REPORT TO THE CONGRESS

BY THE COMPTROLLER GENERAL OF THE UNITED STATES

Defense Supply Agency Could Reduce War Reserve Requirements For Medical Items

Department of Defense AGC 00005
Defense Supply Agency AGC 00107

This report discusses the feasibility of reducing war reserve requirements for medical supplies by improving the industrial preparedness planning program and the requirement computation procedures.

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

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To the President of the Senate and the
Speaker of the House of Representatives CWO 00001

The Defense Supply Agency is responsible for insuring that medical supplies will be available to the military services in wartime. This report discusses improvements that are needed in the Agency's industrial preparedness planning program and requirement computations that would reduce war reserve requirements for medical supplies.

We made our review pursuant to the Budget and Accounting Act, 1921 (31 U.S.C. 53), and the Accounting and Auditing Act of 1950 (31 U.S.C. 67).

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

Comptroller General
of the United States

Contents

ABBREVIATIONS

The Center	Defense Personnel Support Center
DOD	Department of Defense
DSA	Defense Supply Agency
M-day	mobilization day

COMPTROLLER GENERAL'S
REPORT TO THE CONGRESS

DEFENSE SUPPLY AGENCY COULD REDUCE WAR RESERVE REQUIREMENTS FOR MEDICAL ITEMS
Department of Defense

D I G E S T

The Defense Supply Agency is responsible for insuring that medical supplies and equipment will be available to the military services in event of war. This entails determining wartime needs and making arrangements for supplying them by establishing stock reserves and making emergency production agreements with private firms.

GAO found that the Agency had not given adequate emphasis to managing wartime needs for medical supplies and equipment. A management plan, sufficient resources to adequately canvass industry, and adequate technical assistance had not been provided to carry out the program. As a result:

--Medical items readily available from commercial sources were not identified. This was demonstrated by responses from private firms to our questionnaire indicating that over 50 percent of the items could be eliminated from wartime needs. (See p. 6.)

--Planning agreements for most medical items classified as requiring emergency production by private firms had either not been implemented or had provided insufficient quantities to meet wartime needs. (See p. 11.)

--Reserve stocks for medical items requiring emergency production agreements were overstated. Planned producers and other industry sources indicated they could supply additional quantities in an emergency and in less time than anticipated by the Agency. (See pp. 8 and 13.)

The Agency's method of determining needs resulted in an extraordinary allowance for possible problems with the supply system. See p. 17).

GAO recommended that the Agency develop and implement a management plan which provides guidance and goals and a means of evaluating the industrial preparedness planning program. The plan should provide for

--periodically canvassing the medical supply industry,

--encouraging program participation by potential suppliers,

--establishing realistic post M-day production schedules,

--determining war reserve stock requirements, and

--making use of available staff resources and expertise to review and classify the medical items as to their commercial availability and interchangeability. (See p. 15.)

GAO also recommended that the method of determining an allowance for possible problems with the supply system in an emergency be changed. (See p. 20.)

In response, the Agency assigned additional personnel and implemented a plan to improve management and began reviewing alternative methods of determining wartime needs. (See pp. 15 and 20.)

These actions should reduce unnecessary investments in stocks and help insure that adequate arrangements are made for supplying critical needs.

CHAPTER 1

INTRODUCTION

This report discusses war reserve requirements for military medical supplies--how such requirements are computed and how they are met through the workings of the Federal emergency preparedness program. We wanted to determine how well the medical industrial preparedness program was being managed. To establish a basis for this evaluation, we developed data on the availability of medical supplies during a national emergency equivalent to World War II, Korea, or Vietnam.

The emergency preparedness program for the industrial sector is designed to insure that the United States will have sufficient industrial capability to support any future military emergency. In essence this program allows the United States to reduce procurement and production leadtimes and to avoid huge investments in unnecessary war reserve stocks.

Executive Order 11490, dated October 28, 1969, as amended (see 50 U.S.C., App. Sec. 2292 nt. (1970)) assigns emergency preparedness functions to departments and agencies. The Secretary of Defense, for example, is responsible for various emergency preparedness functions. These include developing, with the aid of industry, plans for procuring and producing selected military equipment and supplies needed to fulfill emergency requirements and actions necessary to overcome problems on maintaining an adequate mobilization production base. (See Part 4, Sec. 401(7) et seq. of E.O. 11490, supra.)

The Secretary of Defense established the Industrial Preparedness Planning Program in the Department of Defense to carry out emergency preparedness assignments for certain materials. Such materials include medical supplies. These supplies are managed--procured, stored, and issued--by the Defense Personnel Support Center (Center), an agency of the Defense Supply Agency (DSA). The Center also is responsible for managing DOD's emergency preparedness program for medical supplies.

Annually, the military departments submit to the Center their general mobilization reserve requirements for medical supplies needed for mobilization day (M-day) and the first 12 months of war. For each item of material, the service indicates what is needed for

--the first 6 months (stated in two 3-month increments),

--a sustained monthly demand rate (for replenishment demands with maximum troop deployment) for the second 6 months after M-day, and

--the Allied Forces for the first 12 months after M-day.

The Center eliminates requirement items with a total acquisition value less than $5,000 or with a production lead-time of less than 2 months. The remaining items are classified as:

--Commercial; normally produced in sufficient quantities and in the time required to meet wartime military demand.

--Planned; normal production is not adequate to meet wartime military demand but requirements can be provided by industrial mobilization planning.

--Nonplanned; normal production is not adequate to meet wartime military demand but because of the small quantities needed or item peculiarity, formal planning is not justified.

Medical items classified as commercial are also eliminated from the services' requirements because additional stocks and industrial preparedness planning are not required. For planned and nonplanned items, the Center adjusts requirements of the military services by deducting total peacetime assets that will be available, including routine anticipated deliveries after M-day, and adding a safety level for contingencies.

For planned items, the adjusted requirements become the target quantities for industrial preparedness planning. As part of the planning process, a production schedule indicating the quantities needed each month after M-day is prepared for each prospective supplier. The production schedules are forwarded to the Defense Contract Administration Service which makes facility surveys to insure that suppliers have the capability to produce an item being planned. If they are capable, the suppliers negotiate an agreement between themselves and the Government for emergency production. The supplier is then registered as a planned producer. If necessary, agreements may be negotiated with more than one planned producer to secure production.

The agreements are not, however, contracts and neither the Government nor the suppliers are obligated to enter into contracts in the future. But, in the event of war, the supplier may be required to accept a contract under applicable laws and regulations as may be in effect at the time.

The adjusted requirements for planned items, less anticipated deliveries by planned producers, and nonplanned items are referred to as general mobilization reserve acquisition objectives, which is shortened to acquisition objectives in this report. The acquisition objectives are those quantities of medical items that should be stocked in military warehouses to insure logistics support of the military services in the event of war.

The Center computed acquisition objectives totaling $189.3 million for fiscal year 1976 requirements. The value of war reserve stocks maintained by the Center was $46.6 million, the limitation on investment imposed by DSA. Of the $46.6 million, stocks that could be used to satisfy fiscal year 1976 requirements totalled $34.5 million, and the remaining stocks, worth $12.1 million, were excess to requirements.

The following table shows by number and dollar value the Center's acquisition objective for fiscal year 1976 requirements and the number of reserve stocks held in inventory for planned and nonplanned medical supplies.

	Number of items		Total value	
	In war reserve	With reserve stocks	Acquisition objective	Reserve stocks
			(millions)	
Planned	1,684	1,214	$134.6	$30.0
Nonplanned	1,834	991	54.7	4.5
Total	3,518	2,205	$189.3	$34.5

CHAPTER 2

NEED FOR MORE EFFECTIVE INDUSTRIAL PREPAREDNESS PLANNING FOR MEDICAL ITEMS

The primary objective of the DOD industrial preparedness planning program is to make maximum use of existing commercial facilities to provide the combined quantity of material required in wartime by each of the military departments. To achieve this objective, it is essential that the Center maintain an adequate program to identify critical needs. The feasibility of obtaining assets through the total production capability that will be available during a mobilization period should be assessed. Then, assets that can be obtained from peacetime military and civilian inventories and production during the mobilization period should be deducted from requirements to determine the stocks needed for war reserves. Otherwise, war reserve stocks are unnecessarily maintained for medical items that would be available in sufficient quantities from commercial sources. This has the effect of preventing the acquisition of items to meet other critical requirements (because resources are invested in unneeded items) and overstating the acquisition objectives for items available from inventories and production.

DOD has issued instructions on the management of war reserves which cover the need to determine commercial availability, provide special consideration when commercial sources are not normally available, and periodically review the selection criteria and methods for determining requirements. DSA has also issued instructions to implement and definitize those issued by DOD.

Our review showed that the Center had not given adequate management emphasis to the industrial preparedness program for medical items. Sufficient resources had not been applied to adequately canvass the medical supply industry to determine current production capacity and emergency production potential to support war reserve requirements. Consequently, the Center did not have the necessary information to (1) identify and eliminate from war reserve requirements all medical items that are commercially available and (2) improve the degree of support and responsiveness to produce and deliver the needed quantities after M-day.

We estimate that as many as 1,900 or over 50 percent of the items with fiscal year 1976 war reserve requirements could be classified as commercial. Consequently, reductions

of the acquisition objective by about $48 million and the war reserve inventory by about $7 million could be achieved. (See p. 7.)

We also estimate that over 1,000 of more than 1,600 planned items in war reserves have no planning agreements. Further, planning agreements for as many as 314 of the remaining items provide insufficient quantities to meet mobilization requirements. Therefore, the Center has no arrangements for supplying some medical items in the event of war, and industry may not be able to respond in time to meet military needs without advanced planning. The implementation of planning agreements also eliminates the need to stock requirements for planned items in war reserves.

INADEQUATE INDUSTRIAL PREPAREDNESS PLANNING PROGRAM

DOD instructions state that items which are normally available from commercial sources in sufficient quantities and in the time required to meet wartime military demand will not be selected for war reserves. Implementing DSA instructions provide that substitutes be considered to support military requirements and that reasons why commercial items cannot be substituted for war reserve items be annotated in the records. DSA instructions also require that the time used to process and deliver peacetime orders, referred to as procurement leadtime, should be adjusted to simulate expedited procurement procedures during an emergency or mobilization period.

The Center has not developed a management plan which provides guidance and goals for industrial preparedness planning for medical items and a means of evaluating the program. A maximum of three persons, including one clerical assistant, were involved in industrial preparedness planning for fiscal years 1975 and 1976 at the Center. The classification of medical items and the development of planned producer agreements, however, was mostly done by one employee, the chief of the industrial preparedness section, whose efforts were occasionally diverted to other projects from time to time.

The annual classification of over 8,000 medical items as commercial, planned, and nonplanned must be accomplished within a few months. If the demand for the item and other factors, such as production capability, remain constant, the classification is merely updated. However, new items require classification and others may require reclassification due to factors such as increases or decreases in requirements, changes in production leadtimes and the introduction of new

sources of supply and substitute items. Those classified as planned totaled 2,548 for fiscal year 1975 and 1,684 for fiscal year 1976. Industrial preparedness planning for these items should entail comparison of current and prior year requirements, inquiries to potential suppliers, requests for facility surveys, and implementation of planning agreements.

To accomplish these tasks, the chief of the industrial preparedness section relies on his personal knowledge of the medical supply industry, telephone inquiries to selected suppliers, and production data published by Government agencies and the medical supply industry. Furthermore, his classification of items is not reviewed by the Center's procurement personnel and medical technicians, who write the specifications for the items, to determine if commercial substitutes could be used for M-day requirements.

The Center's industrial preparedness planning program does not include questionnaires or other formal inquiries to determine what all potential suppliers can deliver in case of an emergency or war. Adequate consideration is not given to using commercially available items as substitutes to meet war reserve requirements. Furthermore, there is no documentation showing why commerical items are not used as substitutes, although required by DSA. For nonplanned items, peacetime production leadtime factors are used to determine war reserve requirements, rather than factors adjusted to simulate procurement during an emergency period, as required by DSA instructions.

DSA has, however, initiated an alternative item program to identify commercial items suitable for temporarily satisfying war reserve requirements. By developing service approved substitutes, war reserve funds can be diverted to those items for which there is no suitable commercial alternative. This concept has been successfully applied to selected clothing items and has been expanded to include food service equipment and packaged petroleum products.

The agency is also improving military specifications and standards for all classes of items by applying current industrial technology and standards. In coordination with the military services, revisions of specifications are being programed to reduce the differences between similar commercial and military items.

NEED TO IDENTIFY AND ELIMINATE COMMERCIAL ITEMS FROM WAR RESERVE

The Center classified as commercial about 40 percent of all general mobilization reserve requirements for medical

supplies submitted by the military services. The other 60 percent was classified as either planned or nonplanned. Acquisition objectives are computed for all planned and nonplanned items, and planned producer agreements and mobilization inventories are maintained for some. However, our review of selected medical items disclosed that many classified by the Center as planned or nonplanned are actually available from commercial sources in sufficient quantities to meet mobilization requirements. As a result, it may be feasible to reduce the acquisition objective by about $48 million and the war reserve stock by more than $7 million, as shown in the following table:

FY 1976 requirements			GAO estimated reductions		
War reserve items	Acquisition objective	War reserve stock	War reserve items	Acquisition objective	War reserve stock
	(millions)			(millions)	
P 1,684	$134.6	$30.0	701	$32.8	$5.0
N 1,834	54.7	16.6	1,211	14.9	2.2
T 3,518	$189.3	a/$46.6	1,912	$47.7	$7.2

P--Planned items
N--Nonplanned
T--Total

[a]Excess stock worth $12.1 million was included in universe for purpose of developing estimated reductions because some items with stock balances that exceeded requirements in fiscal year 1976 are still active.

We sent questionnaires to potential suppliers of 162 medical items and requested that they indicate the quantities they could supply on an emergency basis within 30, 60, 90, and 120 days after M-day without affecting their commercial market. (See app. I.) We received responses on 159 items. Our procedures for selecting the sample of medical items and identifying suppliers for each item are set forth in chapter 4.

Many suppliers responding to our questionnaire stated that they could supply items from their inventories or from increased production during the first and second months after M-day without having an impact on their commercial market. Most suppliers said that there were no major differences between their commercial products and the products required under military specifications.

Planned items

If additional planned items were identified and classified as commercial, acquisition objectives would not have to be computed, planned producer agreements would not be needed, and mobilization inventories would be unnecessary.

As indicated in the table on page 7, 701 of the 1,684 medical items classified as planned or as requiring industrial preparedness planning for fiscal year 1976 may be commercially available, based on a projection of our sample. This would reduce the acquisition objective by $32.8 million and make $5 million in war reserve stocks available for other requirements. The following examples illustrate the degree of support offered by suppliers.

The Center computed a 23,454-unit war reserve requirement for ampicillin capsules, worth $649,676, based on estimated deliveries beginning the fourth month after M-day. Two suppliers of ampicillin capsules that responded to our questionnaire had sufficient inventory quantities and production capacities and showed that they could deliver enough quantities in the first month after M-day to exceed requirements. They said special labeling and packing requirements of military specifications were only slightly different from theirs. Our review of the last six contracts awarded by the Center for ampicillin capsules over a 2-year period also showed that actual deliveries were completed from 1 to 3.5 months after the contract dates. In view of the suppliers' responses and deliveries on prior contracts, the war reserve requirement could be eliminated, and war reserve stocks worth $226,000 could be made available for peacetime needs.

War Reserve Requirement for Ampicillin Capsules

Month after M-day	Unit requirement	Deliveries estimated by Center	War reserve requirement as computed	Deliveries per responses to questionnaires	War reserve requirement per responses
1	14,439	-	14,439	17,000	-
2	4,498	-	4,498	17,000	-
3	4,517	-	4,517	17,000	-
4	7,822	7,822	-	17,000	-
Total requirement			23,454		-

Quantities that the Center's current supplier of urinary test strips and color charts could deliver in the first and following months after M-day would easily satisfy mobilization needs. The supplier cited special markings and packing requirements as the only difference.

Our review of the Center's procurement records showed that the current suppliers had completed deliveries on the last three contracts awarded in June 1974 through September 1974, within 2 months of the contract dates. The Center estimated that deliveries would begin in the fifth month after M-day. About $166,000 of war reserve stock was on hand for the items. Retaining this stock is not necessary because these items are available commercially and could be used to fill peacetime needs.

Nonplanned items

Production capabilities in the event of mobilization are considered inadequate for nonplanned items. However, based on industry's responses to our questionnaires, we estimate that fiscal year 1976 war reserve requirements for 1,211 nonplanned items with an acquisition objective of $14.9 million could be satisfied by the second month after M-day. Since items with a production leadtime of less than 2 months should be classified as commercial, the $14.9 million acquisition objective for the 1,211 items is not needed.

We found that the Center was using peacetime production leadtime factors ranging from 3 to 6 months for the items in our sample. The use of peacetime factors was not in accordance with DSA instructions requiring expedited wartime procurement procedures. In a number of instances, the leadtimes required under wartime conditions would be 1 or 2 months, thus eliminating these items from the acquisition objective.

For example, production would not be adequate to meet requirements for three different types of sterilizers until the fifth, sixth, and seventh months after M-day, based on the peacetime production leadtimes used by the Center. The acquisition objectives computed for the three items totaled $3.8 million, as shown below.

Type of sterilizer	Leadtime used by Center (months)	Acquisition objective Units	Value
Rectangular, electrically heated, 9,000 watts	6	304	$1.6
Rectangular, electrically heated, 15,000 watts	4	220	1.5
Horizontal, steam heated	5	209	.7
Total acquisition objectives			$3.8

Three suppliers responded to our questionnaires regarding production of the sterilizers. One stated that he could provide sufficient quantities to cover the acquisition objectives during the first month after M-day. The other two stated that they could provide sufficient quantities during the second month after M-day. Concerning military specifications, two suppliers stated that their commercial products were the same as those required by the Center, and the other supplier stated that the differences between his commercial products and those required by the Center were insignificant. Based on these responses, the sterilizers should have been classified as commercially available.

As another example, the Center computed the acquisition objectives for two different types of clinical chart holder carts based on 5-month production leadtimes. In response to our questionnaires two suppliers stated that they could provide sufficient quantities to cover the acquisition objectives during the second month after M-day. Further, there were no differences between their commercial products and the military specifications.

Responses from other suppliers on other medical items showed that deliveries could begin during the first, second, and third months after M-day. The Center, however, used production leadtimes ranging from 4 to 9 months to compute the acquisition objectives for the items. Although the quantities that the suppliers could provide were not large enough to satisfy the total monthly requirements for each item, the acquisition objectives could have been reduced and the classifications changed to planned if the deliveries were considered in the computations.

INADEQUATE ADMINISTRATION OF PLANNING AGREEMENTS

DSA's manual states that, to fully support military needs during an emergency, stocks available on M-day must be adequate to meet demands until sufficient deliveries from post M-day production can be realized. The quicker deliveries can be made from production after M-day, the less stock is needed on M-day. Further, shorter production leadtimes reduce the severity of potential wartime supply shortages.

DOD instructions require that mobilization production plans with suppliers be updated annually if previous planning requirements have changed. When there are no changes, the production plans and planned producer agreements should be renewed.

Our review of selected medical items classified as requiring industrial preparedness planning showed that no agreements were in effect for many items and agreements that were in effect for a large proportion of the remaining items did not provide sufficient quantities. Industrial preparedness planning has been based on the production capabilities of a limited number of suppliers and is not representative of what industry can produce under emergency conditions. Based on a projection of the results of our sample, over 1,000 of more than 1,600 planned items with war reserve requirements in fiscal year 1976 may have no current agreements. Further, the agreements, for as many as 314 of the remaining items, may not have provided sufficient quantities to meet mobilization requirements. We also noted that some suppliers, including some planned producers, could provide faster deliveries and greater quantities than specified in current agreements.

Because the Center had not closely attended to industrial preparedness planning, its ability to support the military services in the event of mobilization was in doubt. The failure to make arrangements for the supply of some medical items could have grave consequences because industry may not be able to respond in time to meet military needs without advanced planning.

Lack of planning agreements

Responses to our questionnaires indicate that over one-half of the planned items had no current agreements. For many of these items, industrial mobilization planning was never initiated, and for the others agreements had expired and were not renewed. The quantities expected to be delivered after M-day were, therefore, estimated, and the

estimates were not based on realistic production schedules. The following examples illustrate our findings.

The Center computed the following requirements for first aid eye dressing kits.

Month after M-day	Requirements until post M-day production equaled monthly demand	
	Units	Value
1	276,435	$273,671
2	74,508	73,763
3	74,741	73,993
4	103,648	102,611
5	103,604	102,568
6	103,924	102,885
Total requirement	736,860	$729,491
Less war reserve stocks	65,586	64,930
Net requirement	671,274	664,561

Although war reserve stocks were not adequate to satisfy the first month's requirements, no planning agreements were in effect to insure the receipt of the item after M-day. Furthermore, two suppliers responding to our questionnaires stated that this was not a commercial item and that they could not begin deliveries until the fourth month after M-day. The total quantities from these suppliers in the fourth month, 22,000 units, would also amount to a small fraction of the Center's post M-day needs.

An agreement for the delivery of 4,000 units of orthopedic felt bandages had expired in August 1973 and was not renewed. For fiscal year 1976 war reserve requirements, the Center estimated that it could obtain from undisclosed suppliers 6,748 units in the fifth month after M-day and 6,818 units in the sixth and subsequent months, which would be sufficient to meet wartime demand. Based on this assumption, an acquisition objective of $720,781 was computed. The Center, however, had no documentation to show how the post M-day production quantities were determined and who would deliver them in case of an emergency.

Planning agreements do not meet requirements

For planned items with current agreements, our projection indicated that as many as 314 may have agreements that

do not provide sufficient quantities to meet mobilization requirements. To compute acquisition objectives for such items, the Center used certain quantities that represented planned deliveries by suppliers during the mobilization period. However, these quantities were only estimates since agreements for delivery of only a portion thereof had been entered into.

As an example, the Center's computation of the acquisition objective showed 10,000 and 40,000 packages of gauze bandages would be delivered in the third and fourth months after M-day. The planning agreement provided for delivery of only 12,000 packages, or a shortfall of 38,000 packages. The industrial preparedness specialist based his delivery estimate on quantities to be delivered under expired planning agreements, which were not renewed. The records were not annotated to show the additional sources of supply or how the 38,000 packages would be acquired.

In the above case no attempt was made by the Center to contact the suppliers on the three expired agreements to determine if they would renew their agreements and to establish the quantities they could supply in specific months after M-day, as required by DOD instructions.

Production quantities used in computing war reserve requirements can have a major impact on the Center's readiness posture. Using unrealistic estimates of production quantities expected from suppliers results in either understated or overstated acquisition objectives and can have an impact on the amount of reserves needed. When agreements cannot be implemented or renewed, the Center should increase the acquisition objective by the quantity not covered by agreements.

Increased production
under planning agreements

Suppliers' responses covered planned items in our sample with agreements for all or a portion of the Center's requirements. The responses indicated not only additional supply sources were available but also the feasibility of attaining faster deliveries and, in most cases, greater quantities than provided under existing agreements. Some responses were from suppliers with current agreements which stated that greater quantities could be provided than specified in the agreements. Other responses were from the Center's current suppliers without planning agreements and suppliers that had no current contracts or planned producer agreements with the Center.

As an example of the responses, the Center determined that industry could not produce enough units to meet mobilization requirements, and significant shortages would exist for 12 months after M-day, for three items in our sample. The suppliers, however, indicated that production leadtimes could be improved with deliveries starting 30 days after M-day and that greater quantities could be provided. The Center's current supplier of one of the items, a leg splint, stated that he could start deliveries during the first month after M-day and produce up to 6,000 units from the second month on. By combining these quantities with those that would be provided under existing agreements as shown below, requirements could be met during the fifth month after M-day.

War Reserve Requirement for Leg Splint

Month after M-day	Unit requirement	Less deliveries per agreements	Balance of requirement	Less deliveries per response to questionnaire	Remaining requirement
1	37,518	-	37,518	500	37,018
2	18,697	-	18,697	6,000	12,697
3	18,747	2,000	16,747	6,000	10,747
4	9,579	2,500	7,079	6,000	1,079
5	9,453	5,000	4,453	6,000	-
6	9,472	5,000	4,472	6,000	-
7 to 12	9,554	5,000	4,554	6,000	-

CONCLUSIONS

We believe that the Center's requirements for war reserves of medical items are greatly overstated because many items are commercially available and could be deleted from the requirements. Furthermore, another factor that contributes to the overstatement is the failure to establish current planning agreements with industry to cover requirements to the fullest extent possible.

The large number of potentially commercial items identified in our review demonstrates the need for the Center to periodically canvass potential suppliers to obtain current information on their capacity to deliver the needed items. Also, the classification of items must be made by or with the assistance of procurement personnel and medical technicians.

DSA's programs to identify alternate items and improve military specifications and standards will, if applied to the medical area, also help to establish the commercial availability of many medical items and increase the responsiveness of industry.

Suppliers' replies to our questionnaires give strong indication that industry's responsiveness to wartime needs can be improved. Production leadtimes for items can be shortened by soliciting more suppliers, increasing the number of planned producers, and encouraging current suppliers to become planned producers.

Planning agreements must be reviewed annually to update data on the production capability of the suppliers. The need for reserve stocks can then be evaluated after realistic production schedules are established.

RECOMMENDATIONS

We recommend that the Secretary of Defense require the Director of DSA to:

--Develop and implement a management plan at the Center which provides guidance and goals and a means of evaluating the industrial preparedness planning program. The plan should provide for periodically canvassing the medical supply industry, encouraging program participation by potential suppliers, establishing realistic post-M-day production schedules, and determining war reserve stock requirements.

--Insure that the Center uses available staff resources and expertise to review and classify the medical items.

--Implement the alternate item program in the medical supply area.

--Expedite the completion of its study on ways to improve military specifications by applying current industrial technology and standards.

AGENCY COMMENTS

The Acting Assistant Secretary of Defense (Installations and Logistics) generally agreed with our conclusions and provided the following comments on our recommendations.

--The Center has developed a time-phased management plan which will provide for canvassing the medical industry. As a result, a widespread profile of industrial capacity and capability to satisfy mobilization requirements will be developed within the next year.

--The Center has made additional personnel available to review and classify medical items and has increased emphasis on the selection and classification process.

--The alternate item program is being expanded to include medical items. Substitute items identified as the result of a current survey of the medical industry will be submitted to the military services for approval.

--A program was instituted at the Center 2 years ago to apply current industrial technology and standards to military purchase descriptions and interim specifications. The program provides for continuing coordination of specifications for medical items with industry and the services. (See app. III.)

We discussed the plans and programs with Center officials and found that they were being carried out or were in the process of being implemented as described. Actions had already been taken at the time of our discussion. A questionnaire for canvassing all potential suppliers of medical items in war reserves had been prepared. The staff responsible for reviewing and classifying medical items was increased. Further assistance for this function was being provided by the Center's procurement personnel and medical technicians. As a result, over 1,200 medical items were identified as commercially available and would be deleted from fiscal year 1977 war reserve requirements. Planning agreements were also executed for about 1,000 planned items.

We believe that the actions described above should provide greater recognition of the commercial availability of many medical items and increase industry's responsiveness to mobilization requirements for these items. This in turn will permit reducing the quantities of war reserves stocked.

There will be further improvements in the management of medical items once the alternate item and military specification programs are completed. Therefore, we believe that DOD should expedite completion of these projects.

CHAPTER 3

NEED FOR MORE PRECISE IDENTIFICATION OF MEDICAL ITEMS REQUIRED IMMEDIATELY AT MOBILIZATION

As in the case of other items it manages, the Center includes a safety level factor in the computed mobilization requirements for medical items. The Center's $189.3 million acquisition objective for these items for fiscal year 1976 includes a $95 million safety level factor. Safety levels serve as an allowance for minor interruptions of the supply system or unpredictable fluctuations in demand.

In accordance with DSA instructions, the entire safety level factor is added to requirements for the first month after mobilization. This causes requirements for the first month after mobilization to be much greater than for succeeding months and lessens the opportunity for planned producers to supply the items through accelerated production. This, in turn, tends to increase the amount of items to be stocked as war reserves.

THE SAFETY LEVEL FACTOR FOR WAR RESERVES

As indicated in chapter 1, the Center excludes from industrial planning those items with limited requirements or those that are commercially available. For the remaining items, the Center develops average requirements for each of the first 6 months after M-day based on data submitted by the military services. A safety level is added to the first month's requirements as illustrated in the example computation in appendix II. The safety level quantity is determined by comparing the item's average monthly peacetime demand for the previous 12 months to the estimated requirement for the sixth month after M-day and doubling the greater of the two amounts. Projected peacetime inventory assets are deducted from the first month's total requirement and projected deliveries of peacetime orders are deducted from requirements for succeeding months. The remaining quantities needed for each month before deliveries from planned producers equal the requirements, is the acquisition objective or quantity that should be stocked as war reserves.

The Center's report to DSA on the statistics for fiscal year 1976 medical war reserve requirements sets this out as follows:

		(millions)
Total services' requirements to "P" day (note a)		$188.1
Post M-day safety level		95.0
Total requirements		$283.1
Less:		
Peacetime assets	$70.5	
Anticipated post M-day deliveries from suppliers	23.3	93.8
Total acquisition objective		$189.3
Less war reserve stocks		46.6
Deficiency (unfunded requirements)		$142.7

[a]P-day is the day when production equals requirements.

As can be seen from the above, the safety level has an important effect on the computation of war reserve requirements. According to these figures the Center's investment in reserve stocks of $46.6 million amounts to about 25 percent of its acquisition objective. As indicated in chapter 1, $12.1 million of this is excess to current requirements. However, after eliminating the safety level, it is apparent that the war reserve stocks of $34.5 million and the projected peacetime stocks of $93.8 cover a substantial portion of the services' requirements. This is particularly so when the potential of satisfying the first and second months' requirements with peacetime assets and relying on the accelerated production capabilities of planned producers for the subsequent months are considered.

We noted many items in our sample where peacetime stocks were sufficient to cover the services' requirements beyond the first month. For example, peacetime assets that would be on hand and delivered during the first 3 months after M-day exceeded service requirements for a tropical cream during the same period. But, addition of the safety level to requirements for the first month caused the requirements computation to show a shortage for the 3 months, as illustrated below.

		Units	
Service requirements after M-day month	1	90,524	
Service requirements after M-day month	2	90,524	
Service requirements after M-day month	3	90,797	271,845
Less peacetime assets on hand and delivered during period			307,459
Excess of peacetime assets over service requirements for first 3 months			(35,614)
Plus safety level for first month			198,554
Shortage for first 3 months			162,940

REVISION OF REQUIREMENTS SUBMITTED BY THE SERVICES

We discussed the safety level computation with officials at DSA headquarters and noted that it resulted in unrealistically high mobilization requirements for medical items. The officials suggested that this situation is peculiar to medical items in that the services' mobilization estimates for these items are generally as heavy for the fourth through the sixth month as they are for the first three, whereas for most other items mobilization requirements taper off after the initial high demand. Thus, for most agency-managed items the use of the estimate for the sixth month as a safety level, even when doubled, does not increase the initial requirements as much as in the case of medical items.

According to DSA officials, more precise information is required from the services on their essential needs in the first and second mobilization months for initial issues to activating units, recurring demands, and other critical requirements. With more precise information on recurring demands, realistic safety levels can be developed.

This problem has been recognized since 1973. The need for more refined data on general mobilization requirements for medical supplies was brought to the attention of the Assistant Secretary of the Army (Installations and Logistics) by the Deputy Assistant Secretary of Defense (Supply, Maintenance and Services) in January of that year. The matter was also covered in a letter from the Deputy Executive Director, Supply Operations, DSA, to the four services in September 1973.

DSA officials advised us that the services have tentatively agreed to submit war reserve requirements for medical supplies for each month and to show separately recurring and nonrecurring requirements. However, they believe that

implementing these changes will require extensive programing, and it may take several years to get approval, funds, and computer time to revise the program.

CONCLUSIONS

We believe that the magnitude of the safety level factor included in war reserve requirements for medical items indicates that DSA's computation procedures should be revised. Furthermore, more precise information on the services' requirements is needed to compute more realistic safety level allowances.

RECOMMENDATIONS

We recommend that the Secretary of Defense require the Director of DSA to revise the method of computing the war reserve safety level for medical items. The revised method should prevent an unrealistic demand in the first month of mobilization. We suggest that the safety level quantity be applied proportionately to each of the first 6 months of the mobilization period. This would still provide an allowance for minor interruptions in the supply system or unpredictable fluctuations in demand throughout the mobilization period.

We also recommend that the Secretary of Defense require the services to submit more precise information on their requirements for war reserves of medical items to DSA.

AGENCY COMMENTS

The Acting Assistant Secretary of Defense (Installations and Logistics) agreed for the most part with our conclusions. He indicated that the current concept for determining a safety level is adequate for most items managed by DSA but not for medical items. For most items, the services' estimated requirements for the sixth month following M-day decline from demands in the first several months. A safety level based on these amounts is proportionate to the total mobilization requirements. On the other hand, the services' requirements for medical items show little decline in the sixth month.

The Acting Assistant Secretary intends to evaluate this matter to determine why a variable safety level has not been implemented for medical items rather than using a fixed requirement. He also intends to validate the services' procedures for projecting their mobilization requirements on a fixed straight line basis for each month after mobilization.

Concerning the need for more precise information on the services' requirements for medical war reserves, the Acting Assistant Secretary intends to determine the specific requirements data DSA needs and the services' capability to provide the data. The services' criteria for selecting items and assigning priorities to requirements and DSA's ability to use more precise data in requirement computations will be included in the study. (See app. III.)

We believe that timely implementation of the actions described above will result in a more realistic computation of safety level allowances and the submission of more precise requirement information by the services.

CHAPTER 4

SCOPE OF REVIEW

We reviewed the management of the war reserve program for medical supplies and equipment at the Defense Personnel Support Center, Philadelphia, Pennsylvania. We also discussed aspects of the program with officials of the Defense Supply Agency, Alexandria, Virginia.

As a means of evaluating program management, we selected a statistical sample of 162 medical items and sent questionnaires to 446 private firms that supplied medical items. (See app. I.) The sample consisted of items classified as planned and nonplanned. Items with a high value were selected with certainty, and a random sample was selected from the low value items because the values computed for individual items, as well as the amount of war reserve stock that was maintained, varied greatly. A list of bidders maintained by the Defense Personnel Support Center was used to identify at least three potential suppliers for each sample item, if possible, but only one or two were available for some items.

With the questionnaires, we asked suppliers to furnish data on their production capacities, inventory levels, order and delivery timeframes, and the number of units that they could ship within 30, 60, 90, and 120 days, without this having an impact on their commercial market. We also asked the suppliers to advise us of the impact a military conflict would have on production and the differences, if any, between commercial market specifications and military sepcifications for the same item.

The sample, which covered 46 percent of the total acquisition objective value and 32 percent of the total war reserve stock value, was designed to provide estimates at the 95 percent confidence level. Questionnaires returned by 233, or 52 percent of the private firms provided at least one response for 159 sample items.

UNITED STATES GENERAL ACCOUNTING OFFICE
REGIONAL OFFICE
9226 FEDERAL BUILDING, SIXTH AND ARCH STREETS
PHILADELPHIA, PENNSYLVANIA 19106

Gentlemen:

The U.S. General Accounting Office--the agency of the Congress charged with the audit of Federal programs and expenditures--is conducting a review of medical equipment supplies held in reserve by the Department of Defense for a national emergency such as an all out war or a conflict similar in scope to Korea or Vietnam. We are concerned with the stock position of some of the items, and we wish to determine whether such items would be commercially available in sufficient quantities to meet Department of Defense requirements if a national emergency developed. In order to undertake this review, we must contact companies who are producers of medical equipment and supplies.

Personal contacts are not possible because of the number of companies involved. Therefore, we are asking your company and others to complete the enclosed questionnaire. Your frank answers are of vital importance to our review and will be carefully considered. We cannot make meaningful recommendations without your help.

Your answers are confidential and will be used only for the purposes of this review. We will not publish the information that you provide us in any report other than in aggregate form with the data of all companies completing the questionnaire.

Providing the data we need should not prove too time consuming because your company will only be concerned with relatively few items on the questionnaire. We would like you to complete and return the questionnaire in the enclosed envelope within 10 days, if possible. If you have any questions on the matters addressed in the questionnaire, please call Samuel Zampino, phone number 215-271-3826.

Thank you for your cooperation.

Sincerely yours,

A R Voss

Allen R. Voss
Regional Manager

Enclosures

EXAMPLE OF QUESTIONNAIRE SENT TO SUPPLIERS OF MEDICAL ITEMS

MEDICAL SUPPLY SOURCE QUESTIONNAIRE

U. S. GENERAL ACCOUNTING OFFICE

COMPANY NAME _____ COMPANY ADDRESS _____ PHONE _____

PERSON COMPLETING FORM _____ TITLE _____

INSTRUCTIONS:

Included in this packet is a listing of 162 medical items and supplies which we have selected for review. We have checked the item(s) for which we have tentatively identified your company as a producer. There may be other items listed which your company also produces.

a) We are asking manufacturers to furnish information concerning estimates of production capacities, inventories, orders and delivery times as outlined in the right hand response column. Do this for all the checked items as well as any others which your firm produces.

b) Also indicate whether or not supplies would be available without impacting on your commercial market, whether or not a national emergency or conflict would affect your ability to deliver, and whether or not there are any significant specification deviations.

ITEM NO.	FSN	DESCRIPTION	Production, Inventory, Order and Delivery Data										SUPPLY AVAILABILITY, EMERGENCY IMPACT AND COMMERCIAL MARKET SPECIFICATION DEVIATIONS									
			Production: No. of Units Produced Per Month				Inventory: Average No. of Units		Orders: Average No. of Units		Delivery Time (in days) cross Country from order date		Supply Availability: Without impacting on your commercial market, how many units could you ship within the following periods: 30, 60, 90 and 120 days?				Emergency Impact Would the outbreak of a military conflict such as WW II or Vietnam affect your delivery schedule as to the quantities you could deliver?			Commercial market specification deviations Does your product for the commercial market differ from the attached military specifications? If yes, identify and explain these differences and indicate whether or not, in your opinion, these differences are significant. Use additional space if necessary. (Attach a separate sheet if necessary.)		
			Average	Sustained Peak Capacity	Ready for Shipping	In Total	Size of Unit Orders Backlog	New Orders Per Month	Car load # of Units	Delivery Time	Truck Load # of Units	Delivery Time	Less than Truck Load # of Units	Delivery Time	30 Days	60 Days	90 Days	120 Days	No	Yes	Explain if Yes	No	Yes	Explain if Yes
1	6230-145-1407	Light, Bed (Swivel Joint Type; Universally Adjustable with push canopy or toggle type switch) 115 Volt, Single Phase AC																					
2	6505-023-1617	Oxygen, USP 55 gal. (359.6 Liters) Cylinder Size D																					
3	6505-071-6547	Triamcinolone Acetonide Cream, USP Tropical, 0.5% 8 oz. (227 Gram)																					
4	6505-038-6516	Test Strips and Color Chart, Urinary Bilirubin, Blood, Glucose, Ketone, Protein and PH 100s																					
5	6505-104-8672	Meprobamate Tablets, USP 0.4 Gram Individually Sealed, 25s																					
6	6505-105-0824	Mafenide Acetate Cream Equivalent to 8.5% of Mafenide 14.5 oz. (411 Gram)																					
7	6505-116-4600	Dextrose Injection, USP 5%, 1000C, 6s																					
8	6505-117-4912	Ephedrine Sulfate Capsules, USP 25 MG, 500s																					
9	6505-130-1960	Nitrofurazone Ointment, NF Water Soluble, 1:500, 1 lb. (435.6 Gram)																					
10	6505-132-5181	Oxygen, USP 1650 Cal. (6.25 KL)																					

APPENDIX I

EXAMPLE OF DEFENSE PERSONNEL SUPPORT CENTER'S COMPUTATION OF WAR RESERVE REQUIREMENT FOR A MEDICAL ITEM

Data Recorded On Item

Unit of issue	Standard price	Average monthly demand	Shelf life	Peacetime safety level	Production leadtime	Procurement cycle
Each	$1.40	283	240 mo.	566	4 mo.	5.9 mo.

Demand past 12 months	
Army	1,788
Navy	1,089
Air Force	520
Total	3,397

Data Submitted By Military Services

	Military services' requirements for 6-month post D-day period			Allied forces requirements	Sustained monthly demand rate
	D1 to D3	D4 to D6	D1 to D6		
Army	4,524	4,588	9,112	15,576	2,788
Navy		443	443		147
Air Force	63	58	121		19
Total	4,587	5,089	9,676	15,576	2,954

Computation

		D1	D2	D3	D4	D5	D6	D12
Military services' requirements (note a)		1,527	1,527	1,532	1,695	1,695	1,700	1,700
Allied Forces' requirements (note b)		2,648	2,648	2,648	2,648	2,492	2,492	2,492
War reserve safety level (note c)		8,384	-	-	-	-	-	-
Peacetime safety level (note d)		(566)	-	-	-	-	-	-
One-half procurement cycle (note e)		(835)	-	-	-	-	-	-
1 Month production leadtime (note f)		(283)	(283)	(283)	-	-	-	-
Adjusted requirements (adjusted general mobilization reserve acquisition requirement)		10,875	3,892	3,897	4,343	4,187	4,192	4,192
Industrial mobilization planning (note g)		-	-	(3,000)	(4,343)	(4,187)	(4,192)	(4,192)
War reserve requirements (general mobilization reserve acquisition objective) (note h)	Total	10,875	3,892	897				

a/ Division of military services requirements:
D1 33.3%, D2 33.3%, D3 33.4% of D1 to D3
D4 33.3%, D5 33.3%, D6 33.4% of D4 to D6
D7 to D12 same as D6.

b/ Division of allied forces requirement:
D1 to D4 17% of total, D5 to D6 16% of total, D7 to D12 same as D6.

c/ Computation of war reserve safety level:
Greater of either 2 times average monthly demand for past 12 months or 2 times requirement for D6.

d/ Computation of peacetime safety level:
2 times average monthly demand.

e/ Computation of one-half procurement cycle:
number of months for procurement cycle times average monthly demand divided by 2.

f/ One month production leadtime:
same as average monthly demand, until production equals demands or P-day.

g/ Materiel to be furnished after M-day under industrial mobilization planning agreements.

h/ Requirements from M-day until production equals demands or P-day.

APPENDIX II

APPENDIX III

ASSISTANT SECRETARY OF DEFENSE
WASHINGTON, D.C. 20301

SR
INSTALLATIONS AND LOGISTICS

2 DEC 1975

Mr. Fred J. Shafer
Director
Logistics and Communications Division
General Accounting Office
Washington, D.C. 20548

Dear Mr. Shafer:

This is in reply to your letter of September 22, 1975, to the Secretary of Defense requesting comments on General Accounting Office (GAO) Draft Report, "Defense Supply Agency Could Reduce Requirements for Medical Items in War Reserves," (OSD Case #4176).

The Draft Report indicates it would be feasible to reduce wartime needs if the Defense Supply Agency (DSA) gave greater recognition to the availability of medical supplies and equipment from regular commercial sources, and that DSA's method of determining needs resulted in an extraordinary allowance for possible problems with the supply system. We concur in the main thrust and objectives of the Draft Report. Our specific comments relative to the GAO recommendations are set forth in the following paragraphs.

With regard to the recommendation that DSA develop and implement a management plan at the Defense Personnel Support Center (DPSC) which provides guidance and goals and a means of evaluation for the Industrial Preparedness Program (IPP) plan, DPSC has developed a time-phased management plan which includes goals and milestones for the measurement of performance. This plan will also provide for the canvassing of the entire commercial market for medical items. We anticipate the result to be a widespread profile of industrial capacity and capability to satisfy mobilization requirements for both planned and nonplanned items within the next year. Guidance and instructions have been provided by DSA in their revised Industrial Preparedness Planning Manual, dated May 1975.

Insofar as the recommendation that DSA should ensure that DPSC use available staff resources and expertise to review and classify the medical items is concerned, additional personnel have been made available to review medical items for commercial applications and to ensure that

APPENDIX III

only those items meeting the required criteria for selection are planned. Increased emphasis is being placed on the screening phase of the IPP process to ensure proper selection and classification of medical items.

With reference to the recommendation that DSA should implement the alternate commercial item program, this program currently exists and is being expanded to include medical items. The medical industry is being surveyed on the feasibility of using commercial substitutes in lieu of military specification items to meet mobilization requirements. Items identified as candidates by this survey will be submitted to the Military Services for approval. Another alternative, prestocking mobilization reserve items at the contractor's plant, is also being investigated.

With regard to the recommendation that DSA should complete a study on ways to improve military specifications by applying current industrial technology and standards, as you are aware, this study is already in progress. Two years ago, under the DoD Standardization Program, a program was instituted to convert Purchase Descriptions and interim specifications at DPSC (Medical) to fully coordinated documents. This program provides for continuing coordination of documents with industry and the Military Departments. This program is viewed as satisfying your recommendation.

The recommendation that DSA revise the method of computing the war reserve safety level for medical items is partially concurred in. Current policy that the required wartime safety level in days should be on hand in the first month is valid. The fact that the D+6 requirement is used to develop this safety level has been based on the fact that for most commodities the requirements have declined by that period. This is not true in the medical commodity, as the Service estimates do not start high in D+1 and gradually reduce. Also at this time, the medical mobilization safety level uses a fixed 60-day requirement in lieu of a variable safety level computation. This entire area will be evaluated to determine why the variable safety level has not been implemented and to validate the straight line projection of Service requirements after D-day.

With reference to the recommendation that the Secretary of Defense should require the Services to submit more precise information on their requirements for war reserves of medical items to DSA, we have initiated action to ascertain the specific requirements data needed by DSA and the capability of the Services to provide these data. Specific areas to be investigated include item selection criteria, the prioritization of requirements by the Services, and the capability of DSA to use more precise data (Month by Month) in current requirement computation programs.

We appreciate the opportunity to comment on your report in draft form.

Sincerely,

JOHN J. BENNETT
Acting Assistant Secretary of Defense
(Installations and Logistics)

APPENDIX IV

PRINCIPAL OFFICIALS

RESPONSIBLE FOR ADMINISTERING ACTIVITIES

DISCUSSED IN THIS REPORT

	Tenure of office	
	From	To
SECRETARY OF DEFENSE:		
Donald Rumsfeld	Nov. 1975	Present
James R. Schlesinger	June 1973	Nov. 1975
William P. Clements, Jr. (acting)	Apr. 1973	June 1973
Elliot L. Richardson	Jan. 1973	Apr. 1973
ASSISTANT SECRETARY OF DEFENSE (INSTALLATIONS AND LOGISTICS):		
John J. Bennett (acting)	Apr. 1975	Present
Arthur T. Mendolia	Apr. 1973	Mar. 1975
Hugh McCullough (acting)	Jan. 1973	Apr. 1973
DIRECTOR, DEFENSE SUPPLY AGENCY:		
Lt. General Woodrow W. Vaughn	Jan. 1976	Present
Lt. General Wallace H. Robinson, Jr.	July 1971	Dec. 1975

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