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Report to the Chairman, Subcommittee on Oversight of Government Management, Committee on Governmental Affairs, U.S. Senate

June 1993

DOD FOOD INVENTORY

Using Private Sector Practices Can Reduce Costs and Eliminate Problems

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The Honorable Carl Levin
Chairman, Subcommittee on
Oversight of Government Management
Committee on Governmental Affairs
United States Senate

Dear Mr. Chairman:

This report was prepared in response to your request that we compare commercial logistics practices with similar Department of Defense operations. It provides the results of our review of inventory management practices used by the private sector food industry and the Department of Defense to supply food to their end-users.

We are sending copies of this report to appropriate congressional committees; the Secretaries of Defense, the Army, the Navy, and the Air Force; the Director, Office of Management and Budget; and other interested parties. We will also make copies available to others on request.

If you or your staff have any questions concerning this report, please call me on (202) 512-8412. Other major contributors are listed in appendix I.

Sincerely yours,

Donna M. Heivilin
Director, Defense Management
and NASA Issues

Executive Summary

Purpose

Concerned about the $60 billion increase in the value of the Department of Defense's (DOD) inventories between 1980 and 1988, the Chairman of the Subcommittee on Oversight of Government Management, Senate Committee on Governmental Affairs, asked GAO to compare DOD's logistics practices with those of the private sector. In two previous reports, GAO identified ways that DOD could incorporate private sector business practices to better manage its inventories of aircraft repair parts and medical supplies.

In this review, GAO focused on the military food supply system for feeding troops within the continental United States. Specifically, GAO compared DOD's logistics practices for supplying food with those used by the food service industry to identify any practices DOD could adopt to reduce its logistics costs.

Background

DOD reported that it spent about $800 million in fiscal year 1992 to feed U.S. troops worldwide. The Defense Personnel Support Center (DPSC), a component of the Defense Logistics Agency (DLA), purchases more than 90 percent of the food supplied to military "end-users"—dining halls, hospitals, and other facilities that feed troops. DPSC obtains discounts by buying food in large quantities from producers.

Semiperishable items, such as canned goods, are stored in four DLA depots. Perishable items, including fresh and frozen vegetables, fruits, and meats, are stored in 21 contractor-operated Defense Subsistence Offices. These 25 warehouse facilities are located across the United States. Upon receiving requisitions for food, DLA transports the items from its warehouses to the military services' installations. At each installation, a base warehouse activity stores the food until it receives orders from its end-users. The food is then delivered to or picked up by the end-users.

Private sector end-users, including independent restaurants, hospitals, and hotels, as well as those affiliated with food service companies, obtain their food from distributors. Distributors deal with these end-users on a day-to-day basis, including taking orders and making direct deliveries. Many of these distributors offer a full line of food items.

Results in Brief

While making some limited use of food distributors, DOD's food supply system is generally outmoded and inefficient. Its multiple layers of warehouses between producers and end-users encourage large inventories

of food items at all levels, and items often sit on shelves for months or even years before reaching end-users. Many of the costs DOD incurs for holding, handling, and transporting large quantities of food are unnecessary because the existing network of private sector full-line distributors could supply food to DOD much more efficiently.

Because of heavy competition within the industry, distributors have a financial incentive to cut their costs, keep their prices low, and provide excellent customer service. Large food service companies with many end-users rely on distributors to deliver food to their end-users. In addition, DOD's limited use of distributors to meet certain food needs has demonstrated such benefits as lower costs and improved service.

Principal Findings

Food Supply System Encourages Large Inventories and Slow Turnover

Large stocks of food are routinely stored throughout the military supply system. As of the end of fiscal year 1992, for example, DLA depots had, on average, an 82-day supply of semiperishable food. DLA's total food inventories of perishable and semiperishable food were valued at more than $150 million. Base warehouse activities also hold large inventories—worth about $200 million as of September 30, 1991—as do some end-users.

Food items often remain in the supply system for several months, or even years, before they reach end-users. Inventory turnover is less than twice a year for semiperishable items and six times a year for perishable items. During visits to installations, GAO found numerous items with an extended inspection test date—the date food producers stamp on their products to indicate when the first signs of deteriorating food quality may be detected.

DOD's large food inventories and slow turnover are primarily due to the multilayered supply system, which has created a number of inefficiencies. For instance, base warehouse activity officials told us they maintain large inventory levels because deliveries from DLA's depots are unreliable. Installation officials also complained of damaged goods and incorrect orders from depots. Dining hall managers at Camp Pendleton, a Marine Corps base in California, waited several months to receive black pepper through the supply system despite placing four orders for it.

Military Food Supply System Incurs Unnecessary Costs

Although DOD does not know the full costs of supplying food to end-users, it will continue to incur unnecessary costs as long as it retains the current supply system. If DOD significantly expanded its use of distributors, it could eliminate depot storage of food (except for war reserve stocks and items bound for overseas), Defense Subsistence Offices, and many base warehouse activities. To illustrate the magnitude of savings possible, the costs to operate the 25 Defense Subsistence Offices and DLA warehouses are estimated to be almost $64 million for fiscal year 1993. Annual operating expenses for the Air Force's 75 base warehouse activities in the continental United States average $133,000 each, for a total of roughly $10 million. There are 49 Army and 42 Navy and Marine Corps base warehouse activities in the continental United States, many of which are larger than the Air Force base warehouse activities. Some base warehouse activities, however, would likely be more cost-effective to retain, and others would be needed to ensure base security or because their end-users are not easily accessible.

GAO's review also disclosed that some base warehouse activities duplicate the functions of nearby base warehouse activities. This is the case in Alaska, for example, where the Army's Fort Richardson and Elmendorf Air Force Base, which are contiguous, operate separate base warehouse activities whose operations are located in part in the same buildings.

Food Service Industry Employs Efficient Logistics Practices

The private sector avoids many of the problems experienced by the military food supply system by reducing or eliminating "middlemen." By relying on full-line food service distributors to move both perishable and semiperishable food from suppliers to end-users, food service companies and end-users do not incur the direct costs of holding, handling, and transporting food.

While distributors do incur these costs, they have a financial incentive to maintain efficient operations and keep their costs and prices down. The food service distribution industry is highly competitive, with thousands of distributors—national, regional, and local—vying for business.

DOD's Use of Private Sector Practices Demonstrates Benefits

DOD is taking several steps to reduce its investment in food inventories and modify some of its distribution practices. DOD is already using distributors on a limited basis to supply food to installations. For example, many dining halls and other end-users obtain some perishable items from distributors, while military academies and certain installations obtain all

their food from distributors. With few exceptions, officials said that these efforts have resulted in reduced costs, improved food quality, and better customer service.

No DOD Plans to Significantly Expand Use of Private Sector Distributors

Despite the extensive use of distributors in the private sector and the benefits demonstrated by DOD's limited use of distributors, DOD has no immediate plans to significantly expand its use of distributors and eliminate its current supply system. While many DOD food service officials favored the idea, others expressed concerns about taking this step and said obstacles—such as military specifications for food items and government-unique contract clauses—may hinder its ability to procure commercial items and institute commercial logistics practices.

GAO recognizes that using distributors presents challenges to DOD; however, taking this step would be consistent with the goals of DOD's comprehensive inventory reduction plan, issued in May 1990. The plan states that "where DOD requirements can be met through commercial distribution systems in a timely and cost-effective fashion, no value is added by pushing items through the DOD warehousing systems."

Recommendations

GAO recommends that the Secretary of Defense direct the services and DLA to conduct a demonstration project of an expanded use of full-line distributors delivering food directly to end-users. GAO further recommends that the Secretary ensure that DOD eliminates base warehouse activities that are close to one another and have redundant functions.

Agency Comments and GAO's Evaluation

GAO requested written comments from DOD, but none were provided. However, DOD provided official oral comments. DOD generally concurred with the report's conclusions and recommendations. As GAO recommended, DOD plans to conduct a demonstration project to test the feasibility of expanding the use of distributors during peacetime. This project will include a cost comparison of the DOD supply system with the costs of commercial distributors. DOD also said it will develop a plan to eliminate base warehouse activities that are operating within close proximity to one another and/or have redundant functions.

Contents

Executive Summary		2
Chapter 1 Introduction		8
	Organization of the Military Food Supply System	8
	Private Sector Food Industry Relies on Independent Food Service Distributors	11
	Prior GAO Reports	11
	Objectives, Scope, and Methodology	11
Chapter 2 Multilayered Supply System Encourages Large Inventories and Slow Turnover		15
	All Levels of the Food Supply System Hold Large Inventories	15
	Turnover of Food Items at Depots Is Slow	16
	Multilayered Supply System Is Key Factor Contributing to Large Inventories and Slow Turnover	18
	Food Service Industry Keeps Inventory Low and Turnover High	20
	Some Base Warehouse Activities Duplicate Efforts	22
Chapter 3 Military Food Supply System Incurs Unnecessary Costs		23
	Military Supply System Predates the Emergence of Current Private Sector Distribution Practices	23
	Financial Incentives Keep Costs Low in the Food Service Industry	24
	DOD's Food Cost Information Is Inadequate	25
	Unnecessary Costs Associated With Retaining the Current Food Supply System	26
	Customer Service Provided by Depots Is Called Inadequate	27
Chapter 4 DOD's Use of Private Sector Practices Demonstrates Benefits		29
	DLA and the Military Services Rely on Distributors for Certain Perishable Items	29
	Distributors Supply Food to Military Academies and Certain Installations	30
	Nonappropriated Fund Activities Obtain Most Food Items From Distributors	30
	Commissaries Have Realized Savings by Shifting to Private Sector Practices	31
	DPSC Has Several Initiatives to Increase Its Use of Private Sector Practices	32

Chapter 5 DOD Concerns and Questions About Using Distributors

35
Military Specifications 35
Government-Unique Contract Requirements 35
Deliveries to Ships and Certain Other End-Users 36
Administrative Work Load 38
Food Prices 39
Supplying Food on Short Notice 39

Chapter 6 Conclusions and Recommendations

40
Conclusions 40
Recommendations 41
Agency Comments and Our Evaluation 41

Appendix

Appendix I: Major Contributors to This Report 44

Table

Table 3.1: Cost Components of Surcharge 25

Figures

Figure 1.1: DLA Depots 9
Figure 1.2: DLA's Contractor-Run DSOs 10
Figure 2.1: Food Items Stored at DLA Warehouse 16
Figure 2.2: Canned Peanut Butter Packed in June 1989 17
Figure 2.3: Unused Cases of Canned Donut Mix at a Navy Dining Hall 19
Figure 2.4: How Food is Provided to Military End-Users and Private Sector End-Users in Rapid City, South Dakota 21
Figure 5.1: Distributor's Truck Unloading Directly to the USS Eisenhower 38

Abbreviations

DeCA	Defense Commissary Agency
DLA	Defense Logistics Agency
DOD	Department of Defense
DPSC	Defense Personnel Support Center
DSO	Defense Subsistence Office
GAO	General Accounting Office

Introduction

The Department of Defense (DOD) reported that it spent about $800 million in fiscal year 1992 to feed U.S. troops worldwide.[1] Most of the food it purchases is stored in a network of warehouses managed by the Defense Logistics Agency (DLA) or by DLA contractors. From these warehouses, the food is transported to military installations, which store it in their own warehouses. As a final step, the food is moved to individual end-users, such as dining halls, hospitals, and other facilities that feed troops.

Organization of the Military Food Supply System

The Defense Personnel Support Center (DPSC), part of DLA, acquires more than 90 percent of the food provided to U.S. troops. DPSC purchases food not only for military installations in the United States, but also for overseas installations, war reserve stocks, commissaries, and non-DOD customers, including Department of Veterans Affairs medical centers and federal prisons.[2] Sales to non-DOD customers represented less than 4 percent of DPSC's fiscal year 1992 sales. This report addresses only the peacetime troop-feeding mission in the continental United States, which accounts for the largest share of DPSC's troop issue food purchases.

DPSC purchases food from a variety of suppliers—manufacturers, growers, packers, and processors—which deliver their goods to 25 DLA facilities across the continental United States. These facilities include 4 depots for semiperishable items, such as canned goods, and 21 Defense Subsistence Offices (DSO) for perishable items, such as fresh and frozen fruits, vegetables, and meats. Depots are large DOD warehouse facilities that store a variety of military equipment and supplies. DSOs are owned and operated by DLA contractors, except one facility which is owned by DOD. Figures 1.1 and 1.2 show the locations of the depots and DSOs.

[1]DOD figures for the continental United States only are not available.

[2]DPSC is also responsible for acquiring military clothing and medical supplies.

Figure 1.1: DLA Depots

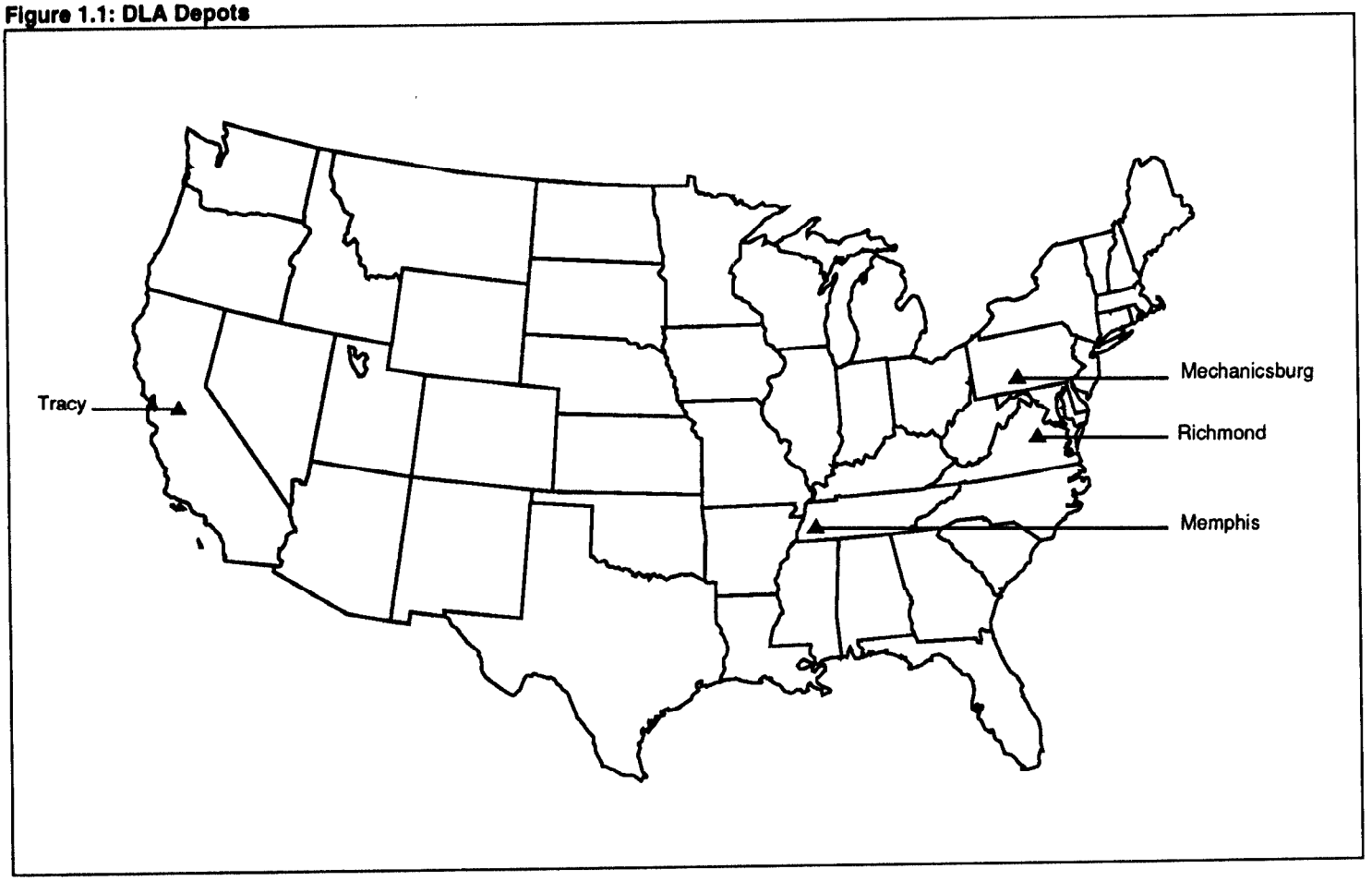
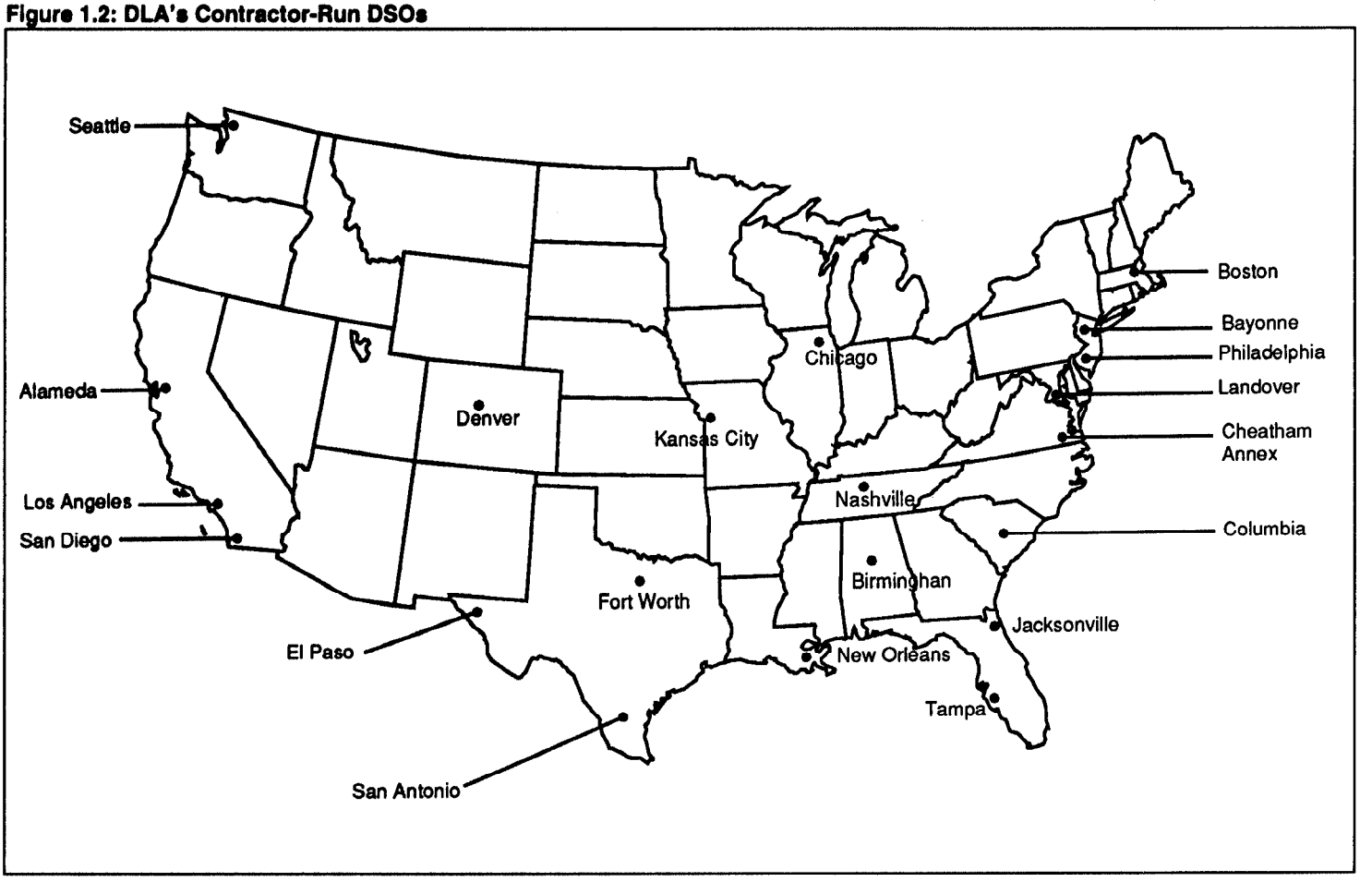


Figure 1.2: DLA's Contractor-Run DSOs



DPSC's main troop issue customers are the base warehouse activities at military installations, which submit requisitions to DPSC and the DSOs for the food requirements of their end-users. All the services operate their own base warehouse activities, and they refer to these by various names. The Army has troop issue subsistence activities; the Air Force has troop issue or troop support activities; the Marine Corps has direct supply stock control departments; and the Navy has supply centers. In March 1992, however, DLA assumed control of the Navy's major supply centers, which are now known as defense depots. Base warehouse activities store both perishable and semiperishable food items. They typically serve a variety of end-users, some of which may be large and others small. To obtain the

food they need, end-users submit requisitions to the base warehouse activities.

Private Sector Food Industry Relies on Independent Food Service Distributors

In the private sector, both food service companies and independent end-users, such as restaurants, hotels, and hospital dining operations, generally obtain their food through food service distributors. Distributors obtain food from suppliers and perform the day-to-day supply functions for end-users, including taking their orders and making direct deliveries. Many of these distributors carry a full line of items, including canned, dry, and frozen items; fresh produce; and kitchen products and supplies.

Food service companies orchestrate the purchase and distribution of food to their end-users. Like DPSC, they buy items in large volume directly from suppliers to obtain volume discounts, thereby keeping the item price low. They also buy items from distributors when items are not consumed by end-users in a quantity sufficient to obtain a volume discount or when distributors can provide food at about the same cost as buying directly from suppliers. Food service companies also set and assure quality standards and maintain cost controls for their end-users. These companies, unlike DPSC, then contract with distributors to take possession of food as end-users need it.

The two food service companies we visited for this review, Marriott Corporation and ARA Services, each purchases more food each year than DOD. Marriott, for instance, purchased $2 billion worth of food and food items in 1992. Some food service companies have their own distribution subsidiaries, but this is uncommon.

Prior GAO Reports

This is the third in a series of reports comparing DOD's logistics practices to those of the private sector. The first two reports, Commercial Practices: Opportunities Exist to Reduce Aircraft Engine Support Costs (GAO/NSIAD-91-240, June 28, 1991) and DOD Medical Inventory: Reductions Can Be Made Through the Use of Commercial Practices (GAO/NSIAD-92-58, Dec. 5, 1991), identified opportunities to improve logistics practices by applying proven private sector practices.

Objectives, Scope, and Methodology

Concerned about the $60 billion increase in the value of DOD's inventories between 1980 and 1988, the Chairman, Subcommittee on Oversight of Government Management, Senate Committee on Governmental Affairs,

asked us to conduct additional work comparing DOD's logistics practices with private sector practices. We selected food logistics because of the large amount of inventory invested in food and the similarities between military peacetime feeding operations and civilian institutional feeding operations. Our specific objectives were to

- compare DOD's inventory practices for food items with those used by private concerns which provide similar institutional support and
- identify practices DOD could adopt to reduce logistics cost for these items.

We assessed the feasibility and cost-effectiveness of using private sector full-line distributors to deliver food to military end-users during peacetime within the continental United States. We excluded war reserves from our review because there is no private sector counterpart and DOD is recalculating war reserve levels based on current and projected troop reductions and base closings. We excluded overseas troop feeding for these same reasons.

To determine current inventory practices for subsistence items in the private sector, we interviewed officials from two food service companies, ARA Services, Philadelphia, Pennsylvania, and Marriott Corporation, Bethesda, Maryland, and 11 full-line food service distributors:

- Doughtie's Foods, Inc., Portsmouth, Virginia;
- Nobel/Sysco Food Services Company, Albuquerque, New Mexico;
- Sysco Food Services of Austin, Inc., Austin, Texas;
- Kraft Foodservice, San Diego, California;
- Kraft Foodservice, Denver, Colorado;
- Ritter Food Corporation, Elizabeth, New Jersey;
- AFI Food Service Distributors, Roseland, New Jersey;
- PYA/Monarch, Inc., Lexington, South Carolina;
- Biggers Brothers, Inc., Charlotte, North Carolina;
- Food Services of America, Rapid City, South Dakota; and
- Food Services of America, Seattle, Washington.

In addition, we visited the International Foodservice Distributors Association in Falls Church, Virginia; a food service consultant in Linwood, New Jersey; and a professor at the Food Marketing Academy, Saint Joseph's University, Philadelphia, Pennsylvania. Our discussions focused on the feasibility of distributors providing services for the military and the cost of these services.

To obtain information on DOD's subsistence logistics system, we interviewed officials from the following organizations:

- Office of the Assistant Secretary of Defense, Production and Logistics, Food Planning Board, Washington, D.C.;
- Defense Logistics Agency, Cameron Station, Alexandria, Virginia;
- U.S. Army Troop Support Division, Washington, D.C.;
- U.S. Navy Food Service Systems Office, Washington, D.C.;
- U.S. Air Force, Directorate of Morale, Welfare, Recreation, and Services, Washington, D.C.;
- U.S. Marine Corps Headquarters, Washington, D.C.;
- Defense Personnel Support Center, Philadelphia, Pennsylvania;
- Defense Depot, Richmond, Virginia;
- Defense Depot, Norfolk, Virginia;
- Quartermaster Center and School, Army Center of Excellence, Fort Lee, Virginia;
- Defense Commissary Agency, Commissary and Troop Support Operations, Fort Lee, Virginia;
- U.S. Army, Community and Family Support Center, Prime Vendor Office, Alexandria, Virginia;
- Professional Contract Administrators, Albuquerque, New Mexico;
- Army Audit Agency, Philadelphia Regional Office, Scranton/Wilkes-Barre Field Office, Wilkes-Barre, Pennsylvania;
- Fort Dix Army Base, Wrightstown, New Jersey;
- Fort Eustis Army Base, Newport News, Virginia;
- Fort Hood Army Base, Killeen, Texas;
- Fort Lewis Army Base, Tacoma, Washington;
- U.S. Military Academy, West Point, New York;
- Camp Pendleton Marine Corps Base, Oceanside, California;
- Parris Island Marine Corps Recruit Depot, Beaufort, South Carolina;
- Norfolk Naval Base, Norfolk, Virginia;
- Little Creek Naval Amphibious Base, Norfolk, Virginia;
- Oceana Naval Air Station, Virginia Beach, Virginia;
- USS Eisenhower, Norfolk, Virginia;
- El Centro Naval Air Station, El Centro, California;
- McGuire Air Force Base, Wrightstown, New Jersey;
- Langley Air Force Base, Hampton, Virginia;
- Ellsworth Air Force Base, Rapid City, South Dakota; and
- McChord Air Force Base, Tacoma, Washington.

Our discussions at these locations focused on the current inventory practices used by the military for troop feeding, any planned future

changes, and DOD officials' positions on the use of private sector distributors for troop-feeding items. In addition, we discussed obstacles that DOD officials believe inhibit the use of private sector practices in military food distribution.

We attempted to obtain DOD cost information for comparison purposes but not all needed information was available because DOD's accounting system does not gather data in this fashion.

We conducted our review from January 1992 through January 1993 in accordance with generally accepted government auditing standards. We requested written comments from DOD, but none were provided. However, we obtained official oral comments from the agency and have discussed them in chapter 6.

Multilayered Supply System Encourages Large Inventories and Slow Turnover

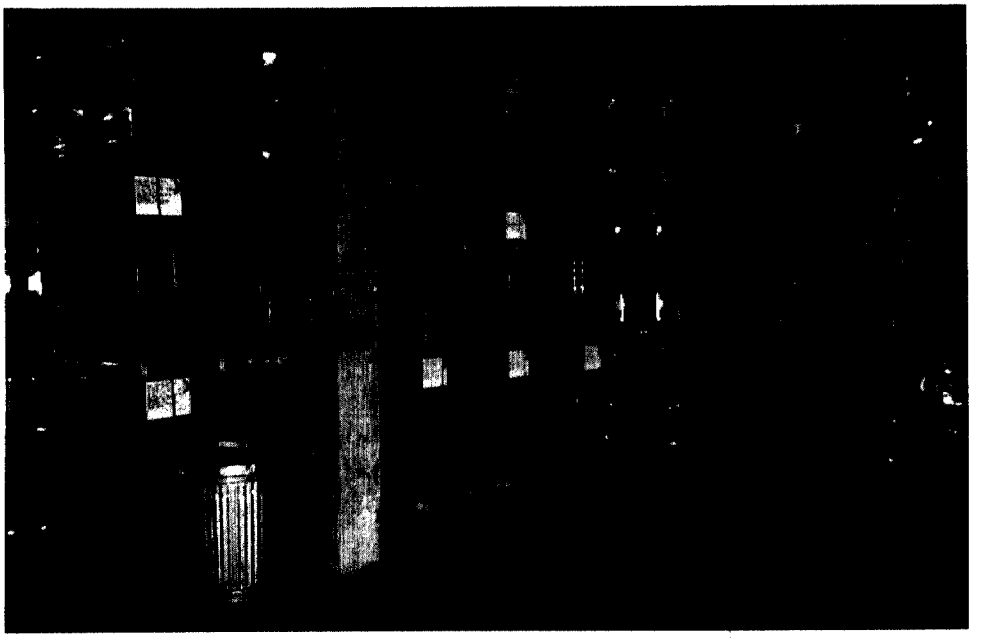
DOD has built up enormous inventories of food at its depots, DSOs, and base warehouse activities, and items often remain at these facilities for long periods of time before they are moved to end-users. The large inventories and slow turnover are the result of several factors, but the most important of these is DOD's multilayered supply system, which is very inefficient. The private sector, in contrast, maintains a flatter organizational structure with just one layer (distributors) between producers and end-users. Because of the competitive nature of their industry, distributors have an incentive to make their operations efficient. This includes maintaining low inventory levels and a quick turnover of products.

Our review of the DOD food supply system also showed that many installations located near one another operate separate base warehouse activities that perform essentially the same functions. Such redundant operations are wasteful.

All Levels of the Food Supply System Hold Large Inventories

Large stocks of food are routinely stored throughout the military supply system. As of the end of fiscal year 1992, for example, depots had enough semiperishable food items on hand to supply base warehouses for about 82 days. DLA's total inventories of troop issue foodstuffs at that time were valued at $159 million—$82 million in semiperishable items and $77 million in perishable items. According to DOD officials, DLA had reduced this level to $132 million as of the end of January 1993. Figure 2.1 shows food stocks maintained at a DLA depot near Richmond, Virginia.

Figure 2.1: Food Items Stored at DLA Warehouse



Base warehouse activities also hold large inventories—worth about $200 million as of September 30, 1991.[1] According to service officials, they are authorized to have a semiperishable inventory equal to 45 days of supplies. Eight of the 11 base warehouse activities we visited generally held the maximum authorized amount, while two held more than that amount and one held less than that amount.

Some end-users also maintain substantial inventories. For example, Navy on-shore end-users maintain an average inventory level of 32 days. According to DOD officials, ships are authorized to maintain a 75- to 90-day inventory level because they may be ordered to sea on short notice. Army dining halls, in contrast, are authorized only a 3-day inventory level.

Turnover of Food Items at Depots Is Slow

Food items remain in DOD's inventories for long periods of time—as long as 2 years or more. On average, inventory turnover is less than twice a year for semiperishable items and about six times a year for perishable items. In some cases, food remains in inventories beyond its initial inspection test date—the date food producers stamp on products to indicate when the first signs of deteriorating quality may be detected. Though food is

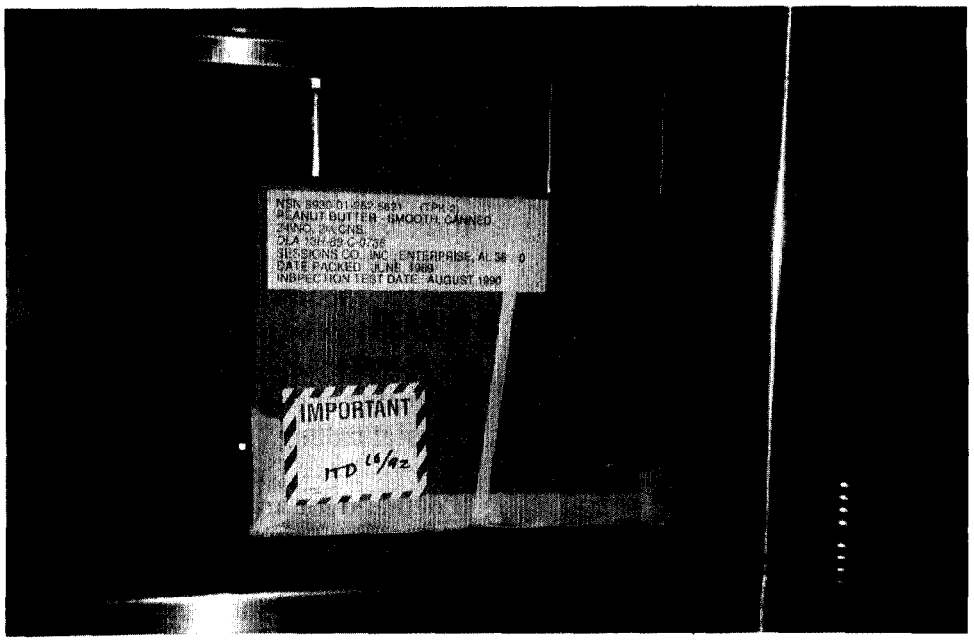
[1]This is the latest date for which data on base warehouses' inventory was available.

periodically inspected after it is received, if it is not used before the inspection test date, an inspector from the U.S. Army Veterinary Service must examine it to determine whether it is still fit for human consumption. If it is fit, the inspector may extend its inspection test date, and the item may remain in the inventory. If it is unfit, the food will be disposed of.

During our visits to base warehouse activities and dining halls, we found many items with extended inspection test dates. For example:

- A box of canned peanut butter at a dining hall at the Marine Corps' Camp Pendleton in California was initially packed in June 1989, with an initial inspection date of August 1990. The peanut butter was delivered from the depot to the base warehouse activity in March 1992. Prior to arriving at the dining hall in May, veterinary inspectors had examined the peanut butter and extended its inspection test date to October 1992 (see fig. 2.2).
- The base warehouse activity at the Marine Corps' Parris Island Recruit Depot in South Carolina received refined white sugar from the DLA depot in Memphis, Tennessee, almost 2 years after it was packed in October 1990. The sugar's inspection test date had been extended to May 1993.

Figure 2.2: Canned Peanut Butter Packed in June 1989



According to DPSC's Assistant Chief of the Semiperishable Branch, these examples illustrate problems with improper stock rotation at the depots. DOD has a "first-in, first-out" policy: the first food items to arrive at a depot or DSO are also to be the first sent out to base warehouse activities. The Assistant Chief said Camp Pendleton's peanut butter was not sent out until almost 3 years after it was packed because depot personnel failed to follow the first-in, first-out rotation procedure. Failure to follow this procedure also was the reason for the late arrival of sugar at Parris Island, he said, adding that because sugar is a high turnover item, no sugar packed in 1990 should have remained in the depot in 1992.

Multilayered Supply System Is Key Factor Contributing to Large Inventories and Slow Turnover

DOD's multilayered supply system is the key factor contributing to the large inventories and slow turnover of food products. Under this system, base warehouse activities have traditionally depended on DLA to meet their food needs. Although the activities may go outside the system for items when it is in their best interest in terms of quality, timeliness, and cost, this has mainly been done only for those items out of stock or not stocked by DLA. Thus, DLA has had few incentives to maintain an efficient operation, keep its food inventory levels low, and move products quickly to base warehouse activities. Base warehouse activity officials told us they must maintain large inventory levels because the supply system is unreliable. They do not know whether they will always get the items they need from DLA when they need them.

Another related factor is DPSC's practice of procuring food from producers using long-range forecasts based on past orders from base warehouse activities, rather than short-term needs of end-users. DPSC uses long-range forecasts because it takes an average of 120 to 205 days from the time a need for an item is identified until the item is received in a depot, primarily due to procurement time. In addition, base warehouse activities develop their orders based, in part, on end-users' estimates of future needs, which can be as much as 60 days ahead of actual need, and on their own rough estimates of end-users' needs, which some officials refer to as "crystal-balling."

If demand for an item declines after DPSC procures the item or after base warehouse activities submit their requisitions, the depots, DSOs, or base warehouse activities will receive food in excess of actual need, and their inventories will increase. Managers at base warehouse activities and end-users told us it is often difficult to accurately forecast their needs more than a few days ahead of actual need. Reasons they cited included

unexpected mobilization or military exercises, base troop population changes, menu changes, and changing consumer preference. There are four options for reducing excess inventories: DPSC can mark down its price to encourage orders from base warehouse activities or send the item to the Defense Reutilization and Marketing Service for disposal,[2] and base warehouse activities can require end-users to take the item and pay for it or take the item and not pay for it.

Excess inventories can also occur at the end-user level. At a Navy dining hall we visited, cases of canned donut mix packaged in 1986 were sitting unused because the dining hall had determined that its customers preferred donuts made from scratch (see fig. 2.3).

Figure 2.3: Unused Cases of Canned Donut Mix at a Navy Dining Hall

A third factor is the contracting practices DPSC has used to purchase food. Typically, contracts with producers require depots and DSOs to take possession of food when it is purchased rather than when it is needed. Thus, the food must be stored at U.S. government expense until the depot or DSO receives requisitions from base warehouse activities. DPSC, however,

[2]The Defense Reutilization and Marketing Service is a part of DLA and manages the reuse or disposal of material that the military services no longer require.

has made strides in moving away from these types of contracts and using private sector contracting practices instead (see ch. 4).

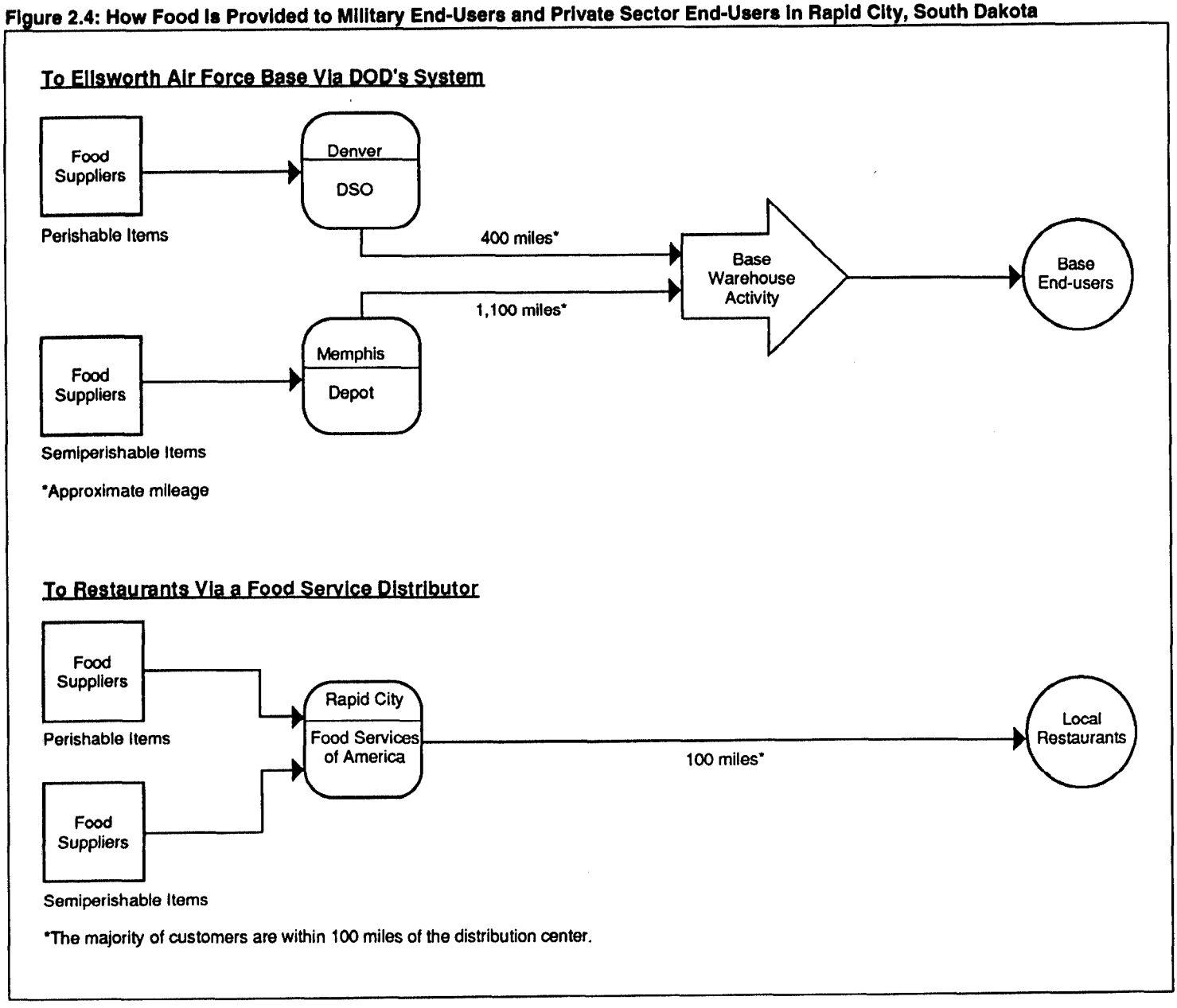
Finally, DPSC's long order lead time also contributes to the large inventories. DPSC requires base warehouse activities to submit their food orders 30 days in advance of when they require delivery. The 30 days is needed to allow DPSC time to process the order and the depot time to deliver the order.

Food Service Industry Keeps Inventory Low and Turnover High

The food service industry provides a striking contrast to DOD in how it manages food supplies. The structure of the industry is streamlined so that food is handled a minimum number of times before delivery to end-users. In addition, private sector full-line distributors handle both perishable and semiperishable items.

Figure 2.4 illustrates the differences between the military and the private sector distribution systems in the area of Rapid City, South Dakota. Specifically, this figure shows the military's flow of food to Ellsworth Air Force Base and a food service distributor's flow of food to local restaurants. It shows that (1) Ellsworth's primary source of semiperishable food—the DLA depot at Memphis, Tennessee—is approximately 1,100 miles away and the primary source of perishable items—the DSO in Denver, Colorado—is about 400 miles away and (2) the Rapid City distribution center for Food Services of America distributes food to local restaurants and other customers mostly within a 100-mile radius. The distributor also delivers food items to end-users at Ellsworth Air Force Base, which is only about 10 miles away.

Figure 2.4: How Food Is Provided to Military End-Users and Private Sector End-Users in Rapid City, South Dakota



Private sector end-users have no need to hold on to large stocks of food because they can depend on the distributors to deliver the food they need within a few days (often 1 day) of ordering it. Full-line distributors told us that they had on-hand inventories averaging 30 days or less and that no

items in their warehouses would be more than 6 months old. Some inventories, they said, are needed to respond to unexpected orders and to guard against disruptions in supply. The turnover rates of these distributors ranged from 12 to 52 times a year for semiperishable items and 37 to 104 times a year for perishable items—much higher than the military system's turnover rates.

Because of the high costs of holding large inventories, distributors have a financial incentive to keep their inventories low and their turnover high. They are able to do so because of efficient operations and close coordination with end-users. These issues are discussed further in chapter 3.

Some Base Warehouse Activities Duplicate Efforts

Installations that are near one another or even contiguous usually have their own base warehouse activities, with separate staff, facilities, and inventories. In Alaska, for example, the Army's Fort Richardson and Elmendorf Air Force Base, which are contiguous, operate separate base warehouse activities even though part of their operations are located in the same buildings at Fort Richardson. The Army's Fort Lewis and McChord Air Force Base in Washington state have separate base warehouse activities that are just 5 miles apart. Similar situations exist in Norfolk, Virginia; San Antonio, Texas; and other locations.

We found two cases in which a base warehouse activity supported more than one installation. In New Jersey, the Army's Fort Dix and McGuire Air Force Base share a base warehouse activity. Despite the different missions of the two installations, sharing a base warehouse activity does not present problems, according to officials. In the San Antonio area, three Air Force bases share a base warehouse activity, although a fourth Air Force base and the Army's Fort Sam Houston each have their own.

One cause of redundant base warehouse activities is the lack of coordination among the military services. No single DOD organization has visibility and control over the food in the various base inventories, and service personnel do not believe they can rely on the other services to supply needed food. Although DLA and the services have visibility and control over the food each possesses, none has visibility over food in the possession of the others. For instance, DLA knows what inventory it has in its depots, but when it transfers items to the services' base warehouse activities, it also transfers responsibility to the services and therefore loses visibility and control over them.

Military Food Supply System Incurs Unnecessary Costs

DOD incurs unnecessary costs by retaining its multilayered food supply system rather than tapping into the existing network of distributors in the private sector. DOD estimates it spent about $800 million to feed its troops worldwide in fiscal year 1992. However, DOD's accounting system does not gather data on all food costs, such as costs of base warehouse activities for food. Our review showed that distributors are capable of supplying food to military end-users much more efficiently than the current supply system. Furthermore, distributors are likely to provide better service. Many installation officials we interviewed criticized the service they currently receive from the depots, citing delivery delays, damaged goods, and inaccurate orders.

Military Supply System Predates the Emergence of Current Private Sector Distribution Practices

The military food supply system took shape in the early 1950s when DOD began to integrate the management of supplies commonly used by all the military services. Commodities such as food, clothing, medical supplies, and petroleum were assigned to one service to manage for all the services. For each commodity assigned to it, the service established a "single manager" agency to buy, store, and issue supplies; manage inventories; and forecast requirements. The Army was assigned to serve as the single manager for food.

While centralizing operations showed economies of operation, logistics and financial management procedures were not uniform from agency to agency. In 1961, DOD established the Defense Supply Agency (later renamed the Defense Logistics Agency) to consolidate the operations of the eight single-manager agencies. These agencies became DLA supply centers. Three of these centers, including the center supplying food, were consolidated into DPSC in 1965. The military food supply system has remained essentially unchanged since the 1960s, about the time the food service distribution industry began to undergo major changes.

Until the 1960s, private sector food distributors were almost exclusively local operations specializing in certain product lines, such as canned or frozen products. Around 1960, they began to expand to carry broader lines of items. For instance, some dry grocery and frozen food distributors merged. The industry continued to expand, and by the late 1980s, many distributors carried a full line of items, including perishable and semiperishable food, as well as equipment and supplies. In addition, some distributors have become more regional or national by expanding their service areas.

This expansion was driven primarily by customer demands for broader product lines and more efficient ordering and distribution practices. Computerization and other improvements in industry practices also contributed to the industry's greater efficiency.

Food service companies have also evolved. While some companies were in the distribution business in the late 1960s, most left the industry after recognizing that independent distributors were more efficient at distribution. Now food service companies contract with distributors to handle distribution, and their role is focused on negotiating and administering contracts with suppliers and distributors.

Financial Incentives Keep Costs Low in the Food Service Industry

The food service industry has become more efficient as a result of the increased reliance on food service distributors. End-users and food service companies do not incur the direct costs for storing, handling, or transporting items. While distributors do incur these costs, they have financial incentives to make their operations efficient and achieve savings. Competition creates these incentives. Thousands of distributors vie for business across the United States. National full-line distributors compete with large regional distributors, which often dominate their region, and with local distributors. The top 10 regional and national distributors, for example, account for less than 25 percent of the total food distribution business, according to a food service consultant.

In response to this competition, distributors must be extremely cost conscious and responsive to their customers in order to stay in business. Achieving these goals depends in large part on lowering inventory levels (see ch. 2) and developing a cooperative relationship with end-users. More specifically, distributors

- make frequent deliveries to their end-users, usually 1 to 3 days after receiving an order;
- automate ordering and inventory systems;
- incorporate efficiencies in both the design of their facilities and in the development of delivery schedules; and
- generally locate facilities within 100 to 250 miles of end-users, and often much closer, to lower transportation costs.

Prices charged to end-users are usually based on a per-case handling fee or a percentage mark-up, depending on whether DOD or distributors purchased food from suppliers. The distributors we spoke with said they

would probably charge DOD $1.00 to $2.50 per case if DOD purchased items or a percentage mark-up of 8 to 14 percent if they purchased items for DOD.

Food industry officials and experts outside the industry believe that DOD could meet its food supply needs through private sector distributors. Representatives of food service companies and the food service distribution trade association said DOD could use distributors to significantly improve its supply system, which they believe is outdated and inefficient. The food service consultant and food marketing professor we interviewed agreed with this view. Distributors themselves said they have proven their capability to supply large customers such as DOD. In fact, some of their customers, including Marriott, purchase much more food each year than DOD.

DOD's Food Cost Information Is Inadequate

DLA publishes catalogs for its end-users that list its food prices. In determining which items it can afford to buy from the catalog and what it will include on its menu, the end-user calculates a monthly budget based on its basic daily food allowance. This allowance is a daily dollar amount DOD allocates to end-users for meals served to each authorized person. The allowance, which was about $4.50 in January 1993, is adjusted regularly to reflect changes in DLA's prices. Each item's catalog price includes the price DLA paid the supplier plus a surcharge (16.6 percent in fiscal year 1993) that is intended to cover the costs associated with procuring, holding, and distributing the item to the base warehouse activities. Table 3.1 lists the cost components of the surcharge.

Table 3.1: Cost Components of Surcharge (Fiscal Year 1993)

Cost component	Percentage
Depot cost of operations	3.2
DPSC and DSO cost of operations	8.4
Transportation from producer to depot, DSO, or base warehouse activity	0.6
Transportation from depot to base warehouse activity	3.6
Depot or DSO inventory losses or damages	0.5
Base warehouse activity inventory losses or damages	0.3
Total	**16.6**

The surcharge, however, does not reflect all costs of supplying food to end-users, which means catalog prices understate total costs. First, it does not cover (1) the costs for operating base warehouse activities or (2) the costs for transporting food from base warehouse activities to end-users.

Second, the surcharge remains unchanged no matter what type of item is purchased and no matter how far the installation is from the depot or DSO.

DOD's prices do not reflect the actual costs of supplying food, and DOD does not know what these costs are. This is because DOD's accounting systems do not capture these costs on an integrated basis. For instance, it does not know the costs for transporting food from base warehouse activities to end-users. Nine of the 11 base warehouse activities we visited require all or some of their end-users to pick up their own orders. The military installations absorb the truck, maintenance, fuel, and other transportation costs into their general operating expenses; the installations do not add these expenses to the costs of feeding their personnel.

The Office of the Secretary of Defense publishes food cost information in its annual Supply System Inventory Report,[1] but some of this information is questionable. The fiscal year 1991 report omits Air Force data altogether, and data for the other services is inconsistent. For example, while data for the Army and Marine Corps includes costs for troop-feeding, war reserves, and commissary retail inventory levels, the data for the Navy includes only ship stores and commissary inventories. Moreover, we could not reconcile data in the report with data we obtained independently from DLA.

We also question the validity of inventory holding costs calculated by DOD. These costs influence DOD's order quantities—a lower cost justifies a larger purchase quantity. DLA and the services, except the Air Force, use a 10-percent investment rate in their economic order computations. The Air Force uses a 6-percent investment rate. The 10-percent rate was established in 1970 and has not changed since then. The rate excludes certain costs, such as depreciation costs. Also, DOD spreads holding costs equally among commodities, even though these costs vary by commodity. For instance, DOD does not recognize the cost differences between handling food and handling spare parts.

Unnecessary Costs Associated With Retaining the Current Food Supply System

In retaining its current supply system rather than switching to private sector distributors, we believe DOD will continue to incur unnecessary costs for holding, handling, and transporting food. DLA contracts for the operation of the 21 DSOs are valued at about $28 million in fiscal year 1993. Expenses at the 4 DLA-operated depots, including the 130 people who work in over 10 food warehouses, equipment, maintenance, transportation, and overhead, are estimated to be about $36 million in fiscal year 1993. In

[1]The report provides summary statistics on the status and value of DOD supply system inventories.

addition, the long distances between depots and some installations increase transportation costs. For instance, as shown in figure 2.4, semiperishable food items for an Air Force base in South Dakota are moved by truck about 1,100 miles from the Memphis depot.

We could not determine the total operating costs for all base warehouse activities. The Army, for instance, does not centrally collect this data. However, operating expenses for the Air Force's 75 base warehouse activities located within the continental United States average about $133,000 annually, for a total of roughly $10 million. There are 49 Army and 42 Navy and Marine Corps base warehouse activities in the continental United States. Because Army installations are generally larger than Air Force installations, it is reasonable to expect that their base warehouse activity operating expenses are also greater. Base warehouse activity operating expenses at Fort Hood and Fort Eustis, two Army installations we visited, were $542,000 and $310,000, respectively.

Customer Service Provided by Depots Is Called Inadequate

Installation officials cited numerous problems with the service provided by DLA depots. While depots are supposed to deliver semiperishable goods to base warehouse activities on a required delivery date, their performance is spotty. Base warehouse activity officials said they did not always know when an order would arrive. In many cases, part of the order arrives on the required delivery date, with the rest arriving before or after this date. Base officials also complained about receiving damaged goods and inaccurate orders from the depots. Even when the installations receive such deliveries, they do not have the option of sending them back to DLA. The installation officials said they had not experienced such problems with DSOs, which are operated by contractors.

Another problem, base officials said, was that items were sometimes unavailable from depots. DLA reported that its depots were out of stock 3.4 percent of the time in July 1992. However, by the end of fiscal year 1992, DLA's reported out-of-stock rate decreased to 1.3 percent. This rate compares to about 1 percent for the distributors we visited.

Dining hall managers at Camp Pendleton told us in July 1992 that they had been unable to obtain black pepper from the military supply system for several months. Their cooks, consequently, were preparing meals without pepper. The base warehouse activity item manager said he had run out of pepper in May and had placed four orders for pepper with DPSC between

late February and July. Though three of the orders were marked "high priority," the base did not receive any pepper until September.

According to DPSC's Assistant Chief of the Semiperishable Branch, DPSC never received Camp Pendleton's first order for black pepper in February. When the second and third orders arrived, he said, pepper was on back order at the Tracy, California, depot—the depot nearest the base. While pepper was available at the Memphis depot, the Assistant Chief could not explain why it was not sent to Camp Pendleton.

DPSC is aware of problems similar to those we found. In the fall of 1992, a DPSC team visited five bases and one DSO in Texas to determine how well DPSC was servicing its customers. Some of the problems the team identified were late deliveries from the Memphis depot, inadequate service and poor quality products from the DSO in San Antonio, damaged items from the Memphis and Richmond depots, delivered fish sticks that were 3 years old, and evidence of rodent droppings in depot shipments. The team also noted an increase in the number of out-of-stock items at the depots, which forced base warehouse activities to purchase more items on the local commercial market.

DOD's Use of Private Sector Practices Demonstrates Benefits

DOD is already using distributors on a limited basis to supply food to installations, demonstrating their feasibility and benefits to the military. These efforts have resulted in reduced costs, improved food quality, and better customer service. DOD also is taking action to reduce its investment in food inventories and, drawing from the experience of the private sector, modify some of its distribution practices. For instance, DPSC has set a goal to eliminate depot storage of most food items by the year 2000, and it is already testing whether food manufacturers can deliver staple food items directly to base warehouse activities.

DLA and the Military Services Rely on Distributors for Certain Perishable Items

Local distributors have been providing a variety of food items to end-users for years. At the bases we visited, distributors deliver milk, bread, and other perishable items directly to end-users, bypassing base warehouse activities. In addition, distributors provide specialty items, local purchase items,[1] and items not in stock at depots. These items are delivered either to end-users or to base warehouse activities, depending on the installation.

End-users or base warehouse activities place their orders by telephone or with the distributor's representative. Deliveries to end-users are made within 1 to 7 days. Delivery time is longer when base warehouse activities place the orders because they first consolidate orders from end-users. When a shipment arrives, installation personnel inspect the delivery and the invoice and can reject damaged items or inaccurate orders. If the shipment is deemed acceptable, the invoice is sent to the base finance office for payment.

Base officials we spoke with were more satisfied with the quality of food and service provided by the distributors than with that provided by the military food supply system. They said that when they were dissatisfied, they changed distributors. End-user officials also told us they had experienced few or no problems with distributors delivering directly to their loading docks, and few reported billing problems with distributor-provided items.

[1]DPSC designates items as local purchase items when demand for them is expected to be too low for DPSC to purchase them at volume discounts. Examples include concentrated beverage bases and cereals.

Distributors Supply Food to Military Academies and Certain Installations

The military academies, which are not authorized to obtain food from base warehouse activities, obtain food directly from distributors. West Point Cadet Mess officials said they recently had changed from using several distributors to one primary full-line distributor for most products. They expected the change to reduce administrative time and cost, speed delivery, improve service, reduce item costs, and decrease food inventories at the academy. The officials were particularly pleased with the new distributor's commitment to service and its flexibility in setting delivery times convenient to the Cadet Mess.

The naval hospital at Beaufort, South Carolina, has been using distributors since about 1983. The switch to distributors followed a study showing it was more cost-effective to contract out dining operations. The hospital has enjoyed considerable benefits from using distributors. According to officials, their food orders are filled much quicker, enabling them to reduce their inventory from 15 and 20 days down to 10 days. In addition, they believe the distributors offer a greater variety of products than does the military supply system. They stated that they have had no ordering, delivering, or billing problems.

El Centro Naval Air Station, located in a remote desert section of California, has contracted out its base operating support, including its food service operation, since 1986. The food service contractor uses a private distributor in San Diego to provide 95 percent of its food needs. The remaining 5 percent is provided by local vendors. The dining hall manager said that she experiences no problems with late deliveries, unavailable items, or poor quality food. Under normal ordering procedures, she orders items only 1 or 2 days prior to need and can change orders up to 4 p.m. of the day before delivery. Deliveries arrive four to five times a week and are verified for accuracy. In emergencies, the distributor has provided items overnight at no additional charge.

Nonappropriated Fund Activities Obtain Most Food Items From Distributors

Many nonappropriated fund activities—which include officer and noncommissioned officer clubs, golf courses, bowling alleys, and child care centers—are obtaining food through distributors contracted by the services. The Army awarded a contract to one full-line distributor to serve as the prime vendor for delivering food to participating activities. Participation in this program is voluntary, but if an activity chooses to participate, it must purchase at least 80 percent of its food through the distributor. The Navy and Marine Corps are also using the Army's prime vendor. The Air Force has developed its own program, under which

distribution contracts are awarded on an installation-by-installation basis. Under both programs, participating activities order from the distributor and receive direct delivery 1 to 2 days after ordering. Item prices reflect distributors' costs plus a percentage for profit. The contracts stipulate standards for food quality, price, and service.

Many nonappropriated fund activities have realized benefits from the programs. At the activities we visited, a main benefit cited was improvement in the consistency of food quality, which in turn has resulted in increased business. Another benefit has been the time saved by avoiding the normal procurement process. Officials said that in the past, each time a nonappropriated fund activity needed to purchase food the activity's procurement personnel were required to go through the time-consuming and costly bidding process to obtain the lowest-cost item, which often meant food quality could vary because of the wide range of sources providing food. Officials of nonappropriated fund activities were also pleased with the distributors' quick delivery time and the variety of products they offered.

Commissaries Have Realized Savings by Shifting to Private Sector Practices

Military commissaries, which are comparable to civilian supermarkets, have realized considerable savings and improved performance as a result of their consolidation under the Defense Commissary Agency (DeCA) and their use of electronic data interchange and frequent delivery practices. Prior to the creation of DeCA, the services owned and operated the commissaries. Deliveries arrived about 4 weeks after ordering, and commissaries stored about a month's supply of food on their premises. The commissaries were consolidated under DeCA in October 1991.

DeCA has consolidated buying operations and obtains volume discounts from suppliers. It also is instituting an automated ordering system that enables commissaries to order directly from distributors. DeCA contracts with distributors require them to provide next-day delivery service.

Commissary officials said that DeCA's efforts have reduced their inventories significantly. The value of the inventory held by the Fort Lewis commissary declined 62 percent from a monthly average of $2.65 million to $1 million. The commissary was able to give up its use of three warehouses. Other commissaries we visited experienced similar savings, using the freed-up space to expand their retail floor space. The commissaries' not-in-stock rates have decreased as well. At one

commissary, the not-in-stock rate fell from about 4 percent to about 1 percent.

DPSC Has Several Initiatives to Increase Its Use of Private Sector Practices

Acknowledging the need to reduce its inventories, including its food inventories, DOD issued a comprehensive inventory reduction plan in May 1990. The plan highlights the need for DOD to expand its use of private sector practices—such as "just-in-time" delivery methods, distributors, and computerized ordering systems—in order to achieve cost savings and improve the supply system. Specific objectives of the plan are to

- minimize the number of new items entering the supply system,
- reduce the number of items currently in the system,
- reduce the quantities of material stocked,
- pursue commercial alternatives to stocking material, and
- improve material control and asset visibility.

The plan states that

> . . . reductions in inventory will result from eliminating the 'middleman' role of the DOD warehousing system where possible . . . where DOD requirements can be met through commercial distribution systems in a timely and cost-effective fashion, no value is added by pushing items through the DOD warehousing systems.

To meet DOD's goals and objectives for inventory reduction, DLA issued its own plan in April 1991. DPSC then followed up with an implementation plan in March 1992. The following are DPSC's major initiatives concerning the food supply system.

Phasing Out Depot Storage

DPSC has set a goal to eliminate depot storage of semiperishable items (excluding storage of war reserve stocks and items bound for overseas) by the year 2000. This goal has not yet been approved by DLA. To phase out its depots, DPSC would incorporate various initiatives based on private sector practices. For instance, it wants producers to increase the frequency of deliveries to depots—six times a year rather than once or twice a year—so that deliveries are spread out over a period of time rather than delivered all at once. DPSC, however, plans to continue using DSOs to supply perishable items to its customers.

Purchasing Food Under Industry-Type Contracts

DPSC has increased its use of indefinite quantity contracts and indefinite delivery contracts to purchase food. Both of these contracting methods

are commonly used in the private sector. Indefinite quantity contracts set the minimum and maximum number of items to be purchased at agreed-to prices, which allow orders to be generated as requirements develop, and state delivery destinations. Indefinite delivery contracts state estimated quantities to be purchased within a given period of time as requirements develop. Food prices under these contracts may either be fixed or based on a formula that allows fluctuations as market conditions change.

These contracts enable DOD to reduce its up-front monetary outlay because only a portion of the contract amount is obligated at the time the contract is awarded. They also could help reduce inventories and costs because, unlike the definite delivery contracts that have been used, they do not require DOD to take possession of the full purchase quantity at the time of purchase. By using these contracts, DOD can reduce the time between the time the need for food is identified and the time food is received because the contract is in place. Although these private sector-type contracts constituted less than 20 percent of the food contracts awarded in fiscal year 1992, DPSC plans to expand the use of these contracts during fiscal year 1993.

Testing Direct Delivery to Installations

DPSC is testing the feasibility of having high-volume staple items delivered directly to base warehouse activities, bypassing DLA depots. In June 1992, DPSC began its first direct delivery test, entering into an indefinite quantity contract with a food manufacturer to supply flour to selected base warehouse activities. A second test, for sugar, began in July 1992. These programs are geared to installations with high volume orders. For instance, monthly orders for flour must be at least 9,000 pounds. Smaller orders are still filled by depots. As of August 1992, DPSC was filling 65 percent of flour orders and 52 percent of sugar orders using direct vendor delivery.

DPSC expects these direct vendor deliveries to result in food that is fresher than that provided through DLA; reduce DLA inventories; and eliminate the costs for receiving, storing, inspecting, and issuing these items at the depot level. However, direct deliveries will not eliminate these costs at base warehouse activities. The base warehouse activities receive delivery directly from the vendor within 30 days after submitting their orders—the same as if they had ordered from a depot. For the direct delivery tests, the total time from when the need for an item is identified until the time it is received by a depot has decreased from about 155 to 21 days.

Consolidating Procurement of Local Purchase Items

DPSC is testing the feasibility of centrally negotiating prices for local purchase items (those items that are included in DLA's catalog but are not stored in DLA inventories because of low demand) to obtain volume discounts. Currently, each base warehouse activity contracts for the local purchase items it needs. In the test, DPSC will award indefinite quantity contracts to distributors on a regional basis to deliver concentrated beverage bases. A DPSC survey for 10 local purchase items showed that the initiative could reduce prices between 11 and 69 percent.

Automated Systems

DPSC is developing electronic data interchange for its food supply system to enhance communication among depots and DSOs, base warehouse activities, and producers and distributors. According to DPSC, potential benefits of electronic data interchange include reduced inventory holding costs, lower prices, faster and more reliable service, long-term business relationships, and just-in-time deliveries. DPSC has already used electronic data interchange to some extent. In fiscal year 1992, it purchased about $129 million in brand name items for commissaries using electronic data interchange. DPSC anticipates running its direct vendor delivery program using electronic data interchange.

Applying Experience of Medical Supply Program

Under a DPSC test, selected military hospitals will obtain medical supplies through distributors. If the test proves successful, DPSC plans to apply it to its food supply program. The test was modeled after the practices of private sector hospitals, which obtain most of their medical supplies through distributors. DPSC chose two distributors, one for the East Coast and one for the West Coast, to provide customers with supplies ordered from a computerized catalog. DPSC officials believe that using distributors can reduce inventory levels by 60 percent within 5 years and eventually result in only war reserve items being stored in the depots. Other expected benefits are reduced order and delivery times, reduced prices, improved customer support, reduced inventory levels at hospitals, increased product distribution, and enhanced readiness and requirements planning.

DOD Concerns and Questions About Using Distributors

Despite the benefits demonstrated by its limited use of distributors to date, DOD has no immediate plans to significantly expand its use of distributors and eliminate its current supply system. While many officials strongly favored the idea, others expressed concerns about taking this step and said obstacles may hinder DOD's ability to procure commercial items and institute commercial logistics practices. DOD, however, is taking actions to alleviate some of these concerns.

The following are the areas of concern cited by DOD officials and our evaluation of them.

Military Specifications

DOD procures many items using military specifications for ingredients and packaging, which sometimes preclude the procurement of commercial items. For instance, DPSC lists one type of instant pudding mix in its catalog and cannot replace it with a commercial product because the Armed Forces Product Evaluation Committee requires that the mix be prepared with non-fat dry milk and be packaged in a can.[1] Although some end-users complain about the mix's quality and taste, the Armed Forces Product Evaluation Committee has refused to change the military specifications for nutritional reasons and because fluid milk is not available to units deployed in the field for training or during combat conditions. But because the committee allows only one such product to be included in DLA's supply catalog, all end-users must either order this item through DPSC or purchase the item locally.

DPSC is in the process of converting military specifications to commercial item descriptions and plans to allow for the inclusion of more commercial items in the military food system. These changes should give end-users more choices among commercially available items. However, officials acknowledged that the conversion process has been slow.

Government-Unique Contract Requirements

Government-unique contract requirements might discourage qualified distributors from competing for defense contracts. The government has numerous contract clauses, for instance, that do not have customary commercial counterparts. Some of these clauses are statutory in origin, while others may be based on regulations or government specifications, such as clauses requiring unique packaging and marking requirements.

[1]The function of the committee is to evaluate (1) unsolicited food items offered by industry for use in the military food service program, (2) new food items generated through research and development, and (3) existing food items for possible improvement in product and packaging; and to coordinate the programming of new or improved food items.

Other types of requirements, such as the requirement for certified cost or pricing data under the Truth in Negotiations Act, may be difficult for businesses to comply with using standard commercial accounting systems, and requirements for small business subcontracting can disrupt existing commercial relationships. Industry statements suggest that at least some of these requirements may be barriers to the entry of firms that might otherwise compete for defense contracts.[2]

While some DOD officials were concerned that expanding the use of distributors might hurt small businesses, the dimensions of the impact on small business are unknown. Moreover, there are countervailing measures that DOD can employ to mitigate the impact on small business. Distributors on contracts expected to exceed $500,000, for instance, would be required to submit small business subcontracting plans. In addition, since DPSC would still be purchasing food from suppliers, it could set aside a percentage of the food contracts for small businesses, as it does now. In addition, locally purchased items, such as bread and milk, can be purchased from small businesses. With adequate planning, DOD should be able to employ these measures to minimize the impact on small business of expanding the use of distributors.

Deliveries to Ships and Certain Other End-Users

Some DOD officials favored retaining some base warehouse activities for certain end-users. For instance, some Navy officials expressed concerns about the ability of distributors to deliver to ships and said base warehouse activities are better suited for this task. These officials asked (1) whether distributors could provide food in sufficient quantities to meet ship demands during deployment, (2) who would pay any extra delivery costs should distributors be delayed in unloading to ships, and (3) whether the distributors would require clearances and escorts. Similarly, an Army official at Fort Eustis wondered whether a distributor could substitute for a base warehouse activity in making numerous deliveries to small end-users, such as boats with crews of six people. Officials also questioned the feasibility of distributors supplying food to troops deployed on field exercises.

Distributors told us that many of these concerns echo those of private sector end-users before they began using distributors. They added that they have satisfied their own customers' concerns and feel confident they can do the same for military end-users.

[2]These statements were made to DOD's Advisory Panel on Streamlining and Codifying Acquisition Law.

The distributors and other industry officials said that the decision as to whether items should be delivered directly to end-users or to base warehouse activities would depend on a variety of factors. They explained they would need to know specific information about end-users' locations, the quantity of orders, the desired frequency of delivery, storage capacity, and other information. At some installations, it may be more cost-effective to deliver to base warehouse activities, especially at installations with small end-users. Matters of security and accessibility may also dictate that certain installations retain their base warehouse activity. For installations with a mix of big and small end-users, distributors could make direct deliveries as part of a "package deal." Alternatively, the distributors could make some deliveries directly to end-users and others to the base warehouse activity. Where base warehouse activities are retained, they would make deliveries to end-users as they do now.

With respect to Navy ships specifically, distributors said that unloading could be coordinated with ship and base personnel to avoid delays and meet security requirements. In addition, they believe they are capable of providing sufficient quantities of food. Navy officials at Norfolk said that during Operation Desert Storm, distributors delivered food directly to ships without problems. In addition, while visiting the USS Eisenhower, we observed a distributor unloading items directly from the truck to the ship (see fig. 5.1).

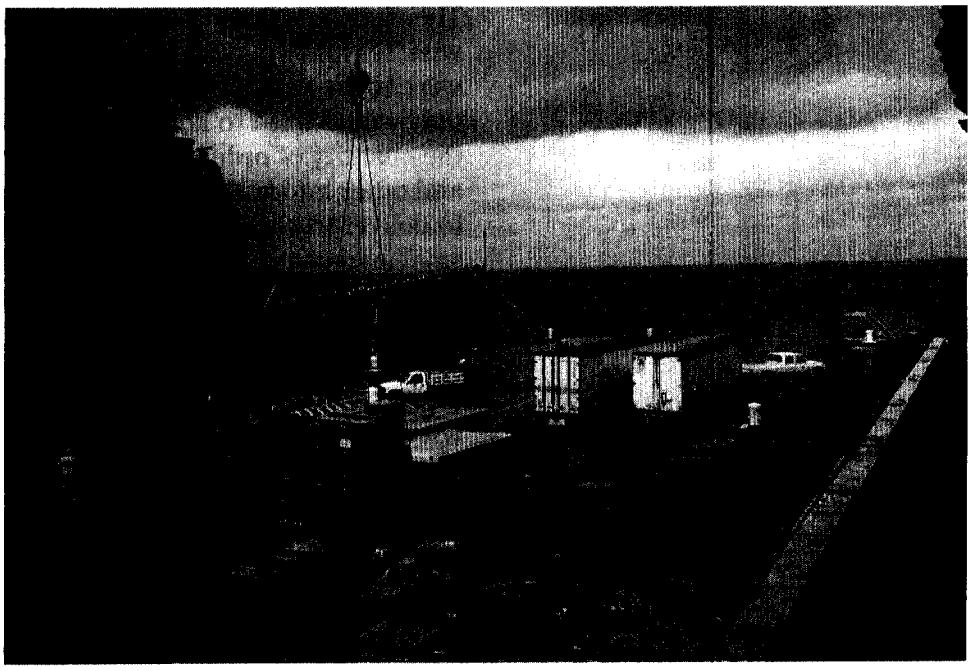


Figure 5.1: Distributor's Truck Unloading Directly to the USS Eisenhower

Administrative Work Load

Some end-user officials questioned whether their administrative burden would increase significantly if DOD expanded its use of distributors. They were concerned that using distributors could require them to spend more time on ordering, billing, and problem-solving and that they would not have the staff or expertise to carry out these functions adequately. Officials, however, believed that if the current system used to order, bill, and resolve problems for milk, bread, and other locally purchased items was expanded as the use of distributors increased, then the increased administrative burden could be mitigated.

Industry officials did not believe the administrative burden would increase for end-users. Because distributors carry a full line of food items, an end-user would order all or most items from a primary distributor, not from numerous distributors as many DOD end-users fear. In many cases, they would be able to order items through electronic data interchange, which is easier than the system currently used by DOD. Moreover, the end-users could verify deliveries and submit delivery invoices to the base food service office for processing, much as they do now for locally purchased items.

Food Prices

Some DOD officials expressed concern that distributors' prices would be higher than the prices charged by DLA. However, as discussed in chapter 3, we believe that DLA's item prices do not reflect the actual costs of supplying food, as distributors' prices do. Further, distributors would have a financial incentive to keep their prices down in order to compete for the government's business.

In addition, some military food service officials stated their concern about whether they would be able to feed their personnel within their basic daily food allowance should the military use distributors. DOD officials said that the basic daily food allowance and DOD's system of standardized pricing are important to ensure that military personnel receive the same quality food throughout the world. Food service officials at the Beaufort naval hospital said that they have not had a problem feeding personnel within their basic daily food allowance. These officials said that they, like other military end-users, have to purchase food based on this allowance, and that they obtain food from distributors that is comparable in quality to that provided by DOD's system. However, we recognize that the basic daily food allowance may have to be adjusted in high-cost areas.

Supplying Food on Short Notice

Officials we interviewed questioned distributors' ability to provide food on short notice. Some end-users, explaining that they now can often get items on a last-minute basis from base warehouse activities, wondered how distributors would provide food to them should they run out of an item before scheduled delivery.

Distributors told us that they provide items to customers on short notice in response to unexpected requests and emergencies. Officials at West Point and El Centro Naval Air Station corroborated this, stating that distributors provided food in a matter of hours if necessary.

Conclusions and Recommendations

Conclusions

DOD has recognized that it must look to the private sector to achieve cost savings in its logistics practices. The May 1990 inventory reduction plan noted that "where DOD requirements can be met through commercial distribution systems in a timely and cost-effective fashion, no value is added by pushing items through the DOD warehousing systems."

The military food supply system offers the opportunity to do just this. The private sector food service industry has learned that using distributors is the most efficient way to deliver food to end-users. Food service companies and their end-users do not incur any direct costs for holding, handling, and transporting items, pushing these costs onto the distributors. The distributors, in turn, have financial incentives to make their operations as efficient as possible to keep their costs down. The savings can then be passed on in the form of lower food prices.

Distributors we spoke with were confident that they could provide service to DOD just as they do to other customers, some of which are even larger. Independent experts on the food service industry agreed. Another indication that distributors could meet DOD's troop-feeding mission is the results from DOD's limited use of distributors to date. With few exceptions, these efforts have demonstrated such benefits as lower costs and improved service.

Some DOD officials strongly favor the idea of eliminating the current supply system and using private sector distributors instead. Other officials have expressed concerns and cited what they believe are obstacles to DOD's ability to obtain commercial products and use of commercial logistics practices. We believe that the potential benefits from change are significant enough for DOD to tackle its concerns and potential obstacles in expanding the use of distributors. This change represents a significant break from current supply practices, practices that date back to the 1950s. As such, it would be prudent for DOD to test the expanded use of distributors to determine their advantages and disadvantages. DOD could also use this test as an opportunity to determine the actual costs of supplying food using the existing system. DOD currently does not know what its costs are. The costs of the military food supply system could then be compared with the results of the test using distributors.

If DOD decides to use distributors, it could eliminate the storage of food at DLA depots, DSOs, and some base warehouse activities, achieving significant cost savings. Some base warehouse activities could be eliminated immediately because they are close to others and perform

duplicate functions. But it is likely that, even if the military supply system is replaced, some base warehouse activities will be more cost-effective to retain or will be needed to ensure base security or because their end-users are small or relatively inaccessible.

Recommendations

We recommend that the Secretary of Defense direct all four services and DLA to conduct a demonstration project of an expanded use of distributors for peacetime troop feeding within the continental United States. This project should involve a variety of installations and end-users and should test distribution of food items directly to end-users where feasible. It should also address identified concerns, such as those of some small businesses.

The project should determine the costs and benefits of using distributors in order to compare these costs and benefits to those of the existing military food supply system. To make this comparison, DOD will need to determine the actual costs of its supply system. Therefore, we recommend that the Secretary ensure that DOD collects accurate information about its food distribution costs, including ordering and inventory holding costs, operating costs of base warehouse activities, and distribution costs of end-users receiving food items from base warehouse activities.

We further recommend that the Secretary ensure that DOD eliminates base warehouse activities that are close to one another and have redundant functions.

Agency Comments and Our Evaluation

We requested written comments from DOD, but none were provided. In commenting on a draft of this report, DOD officials generally concurred with its conclusions and recommendations. DOD acknowledges that savings may be possible through the use of private sector practices for the DOD food service system. Accordingly, as we recommended, DOD plans to conduct a demonstration project to test the feasibility of expanding the use of distributors during peacetime. This project will include a cost comparison of the DOD supply system with the costs of commercial distributors.

DOD questioned the lack of comparative cost data in the report. However, as explained in the report, total cost information, including base warehouse and other costs, was not available because DOD's accounting system does not gather data in this fashion.

In our draft report, we recommended that DOD revise its surcharge to include all food distribution and operating costs—not just those incurred by DLA—and reflect these costs in its item prices. DOD stated that its surcharge is designed to include only DLA costs because DLA is intended to be able to operate by getting reimbursed for its own expenses. We recognize DOD's position and have deleted this recommendation.

DOD stressed that DLA has competition because the Defense Federal Acquisition Regulations Supplement specifies the circumstances under which purchases from sources other than the central supply system may be made. However, as noted in this report, although base warehouse activities may go outside the system for items when it is in their best interest in terms of quality, timeliness, and cost, this has mainly been done only for those items out of stock or not stocked by DLA. DOD also noted that DLA was making a concerted effort to find alternative support, such as direct vendor delivery, to significantly reduce operational costs and remain the supplier of choice by DOD customers.

DOD also expressed concern that we did not provide an analysis of the extent to which small businesses qualify as the sort of full-line distributors examined. As noted in our recommendation, we believe that the demonstration project should address identified concerns, such as those of some small businesses.

Lastly, as recommended, DOD officials said they will develop a plan to eliminate base warehouse activities that are operating within close proximity to one another and/or have redundant functions by the end of fiscal year 1994.

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