these various levels may become unnecessarily excessive and redundant.

The Air Force has acted on some of the problems it had identified from prior special level studies. We believe, however, that there is a potential to further reduce the Air Force's current requirement for adjusted special levels by increased reliance on the item manager to manage the items throughout the entire Air Force supply system, redistributing assets when needed, instead of establishing another stock level.

The item manager should play a greater role in the special level review and approval process because he is in the best position to determine whether the worldwide position of reparable items at all supply echelons is sufficient to support the end item. While base officials may determine that the failure of a particular item could ground an airplane, the criticality of that item needs to be weighed in relation to the demand for other items in the system that cause frequent NORS situations. The item manager, limited by funding, must determine how to best be responsive to the various demands of Air Force activities throughout the world.

In summary, the Air Force, in addition to a computed demand level, could have as many as three other stock levels on some items that it could draw upon to meet peacetime needs--safety levels, special levels, and war reserves.

If funds were unlimited, the redundancy in inventory levels could be justified to cover all conceivable emergencies. But since defense dollars are limited, reducing investments without jeopardizing readiness is a major concern.

During times of limited funding, the questions that must be asked are: How much is enough? Do these redundancies in the supply system actually buy the Air Force the desired degree of readiness? Could the Air Force achieve a high readiness rate and still eliminate some supply redundancies?

RECOMMENDATIONS

To reduce its investment in special stock levels, we recommend that the Secretary of Defense instruct the Air Force to:

--Strengthen the review and approval process for special stock levels at its ALCs. Item managers should determine if the system can respond to a special level need without acquiring additional assets. They should consider (1) whether enough of the items are located at Air Force bases worldwide, (2) actual or expected demand, and (3) the potential to effectively support missions by promptly redistributing assets.

--Eliminate from the procurement determination process all requirements that item managers have established to protect stocks from being disposed of.

CHAPTER 3

AGENCY COMMENTS AND OUR EVALUATION

AGENCY COMMENTS

We brought our findings and conclusions to the Secretary of Defense's attention in our preliminary report dated July 16, 1976. Working with the Air Force, we later made some revisions to the report and resubmitted it to the Department of Defense on August 31, 1976. In his March 25, 1977, letter, the Deputy Assistant Secretary of the Air Force (Logistics) commented on our preliminary report. (See app. I.)

His position, in essence, was that the report did not differentiate between the two stockage systems--that is, the Air Force base level system or the wholesale level Recoverable Consumption Item Requirements Computation System (DO41), or their purposes and relationships. He said lack of these distinctions creates false impressions of the rationale for having different types of levels, the different management systems involved, and the relationships of these systems. The Air Force does not agree that worldwide requirements and assets are germane to special level approval or disapproval determinations for a specific base. The base level stockage system (including base special levels), is a distribution technique; the DO41 is an asset requirements computation system. In this context, approval or disapproval of a special level is based on specific justification for asset distribution to a specific location.

The Deputy Assistant Secretary interpreted the preliminary report's recommendations as referring to negotiated levels established in the wholesale level DO41 system, rather than special levels which the Air Force customarily applies to non-demand-supported levels established in base (retail) stockage records.

The Deputy Assistant Secretary agreed that item managers had improperly established negotiated levels at the wholesale level to protect assets from disposal actions. He suggested that strengthened procedures would eliminate misuse of the "one-per-base" authority and insure that item managers use proper asset retention techniques. He indicated that justification for use of this authority should include describing the nature of the requirement and the source of the information it is based on.

The Deputy Assistant Secretary pointed out, however, that the "one-per-base" authority only exists in the wholesale level system at the Air Logistics Centers and that the described abuses did not involve base special level requirements. Therefore, he believes our conclusions do not pertain to the management of special levels at the base level.

The Deputy Assistant Secretary said the approval process for special levels is controlled by well-defined procedures which require review of the justification and approval by the Logistics Command. He said whether or not that approved distribution need will be translated into an asset repair or procurement requirement is determined by worldwide asset requirements and availability as determined in the D041 system. Further, he said the report had not provided any evaluation of base level requirements, which demonstrated that such requirements could not be supported by assets elsewhere in the supply system.

OUR EVALUATION

The Deputy Assistant Secretary suggests that while changes are needed to keep the item manager from arbitrarily establishing special levels at the wholesale level, the base system is adequate for positioning items at bases where the need is the most critical.

It should not have been confusing for the Air Force to determine whether our report was referring to the D041 system or the Air Force base level stockage system. Our numerous discussions with the Air Force staff made it clear that the direction of our study and report was to treat the two systems as one under strengthened control of the item manager.

Indeed, the report's treatment of the two systems as possibly becoming one inventory control system, together with the Deputy Assistant Secretary's comments, highlight the fundamental difference between Air Force and GAO positions on how to best meet a user's requirements. Although the Air Force operates under a two-echelon system, we believe that Air Force supply requirements should be viewed in terms of one system with the inventory manager having visibility over all assets whether stocked at the wholesale level or at the bases worldwide. It should be noted that the Air Force's $272 million requirement for negotiated levels in the D041 system includes justifications for base-initiated levels.

We believe there should be more emphasis on the item manager's responsibility than just his visibility over assets. In addition to his duties of insuring that sufficient assets are available to cover potential demands at each base, the item manager should also be given the discretion to determine whether requirements for low-use items could be met by timely redistribution of assets from other bases. In this respect, the Deputy Assistant Secretary did not specifically state whether the Air Force would give the item manager that discretion.

In regard to the Deputy Assistant Secretary's comment that we had not evaluated base level requirements, we were not questioning the Command or base decision that the failure of a special level item could ground an aircraft. Rather our interest was how the Air Force could best meet the potential need for that item, considering the worldwide asset position and the capability of the supply system to respond. A base is not in the position of knowing the total worldwide asset picture; the base only knows it would like the item for insurance purposes. The item manager is in the best position to determine if the worldwide requirement is sufficient to preclude stocking an additional special level requirement.

According to Air Force Manual 67-1, the Air Force recognizes that "the establishment of unneeded and unjustified adjusted levels may result in the degradation of support to other bases whose levels are based on demand experience." The less the Air Force invests in those items and the more it depends on the item manager to meet needs by timely redistribution, the more funds are freed to support demand requirements.

Therefore, we find no basis for revising our recommendation (see p.15) that the Secretary of Defense strengthen the review and approval process for special level justifications at the ALCs, and strengthen the role of Air Force item managers in worldwide asset control.

APPENDIX I

DEPARTMENT OF THE AIR FORCE
WASHINGTON, D.C. 20330

OFFICE OF THE ASSISTANT SECRETARY

25 [illegible] 1977

Mr. Fred J. Shafer
Director, Logistics & Communications
Division
U.S. General Accounting Office
441 G Street, NW
Washington, D.C. 20548

Dear Mr. Shafer:

This is in reply to your letter to Secretary Rumsfeld regarding the General Accounting Office Report, "Opportunities to Reduce Air Force Inventories by Eliminating Unneeded Stock Levels", (OSD Case #4410).

The report discusses aspects of the Air Force base level stockage system and the Recoverable Consumption Item Requirements Computation System (DO 41). Differentation often is not made in the report as to which system is being discussed, nor is there regard for the purposes and relationships of the two systems.

Lack of these distinctions creates false impressions of the underlying rationale for the existence of the different types of levels, the different management systems involved and the relationships of these systems. Specific Air Force comments concerning these relationships and response to the recommendations are provided in attachment 1.

In summary, the Air Force considers that, contrary to the impression given, none of the specific examples cited on pages 13 through 16 are supportive of recommendation 1. Further, while many special levels at Air Force bases may have no demands, the report has not provided any evaluation of the nature of the requirements at base level which cannot be supported by adequate stocks elsewhere in the supply system. Also, no recognition is given the fact that most special levels cease to exist at the time demands equal the special level quantity; hence, special levels statistics would tend to reflect previous items with no demand.

We appreciate the opportunity to provide comments on the draft report.

Sincerely,

L. K. HOSTETTLER II
Deputy Assistant Secretary
(Installations)

1 Attachment
Air Force Comments

AIR FORCE COMMENTS ON DRAFT REPORT (OSD CASE #4410)

The scope of review indicates that the work of the audit was limited to ALC--major command negotiated levels. It is not clear from this description whether the review included "negotiated levels" in the requirements computation (DO 41), the negotiation process for special levels or special levels as used in base stockage records.

The report describes the use of special levels at base level, previous Air Force studies of base special levels and corrective measures initiated to strengthen the base special level program. However, neither the special level negotiation process nor the wholesale level process for establishing "negotiated levels" independent of the base level system are described. Within the Air Force, the term special stock levels is customarily applied to non-demand supported levels established in base (retail) stockage records. On pages 12 through 17, the GAO report describes mis-use of the one-per-base authority by some Item Managers (IMs). This authority exists only in the requirements computation system (DO 41) at the Air Logistics Centers (ALCs). The resulting levels are not special stock levels in the context developed in the introduction to the report or as used in the Air Force special levels program. Rather they are "negotiated levels" in the DO 41 system, which do not have a counterpart as special levels in retail stockage records. However, in the discussion, these levels are labeled "special levels". Also, a figure of $272 million is variously designated in the report as adjusted levels, adjusted special stock levels and special stock levels. This figure represents all "negotiated levels" in the requirements computation rather than special levels in base stockage.

For these reasons, we interpret that the recommendations of the report are referring to the negotiated levels in the requirements computation (DO 41), specifically the one-per-base authority, rather than special levels in the context developed in the introduction to the report. We have, however, tailored our responses to the recommendations to apply to both special levels in the retail stockage system and negotiated levels in the Air Logistics Center (ALC) requirements computation.

Recommendations - Chapter 3, page 22. "To reduce all unnecessary special level requirements, we recommend that the Secretary of the Air Force,

-- insure that all special level justifications are reviewed by the Logistics Command and approved only after determining that the worldwide asset position is inadequate, ..."

APPENDIX I

Response. The Air Force agrees that negotiated levels in the DO 41 should be reviewed and approved only after determining that the computed worldwide requirement is inadequate, as required by Air Force policy. Routine application of the policy has not been questioned. However, IMs can apply a separate authority which permits adjustment to the total requirement to allow at least one asset for each user of the item. The Air Force estimates that 15 percent of total negotiated levels in the DO 41 are established under this authority. Some "one-per-base" levels were established by IMs without justification or documentation of the justification and approval. Procedures affecting implementation of Air Force policy are being strengthened to prevent such abuses. The Air Force does not, however, agree that worldwide requirements and assets are germane to special level approval or disapproval determinations for a specific base. The base level stockage system (including base special levels), is a distribution technique; the DO 41 is an asset requirements computation system. In this context, approval or disapproval of a special level is based on specific justification for asset distribution to a specific location.

The approval process for special levels is controlled by well defined procedures. These procedures require review of the justification and approval by the Logistics Command. Whether or not that approved distribution need will be translated into an asset repair or procurement requirement is determined based on worldwide asset requirements and availability as determined in the DO 41 system.

Recommendation - Chapter 3, page 22. "To reduce all unnecessary special level requirements, we recommend that the Secretary of the Air Force,

-- eliminate from the procurement determination process all requirements that are established to protect assets from being disposed of."

Response. Requirements should not be established in the DO 41 to protect assets from being disposed of. The report indicates that some IMs had improperly established "one-per-base" levels in the DO 41 system for this purpose. One-per-base requirements are to be used as a management technique to compensate for variance between computed requirements and known distribution requirements. Justification for use of this authority should include description of the nature of the requirement and the source of the information on which it is based. Strengthened procedures discussed above will eliminate misuse of this authority and insure that IMs use proper asset retention techniques. It should be noted, however, that the described abuses did not involve base special level requirements. One-per-base levels are not negotiated with other

than AFLC agencies, and one-per-base requirements are not established as special levels in base stockage. Therefore, this recommendation does not pertain to management of special levels in the context of the report.

GAO notes:

1. Portions of this letter have been deleted because they are no longer relevant to the matters discussed in this report.

2. Page references in this appendix may not correspond to pages of this final report.

APPENDIX II

PRIOR GAO REPORTS CONCERNING AIR FORCE REQUIREMENTS FOR SPARES AND REPAIR PARTS

1. System for Buying Spare Parts for Initial Support of New Military Aircraft Needs Substantial Improvements (B-133396, Jan. 31, 1972).

2. Need To Improve Accuracy of Air Force Requirements System for Reparable Parts (B-146874, Sept. 13, 1972).

3. Reduced Requirements for Modular Electronic Equipment for Aircraft (B-133396, July 3, 1973).

4. Air Force Could Reduce War Reserve Requirements of Combat-Ready Units For Spares and Repair Parts (B-133396, Aug. 27, 1976).

APPENDIX III

PRINCIPAL OFFICIALS RESPONSIBLE FOR ADMINISTERING ACTIVITIES DISCUSSED IN THIS REPORT

	Tenure of office	
	From	To
DEPARTMENT OF DEFENSE		
SECRETARY OF DEFENS :		
Dr. Harold Brown	Jan. 1977	Present
Donald H. Rumsfeld	Nov. 1975	Jan. 1977
James R. Schlesinger	July 1973	Nov. 1975
William P. Clements, Jr. (acting)	Apr. 1973	July 1973
Elliott L. Richardson	Jan. 1973	Apr. 1973
ASSISTANT SECRETARY OF DEFENSE (INSTALLATIONS AND LOGISTICS):		
Dale R. Babione (acting)	Jan. 1977	Present
Frank A. Shrontz	Feb. 1976	Jan. 1977
John J. Bennett (acting)	Mar. 1975	Feb. 1976
Arthur I. Mendolia	June 1973	Mar. 1975
Hugh McCullough (acting)	Jan. 1973	June 1973
SECRETARY OF THE AIR FORCE:		
John C. Stetson	Apr. 1977	Present
John C. Stetson (acting)	Jan. 1977	Apr. 1977
Thomas C. Reed	Jan. 1976	Jan. 1977
James W. Plummer (acting)	Nov. 1975	Jan. 1976
Dr. John L. McLucas	June 1973	Nov. 1975
Dr. Robert C. Seamans, Jr.	Jan. 1969	May 1973
ASSISTANT SECRETARY OF THE AIR FORCE (INSTALLATIONS AND LOGISTICS):		
J. Gordon Knapp	Mar. 1976	Present
Richard J. Keegan (acting)	Feb. 1976	Mar. 1976
Frank A. Shrontz	Oct. 1973	Feb. 1976
Richard J. Keegan (acting)	Aug. 1973	Oct. 1973
Lewis E. Turner (acting)	Oct. 1972	Aug. 1973
Phillip N. Whittaker	May 1969	Sept. 1972