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19 JUN 1996

Ref: 96-F-0895

Mr. Jay Meeks
Beveridge & Diamond, P.C.
Suite 700
1350 I Street, N.W.
Washington, DC 20005-3311

Dear Mr. Meeks:

This letter responds to your April 24, 1996, Freedom of Information Act(FOIA) request. The telephone conversation with Lieutenant Colonel Hogan refers.

Due to the size and complexity of the Department of Defense (DoD), there is no central repository for all DoD records. This office is responsible for responding to requests for records of the components of the Office of the Secretary of Defense (OSD) and Joint Staff (JS). The several components of the DoD, including the military departments, unified commands, and separate defense agencies, operate their own Freedom of Information offices to respond to requests for records for which they are responsible. These procedures are provided in DoD Regulation 5400.7-R, which may be found at 32 CFR 286.

The enclosed documents are provided as responsive to your request. One document that is responsive to your request is under the release authority of the Department of the Army. Therefore, the document, along with your request, has been referred to the Army for a direct response to you. Additionally, as discussed in the telephone conversation noted above, your request has been referred to the Defense Commissary Agency, Department of the Navy, Department of the Air Force, Commandant of the Marine Corps, and the Army Air Force Exchange Service for a direct response to you. The following addresses pertain:

Department of the Army
Freedom of Information/Privacy Acts Office
ATTN: SAIS-IDP-F/P, Suite 201
1725 Jefferson Davis Highway
Arlington, VA 22202

Defense Commissary Agency
Attn: FOIA Officer
1300 E Avenue
Fort Lee, VA 23801-1300

Department of the Navy
Chief of Naval Operations
N-09B30, Room 5E521
2000 Navy Pentagon
Washington, DC 20350-2000

#812

Department of the Air Force
11 MSS/IMS (FOIA)
1000 Air Force Pentagon
Room 4A1088C
Washington, DC 20330-1000

Commandant of the Marine Corps (ARAD)
Headquarters, United States Marine Corps
2 Navy Annex
Washington, DC 20380-1775

AAFES
ATTN: PA
P.O. Box 660202
Dallas, TX 75266-0202

For your information and in accordance with the DoD Regulation 5400.7-R, your request has been categorized as commercial in nature. Commercial requesters are required to pay search, review, and reproduction costs associated with their requests. Established DoD fees are: clerical search or review at $12.00 per hour; professional search or review at $25.00 per hour; executive search or review at $45.00 per hour; computer search, varies according to the system used, billed per minute; microfiche at $0.25 per page; office copy reproduction at $0.15 per page; and printed publications or reports at $0.02 per page.

Therefore, the total cost associated with processing your request is $181.45, of which $181.45 is assessable. Assessable fees consist of one hour of clerical search at $12.00 per hour, 3.25 hours of professional search at $25.00 per hour, and 588 pages of office copy reproduction at $0.15 per copy.

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Please also note the billing date above since payments received later than 30 days after the billing date may incur additional interest charges.

Sincerely,

"Signed"

A. H. Passarella
Director
Freedom of Information
and Security Review

Enclosures:
As stated

Prepared by VOORHIES:gjv:6/18/96:DFOI:gr/pk__yl__wh__

THE JONES COMMISSION

DOD STUDY OF THE MILITARY COMMISSARY SYSTEM

EXECUTIVE Summary

Volume I/II✦ Study Report

December 18, 1989











OFFICE OF THE ASSISTANT SECRETARY OF DEFENSE
(FORCE MANAGEMENT AND PERSONNEL)
WASHINGTON, D.C.

#818

Chapter 1

EXECUTIVE SUMMARY

BASIS FOR SUBMISSION

This report on the Department of Defense Commissary System is submitted in response to the request of the Honorable Marvin Leath (D-TX), Chairman of the Morale, Welfare and Recreation Panel, Subcommittee on Readiness, Committee on Armed Services, United States House of Representatives. The request to the Department of Defense was transmitted in a 2 March 1989 letter from Congressman Leath to Lieutenant General Donald W. Jones, Deputy Assistant Secretary of Defense (Military Manpower & Personnel Policy). This letter, attached as appendix A, led to the creation of the Jones Commission, the composite "team" representing the full spectrum of the Department's commissary functions. The Jones Commission staff prepared this macro, conceptual report with input from a steering group of senior military and civilian leaders and a technical review group of commissary systems commanders. *All cost projections are based on estimates developed by the commission staff.*

This report is organized into the following chapters:

- Chapter 1 summarizes the report and provides the basis for submission.

community relationship among military personnel and their families, and contribute to a sense of confidence among military personnel that their families are cared for by the military institution when military service requires their absence from their families, in peace and war. Additionally, commissaries will provide a peacetime training environment for food supply logisticians needed in wartime. The intent is to provide this support when a member is in a full compensation status. (DoD 1330.17-R)

FINDINGS

The report shows that the commissary system has been very successful in meeting the needs of the patron. This is evidenced by a tremendous growth in sales over the last ten years with a commensurate improvement in facilities and equipment. The outlook for the future is not as bright.

The demographics point to a continuing shift in the military from single Service members to married Service members with working spouses. The military will also experience a shrinking labor pool simultaneously with increasing requirements for a more technical work force. Retention will be the key to the success of the military.

Quality of life and morale are key retention issues. The Commissary benefit has traditionally been the most important non-pay benefit next to medical care, and it is a significant contributor to retention. If this benefit is to be fully exploited, commissary levels of support must continue to meet the demands of the military community as defined in the mission statement. An increase in service, however, requires additional revenue. The source of this revenue has traditionally been through the appropriation process, but future budgets in the government are very likely to be smaller, not bigger. Based on this reality, additional funding from appropriations becomes an unrealistic expectation. The commission found, however, that industry has experienced many of the same revenue constraints currently facing the military commissary system. Successful companies in the grocery industry have maintained profit levels and market share by improving productivity rather than increasing selling prices. The commission focused on the commercial grocery industry's most successful organizations, policies and procedures for potential application to military commissaries.

The recommendations of the report reflect this philosophy. The military commissary system is not drastically different from the commercial grocery industry, although in many areas a sense of "uniqueness" prevails in the military. This is found throughout the commissary system in areas such as information management, distribution and organization. If the commissary system is to be successful in the future, it will have to adopt the successful practices of the grocery industry, and use prevailing commercial state of the art equipment and practices--"off-the-shelf". This study focuses on this philosophy and details how increased service levels can be offered to patrons without increasing appropriations.

Chapter 2 provides a history of the commissary, an analysis of each of the Service's commissary systems, and the military wholesale support role.

- Chapter 3 discusses the civilian grocery industry and the outlook for the future.
- Chapter 4 examines the commissary patron.
- Chapter 5 discusses the business, financial and organizational strategies of the commissary system.
- Chapter 6 focuses on the operation of a commissary store.
- Chapter 7 defines a short range product distribution strategy.
- Chapter 8 outlines a method of achieving standardization of engineering policies and procedures.
- Chapter 9 analyzes the various segments of manpower and personnel management.
- Chapter 10 discusses present and future information management requirements.
- Chapter 11 proposes an organization to transition military commissaries into the next century.
- Finally, there are several appendices showing, among other things, cost data elements for information management and contract distribution, ship sailings to support overseas commissaries, and other supporting documentation.

STUDY OBJECTIVE

The study mission was to provide an unrestrained baseline reassessment of the Department of Defense Commissary System in consultation with industry. The objective was to increase efficiency, reduce dependence on appropriations, and recommend policies that would move the system forward in an orderly and consistent manner into the 1990s and beyond. Options for ensuring a viable commissary program while protecting the commissary benefit were to be pursued. All actions were to be accomplished in light of the projected demand for services, the patron base, and the resourcing methodology needed to provide a satisfactory program.

MISSION

Commissaries, as an institutional economic benefit of military service providing noncash compensation to military personnel, sell groceries and authorized household supplies at the lowest practical price. Commissaries will be operated in facilities and under standards similar to those of commercial food stores, foster and maintain a sense of military

MAJOR CONCLUSIONS

Generally, the commissary system has been successful in meeting its assigned mission; however, the operational philosophy and associated levels of service provided by the respective commissary stores are not uniformly consistent in each of the four service systems. The system also faces numerous challenges in the near and long term that will affect the ability of the system to successfully achieve mission accomplishment.

Military members, regardless of service, are entitled to the commissary benefit in lieu of compensation that would otherwise have to be paid. This compensation, as depicted in Chapter 5 of this report, is estimated to be $1.7 billion annually. The net annual savings om providing the commissary benefit in lieu compensation to members is just under one lion dollars.

All military members are entitled to the same level of commissary service regardless of which service operates the specific commissary store. Current practices among the services preclude this uniform exercise of the benefit. Since the commissary benefit is in lieu of compensation that would otherwise be paid, military members not receiving equitable commissary service are being disadvantaged. This trend can be reversed by developing a cost effective, responsive organization but left unchanged, the success of the commissary in meeting customer expectations will require more and more resources to meet the growing demand for service, extended hours, and facility improvements. This will occur at a time when fiscal resources are becoming more constrained.

With this constrained fiscal posture as a backdrop, the commission conducted an extensive review of the operations of each of the four individual services' commissary systems. The review found many of the functions currently being performed to be labor intensive, redundant, and often no longer performed in the commercial grocery industry. Some functions, however, were driven by the organizational configuration of the current commissary systems and thus determined to be difficult to eliminate without restructuring. Central distribution is one example of a process widely used in the private sector but difficult to implement in military commissaries due to the current organizational structure.

Many other recommendations were identified but the greatest potential for improvement revolves around two major issues: consolidation of the commissary systems and central distribution and its associated efficiency savings. For instance, a consolidated commissary system with central distribution can yield a net $93.3 million in annual savings to the taxpayer while providing needed improved patron service levels. When treated singularly, central distribution and its associated efficiency savings have the potential to save a net $44.0 million. The following are brief summaries of the alternatives.

CONSOLIDATED COMMISSARY SYSTEM

Consolidating the four separate service commissary organizations into one joint service organization eliminates the need for

redundant, coexisting management layers and automatically creates uniformity through singular policy direction. This centralized direction and policy formulation produces a greater potential for uniform standards of performance. In the commissary arena, this translates into a more uniform entitlement through equitable levels of service to commissary patrons.

Consolidating the separate systems also provides an organization that mirrors a commercial grocery chain and creates a platform for using off-the-shelf proven, industry equipment and procedures to automate many of the manual processes currently used within the various systems. Streamlining current procedures can achieve savings of $83.5 million from bill paying, accounting and warehousing. Table 1-1 outlines these potential savings. The commission developed a model organization patterned after private industry but encompassing the same number of management layers currently found in each of the service unique commissary systems; e.g., districts, regions, and central headquarters. The structure is based upon a philosophy of central control and oversight with decentralized management execution. This model organization is more cost effective as it operates with 1449 fewer spaces than currently utilized by the separate systems. Figure 1-1 outlines how these spaces are allocated to achieve an additional saving of $49.3 million. The combined savings of $132.8 million, offset with $39.5 million to improve service levels, provides a net $93.3 million saving to the taxpayer.

The new system, however, will have some startup costs. In Chapter 11, $30 million is projected as the cost of purchasing a new computer system to operate central distribution and the management function. This system can be procured with trust revolving funds if required. If real estate currently occupied by the separate systems is used, no new brick and mortar will be required to house various central and intermediate level management headquarters. A transition plan to implement a consolidated commissary system is discussed in Chapter 5. The proposed organization is at Figure 1-2.

Personnel costs to cover permanent change of station (PCS) and severance pay are the only identified major expenditure needed to transition to a consolidated organization. Locating headquarters at existing sites not only will save facility expenditures but this approach will also save personnel costs. These costs were determined by developing a model of possible headquarters locations and then arraying costs associated with moving personnel to fill the projected authorizations at these sites. Using this scenario, personnel transition costs, including transition team temporary duty costs, were estimated to be $6.6 million.

Consolidation is a cost effective and efficient proposal but it is not without drawbacks. One major concern is that when commissary sales are indexed to industry margins, consolidation of the separate commissary systems will create the sixth largest grocery chain in the United States and thus provide an inviting target for the anti-government lobby. The problem is not insurmountable but needs to be recognized as an issue.

CHAPTER 1

EXECUTIVE SUMMARY

BASIS FOR SUBMISSION

This report on the Armed Services Exchange System is submitted in response to the request of the Honorable Marvin Leath (D-TX), Chairman of the Morale, Welfare and Recreation Panel, Subcommittee on Readiness, Committee on Armed Services, United States House of Representatives. The request to the Department of Defense was transmitted in a 22 January 1990 letter from Congressman Leath to Lieutenant General Donald W. Jones, Deputy Assistant Secretary of Defense (Military Manpower and Personnel Policy). Based on this request, Mr. Atwood (Deputy Secretary of Defense) directed that a review of the military exchanges be conducted. This directive led to the formation of an exchange study group with representatives from each of the Armed Services, the Army and Air Force Exchange Service (AAFES), and the U. S. Coast Guard. Due to the limited time available to conduct the study, and the need for individuals sufficiently experienced and knowledgeable in exchange operations, the Services selected personnel from their exchange systems with extensive resale experience.

The study group prepared this macro, conceptional report with input from review and steering groups comprised of senior military and civilian leaders, a technical advisory group of exchange system commanders, functional experts from the exchange systems' staffs, installation commanders, the senior noncommissioned officers of the military services and exchange patrons. All cost and savings projections for the alternatives considered are based on estimates developed by the study group staff. All estimates are, however, considered conservative.

The report is organized into the following chapters:

- Chapter 1 summarizes the study report, gives the

basis for submission and outlines he study group's overall ssumptions, methodology, findings, conclusions, and final ecommendations.

o Chapter 2 gives a history and evolution of the exchange systems, presents the current scope of operations and provides a description of each of the separate exchange systems.

o Chapter 3 analyzes current financial, business and organizational strategies of the exchange systems, explains current MWR distribution policies, and details estimated savings and one time implementation costs.

o Chapter 4 examines exchange procurement and inventory management functions and potential benefits through centralization.

o Chapter 5 reviews the existing distribution and transportation systems of the exchange systems and proposes organizational changes to increase efficiency.

o Chapter 6 examines current and projected management information systems utilized by the exchanges.

o Chapter 7 focuses on customer service, store and installation operating procedures and special exchange programs.

o Chapter 8 discusses the various food programs of each service, including the potential for increased service and earnings.

o Chapter 9 discusses the broad category of services operations and how each exchange system fulfills these requirements.

o Chapter 10 outlines options for operating design construction departments of the exchange systems more cost effectively.

o Chapter 11 discusses human resources program similarities and differences of each system and potential efficiences through cooperative actions.

o Chapter 12 examines the employee benefits programs of each system and the costs and impact of any proposed change.

o Finally, there are several appendices which provide additional data and a more detailed analysis of specific topics.

STUDY OBJECTIVE

The study mission was to provide an unconstrained baseline assessment of the Department of Defense Armed Forces exchange system with the objective of identifying increased efficiencies, reducing overhead costs and increasing savings in nonappropriated fund and appropriated fund revenues. Any recommended changes were to maintain the same or higher level of service to the customer with no increase in cost. All functional areas of the exchange systems were subject to review for efficiencies, with the review to include, but not be limited to, the feasibility of consolidating some or all functional areas.

THE EXCHANGE MISSION

Each of the exchange systems

has a similar dual mission of providing patrons with merchandise and services necessary for their health, comfort and convenience, and of serving as a supplemental source of funding for military Morale, Welfare and Recreation (MWR) programs. The exchange located on military installations encompass a wide variety of resale activities, and compare favorably with commercial retail stores and shopping malls. Included in the list of exchange activities are retail, food and automotive outlets; personal services such as barber shops, beauty shops and laundry/dry cleaning; amusement and vending centers; Navy Lodges; and, in the case of AAFES, motion picture theaters. The exchanges serve as an important nonpay military benefit, providing vital services worldwide and saving the patron an average of 20% over outside prices.

The exchange systems are unique government organizations in that they operate almost entirely on revenues generated from the sale of goods and services. These sales dollars pay for civilian employee salaries, merchandise inventory investment, most distribution and utility costs and capital expenditures for equipment, vehicles and facilities --- in short, all the normal costs of doing business. Limited appropriated fund (tax dollar) support is received for paying some overseas transportation costs; utilities overseas and in designated isolated and remote areas; and common services such as fire and police protection.

Exchanges are an integral part of the military Services quality of life programs, providing on-base services as well as generating earnings to support MWR programs such as libraries, child care and youth centers, fitness programs and other vital quality of life programs.

FINDINGS

The review group soon determined that the current exchange systems are financially sound, serving their patrons well and making valuable contributions to the MWR program. However, with three separate exchange systems accomplishing the same basic mission, often within the same geographical area, there are duplications and redundancies in both overhead and operating costs. This is in no way meant to imply that any one of the systems is not pursuing actions to optimize their separate operation.

Yet, these are tumultuous times. So any immediate, system-wide consolidation taken simply to realize the anticipated savings identified in this study would involve significant risks and could adversely affect customer service, ongoing programs and exchange earnings, and ultimately support to MWR.

The exchange systems today are operating in a rapidly changing political environment and are absorbed in the process of adjusting to a variety of internal and external influences beyond their control. These factors are impacting on traditional methods of operation, and any attempt to project future savings on recent historical data must take them into account. In an unbelievably short span of time we've seen the Berlin Wall come down, action initiated and almost concluded for the reunification of Germany, political reforms instituted in

the Soviet Union, the loosening of the Soviet grip on her member states, and an overall reduction in tensions between East and West. This has led to calls for massive cuts in defense spending which will be reflected in major force reductions and base closures. In a 19 June 1990 news briefing, Secretary of Defense Cheney responded to a Congressional inquiry regarding the impact of a 25% force reduction --- equal to approximately 442,000 military personnel. The most recent crisis in the Middle East may also influence future force structure and basing decisions.

The exchanges are also facing increased competition from outside retailers, which is expected to grow through niche formats, everyday low prices, warehouse/superstores and the movement of major competitors into sections of the country they did not previously operate. To remain competitive, the exchanges must stay abreast of and implement current retailing concepts such as electronic data interchange and rapid replenishment by suppliers.

Each of the separate exchange systems has responded to this changing environment by instituting actions to scale down and consolidate overhead operations and reduce costs to meet the challenge of significant reductions in the patron base. Within AAFES, project "Fresh Start" is well underway. This project will reduce and relocate the four major CONUS geographical headquarters elements to Dallas. Additionally, actions have been initiated in both Europe and the Pacific to reduce staffing to meet reduced support requirements due to changes in force levels. AAFES' automated management information and communication systems are being greatly expanded with a satellite communication network and installation level computers to support operations and decision making functions.

The Navy Resale System has begun steps to reduce costs by reducing the number of Field Support Offices (FSOs) and further centralizing some distribution and procurement functions. Additionally, the Navy Resale System is faced with the complicated process of divesting commissary operations and the associated organizational turmoil. The Navy also has a program to update and improve their management information system.

In the Marine Corps, the exchange and MWR activities were merged into a single organization barely a year ago. Any exchange consolidation would require this organization to be split at a time when it is both recovering from this action and is placing total concentration and effort on managing the eminent changes due to force structure adjustments.

Although the U. S. Coast Guard participated in this study, primarily in an observer status, no consideration was given nor analysis performed on including them in any consolidation of the Armed Services exchange systems.

ANALYSIS OF ALTERNATIVES

The study group considered and evaluated a number of alternatives, including continuation of separate systems (status quo), a variety of partial consolidation scenarios such as

centralized support to separate systems and geographical esponsibility by dominant system, operation as a government ;ponsored enterprise (GSE), and total consolidation. Since the partial consolidation scenarios were cumbersome, did not provide major savings and were not supported by the military Services, they are not presented here. These alternatives are, however, discussed in later chapters and could become a step in the movement to total consolidation if that course of action is selected. There appears to be no advantage in converting from a nonappropriated fund instrumentality to a GSE.

The major pros and cons of the two remaining alternatives, status quo and total consolidation, as identified by the study group, are summarized in Figure 1-1 at the end of this chapter.

CONCLUSIONS

Despite the complexity of this action, total consolidation of the three military exchanges is feasible and is the most cost effective alternative. There currently is, in fact, a consolidated exchange system in existence. AAFES serves both the Army and Air Force worldwide. While the study group can identify savings through further exchange consolidation, such action must be taken carefully over time due to force structure uncertanties, with check points built in for review action before moving from phase to phase.

Figure 1-2 presents a summary of projected savings and costs which could be realized through a total consolidation of the exchange systems. Net savings are expected to be $35 million annually. (The full impact of these savings would not be realized until the end of the implementation period.) One-time net implementation costs, projected to be ~~$6.0~~ $10.8 million, and the impact on personnel are also summarized in Figure 1-3. Chapter 3 gives a more detailed analysis and explanation of the savings and cost figures. It should be noted that the personnel impact of consolidation would be substantial and every effort should be made to reduce the affect on individuals, such as offering early retirement, placement services, etc.

Since AAFES is the largest system (73% of total direct sales; 74% of employees) and has in place a worldwide, sophisticated infrastructure, it is only logical that any consolidation would be built around this infrastructure.

The basic methodology used as a starting point for determining costs and savings in each of the functional areas was as follows (using AAFES as the core organization):

- Identified common functions and eliminated the positions currently performing those functions at Navy and Marine Corps Headquarters, Regional and Local Levels.

- Based on a selected productivity measure, determined cost of adding additional people to the core organization (Total people required less those on hand at core organization).

- ✓Net savings is the difference between total savings and added cost.

- Compute one-time implementation costs.

- Once this was determined, it was refined by comparing more closely the actual functions being performed by the personnel in each exchange system.

Conclusions relating to each of the major functional areas follow:

o Financial/Business Strategy. Because of differences in accounting procedures, financial reporting, operating environments and other factors, comparison of financial indicators for the exchange systems is not an accurate measure of performance. However, all three systems are financially healthy, with profitability figures that generally exceed commercial industry averages. Each system provides patrons a savings of at least 20 percent overall, while continuing to generate funds to support MWR. A pro forma analysis (see chapter 3) indicates an increase in total earnings could be achieved if the exchange systems were consolidated. The accounting functions were specifically reviewed. Approximately $5.4 million could be realized from increased efficiencies gained by consolidating and centralizing the accounting functions.

o Purchasing/Inventory Management. Efficiencies can be realized by consolidating the exchange services' buying and contracting functions. Consolidation of these functions into the existing AAFES infrastructure will eliminate the duplication that now exists. The AAFES system is capable of supporting the combined sales of the consolidated exchange system. It would require an incremental increase over current staffing levels of about 337 positions with wages, including fringe benefits, of about $9.8 million. Computed savings, within the purchasing area only, are projected to be 824 positions with salary of about $22 million.

o Distribution/Transportation. Increased efficiencies would result from a consolidation of AAFES and NAVRESSO distribution centers in CONUS. The consolidated distribution system would have the capability of supporting the three current exchange systems. Consolidation of the Norton AFB (AAFES) replacement facility (with a project scope of $9.6 million, to be partially offset with base closure funds) and the NAVRESSOFSO San Diego distribution center at a cost effective location, or expansion of the San Diego facility, could not be accomplished before FY 93. Consolidation of exchange system management will also result in reduced overhead requirements at several overseas locations. Total annual savings from consolidation are estimated to be $9.7 million.

o Management Information Systems. Consolidation of the three exchange systems into a single entity will require a worldwide communications and data processing capability. AAFES is the only exchange system with the existing MIS infrastructure and can support the many and varied businesses included in the exchange systems. Each part of the AAFES MIS infrastructure has been specifically designed to operate in every country with military presence. All MIS

applicable local laws, Status of Forces Agreements, U. S. military regulations and national/international communications protocols/equipment technical specifications. One-time costs of the MIS consolidation into the AAFES infrastructure is projected at $37.9 million, which would be offset by a MIS cost avoidance of $60.1 million, resulting in a net savings of $27.0 million over the projected costs of the three separate MIS support systems.

o Operations Management. Even with differing retail store manning objectives and levels of management commitment, each exchange system is providing satisfactory customer service. To standardize store staffing levels under a total consolidation scenario, additional personnel costs of $13.3 million per year will be required. Other issues addressed include removal of current restrictions placed on mailing of promotional literature, and merchandise authorized for sale. Also, the sale of nonessential items in the commissaries must be addressed due to the impact of these sales on the exchanges' ability to generate funds for MWR.

o Food Operations. Total sales, profits and customer service would be enhanced by consolidation into a single system. Such an action would result in a one-time cost avoidance of $1.8 million for development of separate in-house food concepts. The proven AAFES food programs, modern information and management systems and worldwide organizational infrastructure dictate this system should be used as the core for a consolidated organization.

o Services Operations. Services operations, such as barber and beauty shops, laundry and dry cleaning, tailor shops, automotive services, flower shops, electronic repair, tax preparation, optical, photo and film developing shops, etc., would generally continue to operate under consolidation as they do now. Although broad policies and procedures govern their operation, these activities are established and organized to meet local requirements and may be either direct (exchange operated) or concession (contractor operated) based on the situation. Annual savings of $0.3 million are possible through consolidation and reduction of headquarters staffs.

o Design and Construction. Centralized design and construction would be cost effective and increase efficiencies whether the exchange systems are consolidated or not. The AAFES organization has this capability. Projected savings are $2.9 million per year under total consolidation.

o Personnel. A number of individual and collective improvements were identified in human resources programs. If consolidation occurs, they could result in new personnel programs which may be better able to attract, retain, compensate and reward employees.

o Employee Benefits. Due to the number of variables present in the three systems and uncertainty over the design of successor plans for welfare benefits and retirement, a reasonable projection of costs/savings could not be estimated at this time. The only cost readily identifiable would be movement of Marine Corps and Navy Resale UA-13s and above

would be movement of Marine Corps nd Navy Resale UA-13s and above nto the equivalent of the AAFES EMP supplemental deferred ompensation benefit plan, the cost of which is estimated at $0.6 million annually.

During the course of this study, there were inferences by some Navy, Marine Corps and AAFES individuals that in the event of consolidation, AAFES initiatives would remain in place while initiatives of the other exchange systems would be lost. These perceptions are wrong. Each system has good ideas and, in the event of consolidation, the new organization would be expected to evaluate these ongoing initiatives and take the best from each system.

It should be noted that this is not the first study of the military exchange systems. A previous study, conducted for DoD by the Logistics Management Institute in July 1968, arrived at basically the same conclusions -- - consolidating the exchanges would eliminate redundancy and result in significant cost savings. That study recommended the exchanges be consolidated. The study noted that multiservice exchange operations worked well in Vietnam where AAFES provided support to all Services and they are working well on a much smaller scale in various other parts of the world today, such as in Okinawa where AAFES exchanges support all services.

Given the complexity of the merger and the uncertaintities of the future, a phased approach should be adopted. Each exchange system is in the process of implementing critical phasedown actions to meet anticipated force reductions and base closures, and these independent efforts should continue as planned, but coordinated among the Services. Managing these changes, while at the same time attempting to consolidate into a single exchange system, would compound problems currently being addressed and increase the risk of adversely affecting customer service and earnings.

There are, however, potential savings from cooperative efforts that could be instituted immediately, as possibly the first step toward consolidation, which would result in savings and increased efficiencies within the overall exchange system. Additionally, such cooperative actions would begin to create the rapport, trust and working relationships needed to move to the total consolidation mode. Examples of such cooperative efforts, further discussed in the individual study chapters, include:

o Facility design and construction.

o Centralized distribution of specialized merchandise such as pre-recorded music and fine jewelry.

o Consolidated development and procurement of in store electronic point of sale systems and other ADP equipment.

o Transfer of operational support for exchanges based on the dominant system within a geographical area.

o Consolidated European purchasing.

o Quality assurance lab

inspections.

o Shared in-house fast food concepts.

o Cross stocking of private label merchandise.

Due to the direct relationship between exchange and MWR programs, and the unique quality of life aspects of the exchanges, it is vital that the military Services continue to have direct control over the exchange system. This could best be accomplished through a joint board of directors, with a chairperson that rotates between the Army, Navy and Air Force, and full representation from each Service. Recommendations regarding the composition and responsibilities of such a board along with a proposed organizational chart are attached in Figure 1-3.

The exchanges are "cooperatives." Ownership belongs to its customers, not a "government agency." The Board represents the customer base: soldiers, sailors, marines and airmen. The Board is a caretaker of the servicemember's monies, revenues earned by the military exchanges, and, as such, has a fiduciary responsibility for the servicemember's investment. It is the servicemember's money, not taxpayer money, to be distributed as dividends to the services.

The Board, as a responsible military governing body, must report through the respective Chiefs to the Services' Secretaries, not through a separate government agency. This is in keeping with the role of the military exchanges and the Command's role to maintain and provide for the Morale, Welfare and Recreation of the servicemember.

One of the major concerns of the Services during this study was the impact of consolidation on earnings and the availability of funding for MWR programs. The pro forma analysis in Chapter 3 indicates earnings would increase under consolidation, but a new dividend distribution policy would be necessary to ensure balance between support to MWR and exchange reinvestment and also consideration of existing assets of each Service. Any distribution method developed by the Board of Directors should consider ways to provide incentives for installation Commanders, to increase total exchange profits and avoid unnecessary competition with MWR.

The Navy Lodge Program, Navy Clothing and Textile Research Facility and Navy Ships Stores Afloat Program are unique entities to the NAVRESSO resale organization. These programs are vital elements of the Navy's quality of Life and shipboard MWR initiatives. They should be transferred internally within the Navy. Additionally, only traditional exchange functions from the combined Marine Corps exchange organization should become part of the consolidation.

The major savings from consolidation result from merging and reducing overhead staffs; centralizing procurement, accounting and construction functions; and eliminating duplicative warehouse and distribution activities. Very little change would be visible at the store operating level, with very little impact on customer service. In fact, by taking the best programs of each system,

could be retained through signing or other actions, similar to what is currently done with the Army "PX" and Air Force "BX" under AAFES. Furthermore, there is no reason to believe local exchanges would not continue to be responsive to, and support, the desires of local commanders.

RECOMMENDATION

The study group recommends that the military exchange systems be consolidated into a single organization in order to eliminate current redundancies, improve operational efficiencies and achieve projected annual savings from consolidation of $35 million plus a $9.6 million future reduction to Navy and Marine Corps Store staffing from implementation of the AAFES Store Automation Program (ASAP). The following elements should be included in the implementation plan for the consolidated exchange system:

o A Joint Exchange Consolidation Task Force should be established to prepare and execute necessary implementing plans and documents; to review and coordinate major Service initiatives during the implementation period, ensuring they are in consonance with the consolidation effort; and monitor the completion of required actions.

The task force would be responsible for overall consolidation planning and execution. It should be made up of senior functional area representatives, detailed from each exchange system, and assisted as necessary by additional staffing on a temporary basis. The first objective of the task force would be to develop a comprehensive implementation plan addressing impact, interface and required actions in each functional area, thus providing the blueprint for the future. In addition to functional area interfaces, the plan should also include:

- Proposed structure for the new exchange system, staffing requirements and command and control relationships.

- Procedures for a review of Service initiatives to assure they complement the consolidation process.

- Milestones and time frames for accomplishing identified tasks.

- Checkpoints for review and evaluation of conslidation progress to confirm proper direction prior to moving from one phase to the next.

- Programs and open communications lines to educate and assist employees.

- Requirements for changes in regulations and other regulatory documents.

- Identification of a test site to validate implementation procedures.

o Early implementation of cooperative efforts discussed herein, such as consolidated MIS procurement, centralized design and construction, centralized distribution of specialized merchandise, etc. should be to achieve initial savings and establish interface between the systems. Many of these offer substantial benefits, and could be implemented independent of any

action on this study's recommendation. Besides the potential benefits from these programs, they would provide another mechanism for communications and cooperation between the existing exchange systems.

o A review should be conducted at each implementation phase to ensure the correct course is being followed and projected benefits can be achieved.

o A Board of Directors representing all Services, and responsible to the Service Secretaries, should be established to govern the consolidated exchange system and to manage and control what is, in effect, the servicemember's money and quality of life vehicle. This board would initially serve as an Exchange Consolidation Oversight Committee to guide the consolidation process. Since this board will become the governing body of the new consolidated exchange system, serving as the oversight committee will facilitate the transition to the consolidated organization and assumption of its responsibilities. Furthermore, interface with existing exchange boards will be facilitated since most consolidated board members are also directors of their respective exchange systems.

In addition to the major recommendation presented here, each functional chapter which follows has additional recommendations which, when implemented, will result in increased efficiencies, reduced costs and better customer service.

Closing

As stated earlier in this chapter, there are many uncertainties facing the exchange systems and any rash action regarding consolidation should be avoided. It is the opinion of this study group that, upon approval of the recommendation to consolidate the exchange systems, adequate time must be afforded for the development of a detailed plan prior to implementation. It would take two to three years beyond the actual implementation date before all implementing actions could be realized. A measured logical, methodical approach must be taken to minimize distruption to the existing work force and service to patrons.

For the transition to a new Joint Service Exchange Instrumentality to be successful, the support and commitment of all affected parties is essential. This commitment, which must be clearly communicated throughout each exchange system, should emphasize the overall benefits of such a consolidation to both employees and customers. Without total support, the transition could be plagued by serious problems which might adversely affect customer service and earnings.

MAJOR PROS AND CONS
STATUS QUO & TOTAL CONSOLIDATION

STATUS QUO - PROS:

- Separate systems continue with programs to reduce costs and adjust to force structure/ base closure decisions.
- Retains Service command and control perogatives.
- Retains Service control over earnings distribution.
- Permits continuation of Marine Corps consolidated MWR operation and evaluation of effectiveness of this system.
- Potential benefits of cooperative efforts among exchange systems could still be pursued.
- Employee/organization turmoil minimized.

TOTAL CONSOLIDATION - PROS

- Savings achieved through elimination of duplication and increased efficiencies and economies of scale in the areas of procurement/inventory management; distribution/ transportation; accounting; management information systems; facility design and construction; and headquarters management.
- Standardization and improvement in personnel benefits and career opportunities.
- Basic infrastructure for consolidation is in place.
- Projected annual savings of $35 million as a result of consolidation.
- Projected annual savings of $9.6 million resulting from Navy and Marine Corps implementation of AAFES Store Automation Program (ASAP)
- Savings offset decline in total earnings projected due to troop draw downs and cigarette/soda sales in commissaries.

STATUS QUO - CONS

- Forfeiture of potential savings which would be gained through elimination of redundancies and increased efficiencies
- Does not take advantage of potential MIS cost avoidances.
- Duplication of effort in development of costly in-house food programs.
- Opportunities to standardize personnel programs and career opportunities are not maximized.
- Decline in total net earnings due to troop draw downs and loss of exclusive sales rights of cigarettes/sodas is not totally offset by planned cost savings initiatives.

TOTAL CONSOLIDATION - CONS

- Employee and organizational turmoil could have a temporary adverse impact on customer service and earnings.
- Force structure/base closure decisions could hinder efforts to achieve a smooth consolidation.
- Navy and Marine Corps lose command and control prerogative over exchange operations.
- Consolidation not in consonance with concerns expressed by industry (ALA), base commanders and Services' senior noncommissioned officers.
- Additional internal reorganizations needed: Navy - transfer of Navy Lodges, Ships Stores and Uniform Program; Marine Corps - dismant the new MWR/exchange organization.
- One-time implementation costs could impact funding for MWR in the short term.
- Projected net one-time implementation costs: $6.0 million.

FIGURE 1-1

Figure 1-2. Cost/Benefit Analysis, one-time Implementation Cost and Personnel Impact Summary.

Cost/Benefit Analysis

Item	Savings Cost Avoidance	Additional Cost
Current costs of HQ, distribution, accounting & buying function to be deleted	$115.78M	
Augmentation of HQ, distribution, accounting & buying positions under consolidation		$77.75M
Other Economics	9.26	
Other Costs		3.67
Totals	$125.64	$81.42M
New initiatives under Status Quo	(9.10M)	
Net Annual Impact of Consolidation	$34.6M	
Navy & MARCORPS Store Reductions resulting from ASAP	$9.6M	

* Cost/Benefits stated in relationship to FY 89 operations.

One-time Cost/Benefit (Implementation)

Item	Cost	Cost Avoidance
Personnel Relocation/ Severance Costs	$21.01M	
Training	13.42	
Other	.41	$1.80M
Management Information System	37.87	$60.10M
Total	$72.71	$61.90M
Net Cost	$10.81M*	

Personnel Impact

	UA	HPP
Positions Affected	1348	2285
Relocate/Locally Place	379	589
Early Retirement	270	58
Reduction Action	699	1638
New Organization HQ Requirement	380	300
Store Augmentation Requirement	*	*

* Not identified by number or category of personnel, estimated annual personnel cost $13.3M

UA - Universal Annual
HPP - Hourly Paid Person

RECOMMENDED ORGANIZATIONAL STRUCTURE
CONSOLIDATED EXCHANGE SYSTEM

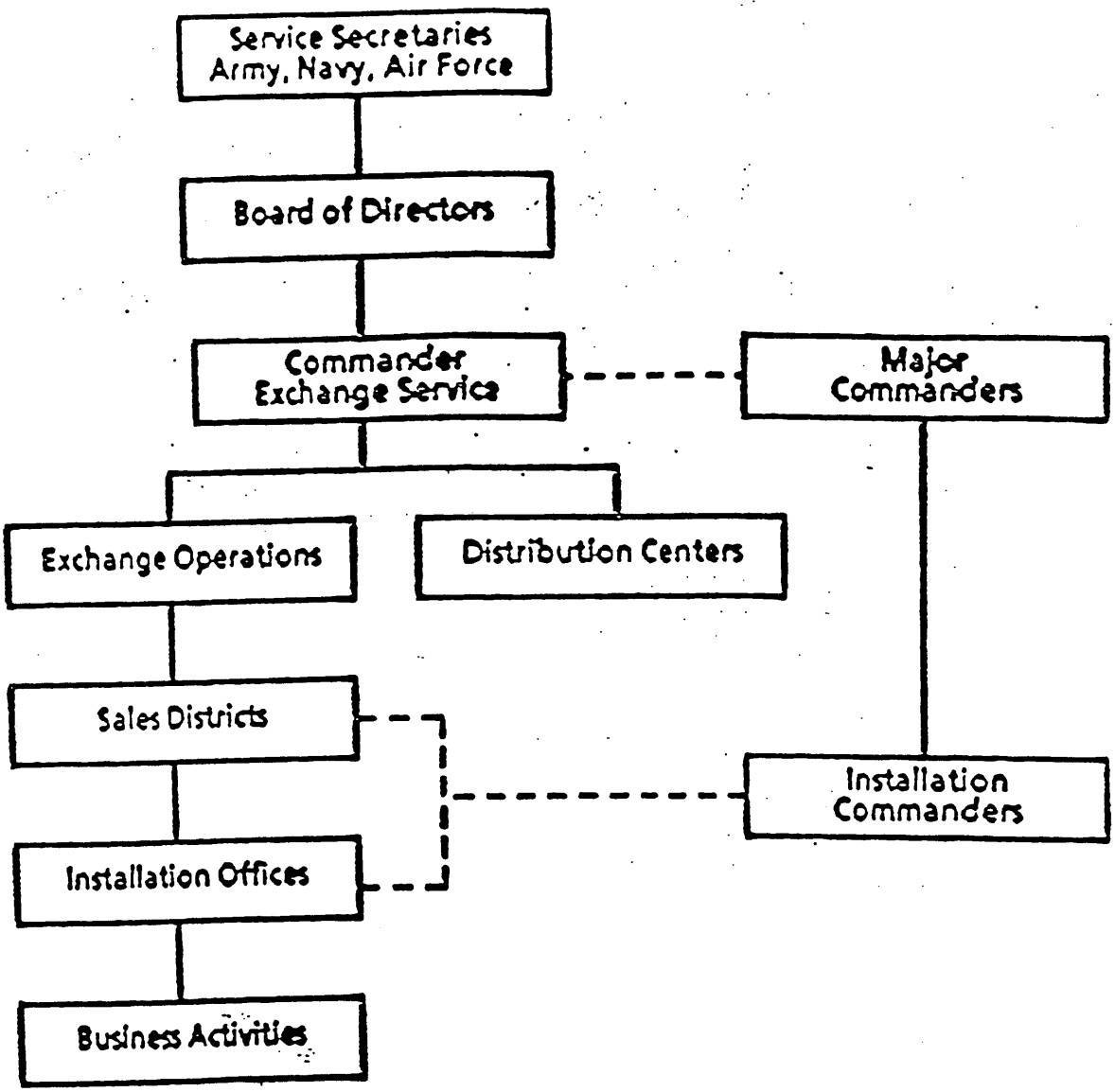


FIGURE 1-3

BOARD OF DIRECTORS

Board Responsibilities

The board should be responsible to the Secretaries of the Army, Air Force and Navy through the Army and Air Force Chiefs of Staff, Chief of Naval Operations, and Marine Corps Commandant in directing the exchange service. Basic responsibilities should be:

- Determine and approve policies, plans, programs, and strategies of the exchange system. Ensure appropriate staffing with departmental, other Service, and OSD entities.

- Review and approve operating and capital budgets and financial goals. Ensure they are consistent with the organization's strategies and policies.

- Set dividend policy and declare dividends to be paid to each Service's MWR function.

- Analyze reports on the exchange's performance and suggest possible actions to improve performance.

- Formulate policies regarding ethical or public responsibility matters and ensure organization adherence to these policies.

- Provide an annual report on exchange operations to the Service Secretaries.

- Provide the Army and Air Force Chiefs of Staff, Chief of Naval Operations and Marine Corps Commandant quarterly reports on the status of the exchange system.

Committees of the Board

Due to the scope of responsibilities, the board should rely on standing committees to accomplish detailed reviews of the issues and make recommendations to the board. There should be a minimum of three standing committees:

- Finance committee

  -- Review and recommend approval of financial policy and plans.

  -- Review the financial performance of the organization.

  -- Approve the level of funding available for capital improvements.

- Audit committee

  -- Review the audit program of both the internal auditor and external independent auditor.

  -- Ensure that managerial and accounting controls are adequate and effective.

  -- Promote practices to improve management efficiency and effectiveness.

- Capital improvements committee

  -- Review and recommend approval of capital improvements at a dollar level not to exceed that approved by the finance committee.

FIGURE 1-3 continued

Board Membership

Recommended membership is as follows:

- Army
  - -- Comptroller of the Army
  - -- Commander, U.S. Army Community and Family Support Center
  - -- Sergeant Major of the Army
  - -- Operational Commander selected by the Chief of Staff of the Army

- Air Force
  - -- Principal Deputy Assistant Secretary, Financial Management (Resource Management)
  - -- Assistant Deputy Chief of Staff/Personnel for Military Personnel
  - -- Chief Master Sergeant of the Air Force
  - -- Operational Commander selected by the Chief of Staff of the Air Force

- Navy
  - -- Deputy Chief of Naval Operations for Logistics
  - -- Commander Naval Military Personnel Command
  - -- Master Chief Petty Officer of the Navy
  - -- Operational Commander selected by Chief of Naval Operations

- Marine Corps
  - -- Assistant Chief of Staff for Manpower and Reserve Affairs
  - -- Sergeant Major of the Marine Corps
  - -- Assistant Chief of Staff for Installations and Logistics
  - -- Operational Commander selected by the Commandant of the Marine Corps

- Exchange system Commander

Chairmanship of the board should alternate between the Comptroller of the Army, Principal Deputy Assistant Secretary of the Air Force, Financial Management (Resource Management), and Deputy Chief of Naval Operations for Logistics at two year intervals.

FIGURE 1-3 continued

TOWARD A MORE EFFICIENT MILITARY EXCHANGE SYSTEM

Report PL110R1

Volume I

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Executive Summary

TOWARD A MORE EFFICIENT MILITARY EXCHANGE SYSTEM

An April 1990 DoD study recommended a full consolidation of the three military exchange systems. Such a consolidated system would be the seventh largest merchandiser in the United States, with annual sales of over $9 billion. Although the Army and Air Force generally concurred with the recommendation, the Navy and Marine Corps challenged the study's analysis and results. Our independent review of the study and of the subsequent rebuttals leads us to recommend increasing cooperation and coordination among the current exchange systems and integrating some of their functions without a full and immediate consolidation.

The DoD study projected annual savings of over $44 million from the consolidation. Most of the savings would come from abolishing the Navy and Marine Corps field support and headquarters functions, adopting the Army and Air Force Exchange Service automated information system, and closing some of the Navy's distribution centers. The rebuttal challenged the analysis and the data on which it was based and also objected to the concept of replacing the Navy's and Marine Corps' regionalized and decentralized buying strategies with the Army and Air Force Exchange Service's centralized strategy.

Our analysis showed potential annual savings of $36.6 million from consolidation, with a net present value over 10 years of $104.9 million. Those savings represent an 8 percent potential increase in annual profits and, alone, would appear high enough to warrant consolidation.

However, qualitative considerations are also important. Collectively, the nonquantifiable issues raise the risks to a level too high to justify full and immediate consolidation, despite the apparent potential savings. The retail industry has found, for example, that mergers of this size need teams experienced in managing large organizational changes. The exchanges do not have personnel experienced in large mergers. Successful mergers also need a committed, enthusiastic management team, but many in the Services actively oppose this merger. Moreover, the retail industry

expects major changes in the retail environment in the 1990s. Those management and industry uncertainties, together with the military's anticipated troop reductions and base closures, create a high-risk environment for exchange consolidation at this time.

However, some of the first steps on the road to consolidation make good economic sense, whether or not the exchanges actually consolidate. Those steps will significantly reduce the risks of a full consolidation if one is ultimately undertaken. With increased management cooperation and coordination, aided by a common chart of accounts and a standard system of merchandise numbering, the independent exchange systems could make detailed comparisons of their operations. From those comparisons, the exchanges could identify and adopt the best contracts, vendors, buying strategies, and management options. Moreover, the Navy and Marine Corps exchanges could realize savings by using design and construction services provided by the Army and Air Force Exchange Service, and by adopting the Army and Air Force Exchange Service's food service strategy. The exchanges should also cooperate on designing an architecture for a common information system. We project the quantifiable savings from these steps to be $3.3 million per year.

Although the actions described are necessary before the exchanges can consolidate, DoD should not make a decision on consolidation until at least 3 years have passed. By that time, the integration outlined above should be completed, and the decision makers will have a much better comparison of exchange operations, because of the common chart of accounts and standard merchandise numbering system. They will also have had time to encourage further cooperation among the Services and possibly to reach consensus on buying and management strategies. Finally, the extra time will produce a clearer picture of the evolving retail environment and the effects of base closures and troop drawdowns.

We recommend that DoD establish an Exchange Oversight Board with regulatory powers to implement some integration of exchange operations. Although the exchanges would remain independent, the actions that have been described will increase their net earnings. Additionally, the integration will better position the exchanges for a full consolidation, should such occur.

CHAPTER 1

THE EXISTING EXCHANGE SYSTEMS

The Military Services operate three separate military exchange systems: the Army and Air Force Exchange Service (AAFES) for the Army and the Air Force; the Navy Resale and Services Support Office (NAVRESSO) for the Navy; and the Morale, Welfare, and Recreation Support Activity (MWRSPTACT) for the Marine Corps. Military exchanges originated during the Revolutionary War, when Congress authorized civilian sales concessions to be established to sell personal use items to troops. Since then, each system has evolved and grown to the current worldwide operations, with a combined annual revenue of $9.3 billion and employing over 100,000 people. Although each exchange system satisfies its military patrons with similar services, the Services differ significantly in the management and operations strategies they follow to carry out their missions.

The AAFES operates under a highly centralized management. Its headquarters sets policy; establishes procedures; and provides centralized information systems, procurement, distribution, engineering, and accounting and personnel functional support to its stores. NAVRESSO is organized regionally, and its seven field support offices (FSOs) provide regionalized information systems, procurement, distribution, and accounting and personnel support to operate Navy stores. MWRSPTACT is decentralized, with procurement and other support functions performed by each store at the installation level.

THE DoD STUDY

The Assistant Secretary of Defense (Force Management and Personnel) [ASD(FM&P)] initiated a study of the exchange systems in April 1990 in response to a congressional request that DoD study the feasibility of consolidating its military exchange systems. The study was to provide an unconstrained baseline assessment of the three exchange systems and to determine whether savings could be realized by consolidating them and thus reducing duplicate overhead costs and increasing operating efficiencies.

TABLE 1-1

ANNUAL RECURRING COSTS AND BENEFITS (FROM DoD STUDY)

Affected function	Total consolidation ($000)	
	Savings, cost avoidance, new income	Additional costs[a]
Marine Corps buyers at store level	6,215	
Marine Corps accountants	2,295	
Marine Corps headquarters	1,010	
NAVRESSO headquarters	27,322	
Navy FSOs	42,945	
Navy Independent Exchange	2,495	
Navy/Marine Corps store staffing		13,300
Augmentation of Navy/Marine Corps buyers		9,800
Augmentation of Navy/Marine Corps accountants		10,000
Augmentation of Navy/Marine Corps distribution	34,000	24,300
Augmentation of DCO organization		770
Augmentation of area exchange structure		8,812
Augmentation of headquarters		4,367
Headquarters expense additions		6,401
AAFES IS savings to current Navy/Marine Corps systems	7,309	
Food service savings	300	
Personal service savings	313	
Impact of employee program for Navy/Marine Corps		550
Impact of in-house construction	921	
Interest cost for lower inventory turns		3,122
Total	125,125	81,422
Net benefit	43,703	
Navy initiatives under separate systems (status quo)	(9,100)	
Navy and Marine Corps store reductions resulting from AAFES Store Automation Program (ASAP)	9,600	
Net consolidation impact	44,200	

Note: IS = Information System.

[a] Cost/benefit stated in relation to FY89 operations.

Recreation (MWR) program is very real. A marginal swing in sales performance would cancel any consolidation savings and reduce profit dividends to MWR activities, according to the Navy's analysis.

Navy officials claimed it takes only a 3.7 percent loss of sales in any year to destroy the savings the consolidation had hoped to create. NAVRESSO officials believe that the sales drop resulting from the consolidation will be 12 percent permanently, creating a business disruption as the merger takes place. Since the consolidation might require heavy unfunded front-end investment, according to the Navy's calculations, a net profit loss would reduce sailors' MWR programs in at least the first 6 years. According to joint Navy and Marine Corps analysis, the merger will require $104 million in up-front costs and will not break even until the 7th year.

Navy officials claim they can achieve greater savings by implementing cooperative efforts among the military exchanges rather than a total consolidation. That cooperative effort includes using common facilities design and construction services, joint training development concepts, and a common information system. They claim that this alternative to consolidation would allow independent exchange systems to continue and would encourage maximum earnings by internal streamlining. Under this effort, NAVRESSO plans to reduce its operating costs by consolidating seven FSOs down to three FSOs. Department of Navy officials claimed they can save $264.6 million over the next 7 years by increasing operating efficiency through the internal streamlining and implementation of the cooperative efforts.

Major Point of Rebuttal from NAVRESSO and MWRSPTACT Managers

According to the NAVRESSO managers, more than 80 percent of Navy and Marine Corps exchanges are located in the top 100 metropolitan areas, compared to 57 percent for AAFES exchanges. These metropolitan areas are highly competitive when compared to rural locations. Under a decentralized management concept, the managers claim, the Navy and Marine Corps exchanges quickly and effectively respond to local market conditions by adjusting merchandise assortment, pricing, services, etc. If AAFES's centralized management approach is imposed on the Navy and Marine Corps exchanges, the Navy does not believe it could respond quickly enough to rapidly changing market conditions. This alleged loss of marketing flexibility under the AAFES centralized concept, it believes, would alienate

The overall group consensus for consolidation was not favorable. In a vote, 7 opposed the consolidation. All viewed the Service missions as being too different from each other to be effectively supported by one agency. They believe that the exchanges currently satisfy their commands' mission needs.

Air Force and Army Responses

The Air Force and the Army concurred with the conclusion and the recommendations made by the study group. However, both Services believe that the new consolidated exchange system should remain under the control of the Services and not OSD. They believe that the new head of a consolidated exchange system should be responsible to a board of directors appointed by and representing the Services. Each Military Department should get equal representation, and the system's head position should be rotated. The current AAFES governing board framework could be expanded to include representatives from the Navy and Marine Corps, should consolidation occur.

LMI STUDY FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

We performed an independent review of the DoD study's methodology, findings, financial analyses, and of the conclusions based upon them. In summary, we found that the annual savings from consolidation would be $36.6 million, an 8 percent increase in profits. We believe that those savings, if considered alone, are sufficient to warrant consolidation. However, we found a number of nonquantifiable issues that create a risk too high to justify immediate consolidation to achieve those savings.

In view of our findings and conclusions, we recommend that the Assistant Secretary of Defense for Production and Logistics [ASD(P&L)] and the ASD(FM&P) take the following actions:

- *Direct the Services to take the first steps toward a full consolidation of their military exchange systems.* However, a final decision on full consolidation should not be made until the nonquantifiable risks of consolidation can be evaluated. Taking the first steps is justified, however, because they make sound business sense whether or not the exchange systems are eventually consolidated.

- *Delay the final decision on consolidation until at least 3 years have passed.* Postponing a final decision on consolidation until after the first steps are taken will cost little in time or dollars. After 3 years, the results of those

conclusions (Chapter 3). In Chapter 3, we also suggest a formula for distributing MWR funds, should consolidation be implemented. We present more detailed information on the organization of the three exchanges (Appendix A), programmed savings claimed by the Services through internal streamlining and cooperation (Appendix B), a list of attendees at the industry forum (Appendix C), and, finally, a detailed list of the data and assumptions used in our analysis (Appendix D which is contained in Volume II).

CHAPTER 2

ANALYTIC APPROACH AND ISSUES

APPROACH

We retained the basic approach of the DoD study, analyzing the major functional operations separately to determine the costs and benefits (i.e., savings) of consolidating each function versus maintaining the status quo. We spent much of our effort validating the cost estimates presented in the DoD report and the subsequent DoN rebuttals. We concentrated on the four areas that provide almost all the savings from a consolidation – business and financial strategy [primarily General and Administrative (G&A) issues and costs], distribution centers, purchasing and inventory management, and information systems. Within each of those four major areas, we studied the detailed supporting calculations and assumptions used to arrive at the DoD study – and DoN rebuttal – estimates. We made our own independent judgments on the likelihood of achieving each cost or saving estimate presented to us and, in some cases, substituted our own estimates.

Many claims of savings in the DoD study and the Navy rebuttal are based on productivity improvement programs not yet implemented. We gave credit to all of them (see Appendix B), although not always the full amount claimed. Some of the claimed savings, for example, were planned Navy and Marine Corps improvements in information systems (ISs), elimination of some Navy regional offices and functions (FSOs), and increased AAFES store automation.

We met with members of the DoD study team and rebuttal groups for each of the four areas to obtain backup data to justify the facts and figures used in both cases. At those meetings, we reviewed the detailed calculations and assumptions and many of the original source documents. We also used the meetings to discuss the philosophy and reasoning behind the approach to consolidation or status quo that the supporting calculations implied. Examples included such things as failure to assume economies of scale, timing of distribution center and IS changes, and timing and impact of personnel changes.

and Marine Corps operating with separate systems now in the planning stages. We included the one-time and conversion costs separately in our cash-flow analysis (described below).

From the above calculations, we arrived at a validly determined estimate of annual recurring net savings from consolidation. However, we went further to analyze the cash flow from a consolidation because the annually recurring savings are a "steady state" savings and the steady state does not begin until Year 5. Until that time, savings are lower, and the possibility even exists of having a few years with negative savings (net costs) because of the one-time conversion and capital expenditures required to implement the consolidation. After the consolidation is complete, the annual recurring savings accrue to the organization for some years into the future. The planning horizons for most companies do not extend beyond 10 years, and the retail environment is difficult to envision any further ahead than that. Therefore, our cash flow analysis spans 10 years – 4 years of transition and 6 years of a fully consolidated operation. We inflated all figures at a conservative 3 percent annual rate and then discounted future year costs and savings by 10 percent, to arrive at a net present value of a consolidation. The results of our financial analysis are presented in Chapter 3.

Any business consolidation entails both risks and opportunities. A military exchange consolidation is no exception, and for that reason, we factored both the risks and opportunities into our financial analysis. Thus, we present three sets of savings estimates. The primary set of estimates are our best predictions of the annual savings and 10-year cash flows from a consolidation. We label these as the "most likely" estimates because they are what we expect to happen under a consolidation if everything internal and external (i.e., the retailing market) goes reasonably according to plan. To calculate our most likely estimates, we used reasonably conservative assumptions such as no economies of scale in purchasing, inventory management, and G&A resources. The consolidation could very well turn out better than planned. Economies of scale could be realized in several areas, IS hardware costs could be lower, and conversion disruptions could be minimal. In that case, the savings would be even greater than projected by our most likely estimates. We labeled this second set of estimates as "optimistic," to signify that they are within reach if the consolidation works out slightly better than planned and the new organization can capitalize on the opportunities that a strong unified system might

further economies of scale might be possible in some other areas, especially in G&A functions. Although the smaller Marine Corps exchange system does some cooperative purchasing with the other exchange systems, it still stands to gain the most from the economies-of-scale savings that a consolidation would bring.

- The financial statements for all three exchange systems show that all are operating reasonably well at the store level. The majority of the savings from consolidation would therefore come from "above the store level." Elimination of duplicative G&A costs at the NAVRESSO and MWRSPTACT regional and central offices would provide the majority of the estimated savings from a consolidation. Only if a total consolidation takes place can all duplicative staff, buildings, and equipment be eliminated.

- The private retailing sector is exhibiting a clear trend toward centralization but with more information and decision empowerment at the store level, facilitated by responsive senior management and appropriate use of information systems and technology. This management philosophy entails elimination of middle (e.g., regional office) management staff, functions, and offices.

- Most companies in fashion merchandising (e.g., department stores) have both West Coast and East Coast buying organizations. Each is charged with being responsive to the often-different fashion tastes and preferences of consumers in the eastern and western parts of the country.

- While many mergers in retailing have failed, many others have succeeded. Among the reasons for failure have been the heavy debt burdens from leveraged buyouts, the financial status of one or more of the companies being marginal prior to the consolidation, and poor and uncommitted management during the consolidation.

- Sales often dip slightly for a year or two after a merger and tend to rebound quickly. Careful planning and good merger management can mitigate many but not all of these problems.

- A successful merger needs a cooperative management effort. Poor cooperation among the exchange systems could increase the conversion costs of a merger significantly. The reluctance of the Navy and Marine Corps to participate in the merger is a real factor casting doubt on its probability of success.

- Mergers also need a competent, professional merger-management team to fully succeed. Large mergers present planning and conversion issues that differ significantly from normal operational issues, and experience is needed to effectively meet the challenges posed by a consolidation.

CHAPTER 3

ANALYSIS AND CONCLUSIONS

RESULTS OF FINANCIAL ANALYSIS

We discussed the methodology and findings of our financial analysis, in Chapter 2. We estimated the annual recurring savings from a consolidation – the "steady state" annual savings that would accrue to the exchange system once the consolidation is complete. However, planning and implementing the consolidation actions takes time and would not be complete until the end of Year 4, at which time the steady state annual savings would accrue. During the transition in Years 1 through 4, fewer savings occur, for two reasons. First, operational savings are less, because G&A functions have not yet been fully merged. Second, one-time conversion costs arise from personnel changes, construction of a new southwest distribution center, SKU conversions, and conversion to a single IS. During some of the early years, net costs may be experienced rather than net savings for those two reasons. Therefore, we also estimated the annual cash flow from a consolidation for a period of 10 years – 4 years of consolidation and 6 years of steady-state operation – and discounted that cash flow to arrive at a net present value (NPV) of the consolidation.

The NPV (i.e., discounted cash flow) analysis requires assumptions on the timing of the consolidation phases. Figure 3-1 shows the milestones for an immediate consolidation decision. Although functions such as food concept development and design and construction can be consolidated very quickly, others such as SKU conversion and IS consolidation require more time. Completion milestones of the consolidation activities are shown in the figure, but many of the activities would occur over a 2- or 3-year period. Such is the case with SKU conversions; development of a common chart of accounts; and IS, distribution center, and HQ consolidations. Accordingly, we spread the one-time and conversion costs over 2 to 3 years for those activities.

Table 3-1 shows by major category the potential annual savings, or increases in profit, that would accrue from an immediate consolidation once that consolidation

TABLE 3-1

ANNUAL RECURRING SAVINGS FROM A FULL CONSOLIDATION

($000)

Major category	Savings			Costs		
	Pessimistic	Most likely	Optimistic	Pessimistic	Most likely	Optimistic
G&A (except IS):						
Eliminate USMC accountants	2,295	2,295	2,295			
Eliminate USMC buyers	6,838	6,838	7,315			
Eliminate USMC HQ staff	1,010	1,010	1,010			
Eliminate Navy HQ staff	28,763	28,763	28,763			
Eliminate Navy FSOs	42,945	42,945	42,945			
Reduce Navy independent exchange support expenses	2,495	2,495	2,495			
Reduce Navy/USMC personnel services expenses	282	313	344			
Augment AAFES accountants				10,000	9,500	9,000
Augment AAFES buyers				10,780	9,800	8,820
Augment AAFES directors of CONUS operations				770	770	770
Augment AAFES area exchange management				9,253	8,812	4,406
Augment other AAFES HQ				3,744	3,566	3,388
HQ consolidation expenses				6,401	6,401	6,401
Increased Navy/USMC long-term employee benefit costs				550	550	550
Subtotal	84,628	84,659	85,167	41,498	39,399	33,335
ISs:						
Navy/USMC on AAFES (net)	2,805	3,302	4,285			
Navy/USMC store staff reductions from ASAP	5,900	6,800	9,600			
Subtotal	8,705	10,102	13,885			
Distribution:						
Eliminate Navy/USMC distribution	22,324	23,500	23,956			
Augment AAFES distribution				27,200	16,900	12,250
Additional inventory costs				3,122	2,571	2,204
Subtotal	22,324	23,500	23,956	30,322	19,471	14,454
Design and construction:						
Navy/USMC use AAFES facility design and construction	1,968	2,987	3,868			
Subtotal	1,968	2,987	3,868			
Direct:						
Food services operations	270	300	330			
Augment Navy/USMC store staffing				13,300	7,400	2,204
Subtotal	270	300	330	13,300	7,400	2,204
Navy/USMC status quo initiatives:				10,300	5,150	0
Total	117,895	121,548	127,206	95,420	71,420	49,993
Net savings before G&A adjustment	22,475	50,128	77,213			
Less overstated G&A savings	21,565	13,578	0			
Net savings	901	36,550	77,213			

Note: USMC = U.S. Marine Corps.

TABLE 3-2

CASH FLOW AND NET PRESENT VALUE OF BENEFITS/(COSTS)
FROM AN IMMEDIATE DECISION TO CONSOLIDATE (Continued)

(FY89 $000)

Item	Year 7			Year 8			Year 9			Year 10		
	Pess.	ML.	Opt.	Pess.	ML.	Opt.	Pess.	ML.	Opt.	Pess.	ML.	Opt.
Steady-state annual savings	910	36,550	77,213	910	36,550	77,213	910	36,550	77,213	910	36,550	77,213
Personnel relocation												
Severance pay												
Unemployment compensation												
Additional office equipment												
Training												
Personnel												
Travel												
FSO building/equipment excessing												
Planning												
Food concept development												
Transfer of distribution												
Design and construction												
ISs:												
Navy												
Marine Corps												
Customer alienation												
G&A merger turbulence												
Total benefit/(cost)	910	36,550	77,213	910	36,550	77,213	910	36,550	77,213	910	36,550	77,213

that these savings could be achieved without issuing high-yield bonds, otherwise going into debt, or using large cash reserves. No increased equity or debt investment is required to achieve these savings, only 3 years of slightly smaller profits.

As explained in Chapter 2, the savings estimates we refer to as *most likely* are what we would reasonably expect to realize from a consolidation with prudent assumptions regarding conversion disruptions and anticipated savings from combining G&A functions. The optimistic savings estimates are attainable if the Services cooperate fully, and management keeps conversion disruptions, costs, and customer alienation to a minimum. The pessimistic savings estimates are *highly pessimistic*, and represent the extreme case of non-cooperation, poor planning, poor merger management, and extreme customer alienation. Even in the worst scenario,

We have also added a penalty to account for the risk that projected G&A savings for the consolidation may be overstated. Venture capitalists have found that G&A savings never fully materialize after a large merger no matter how carefully they are projected. We therefore reduced projected G&A savings by 50 percent in the pessimistic scenario and by 30 percent in the most likely scenario.

For large mergers, the private sector finds that it needs an experienced merger team. Its experience also shows that even with such a team, a pessimistic, rather than a most likely or optimistic result is possible. AAFES has little experience with large mergers. Although it recently completed a successful merger of all the military Class VI (package) stores worldwide, AAFES does nct have an internal staff with the experience needed in the scale of a merger that would occur under a total exchange consolidation. Although the risks of merger inexperience are impossible to quantify, to be conservative in our analysis we added a penalty of another 25 percent of the projected G&A costs for Years 3 and 4 of the merger.

The industry forum was unanimous in its belief that the full support of the merger participants is needed for a consolidation to succeed. However, the Navy and the Marine Corps are currently opposed to total consolidation and that opposition constitutes a real risk to the relative success of the venture. The risks from a reluctant or uncooperative management structure are that it would introduce delays and lead to decisions that would increase consolidation costs or reduce profit opportunities. We made no attempt to quantify such real but vague costs.

On the positive side, we find no evidence to suggest that this merger would be any more difficult than a retail merger of similar size in the private sector. The military exchanges share the same narrowly defined basic market: Service persons. About 80 percent of the merchandise of the exchange systems is already common, the systems have extensive knowledge about each others' finances and business processes, and the systems do have some previous experience in joint ventures and consolidations.

Neither we nor most of the attendees of the industry forum see the loss of competition among the exchanges as a significant risk. The retailing literature, consultants, and industry representatives suggest that, during the 1990s, the real competition will come from outside the gate; the exchanges should be less concerned

systems, and greater automation strategies are being tried. It is unclear how these evolving strategies will affect the retail market and especially how they will affect military exchanges.

A GRADUAL APPROACH TO CONSOLIDATION: ACHIEVING THE BENEFITS WITH LOWER RISK

The issues we have presented that cannot be quantified raise the risk for a consolidation to a high level. The expected annual return and the NPV, although significant, are not high enough to risk the consolidation in the current environment and with the current degree of uncertainty. An ideal compromise would be to follow a course that would provide most of the potential benefits of an immediate consolidation and would do so with a much lower degree of risk. We suggest an approach that will produce such an outcome.

We can show that the early steps toward a consolidation make good sense for the exchange systems whether or not they are consolidated. Moreover, those steps can be taken before an irrevocable decision for consolidation is made. The outcome of those early steps, together with a more settled retailing environment, will provide information and a perspective that will drastically lower the current level of risk. Under this scenario, DoD would not make final commitment for consolidation until at least the end of Year 3 of the process. This approach, however, is not without cost. By delaying the final decision, DoD introduces a delay in the groundwork necessary to consolidate the exchange systems' ISs. The delay may also warrant a change in the consolidated IS strategy. In the following subsections, we discuss the advantages and costs of this gradual approach to consolidation.

Mandated Cooperation

As the first step in a consolidation plan, DoD would have to establish a board to manage the plan and facilitate coordination and cooperation of the Services. That level of cooperation, however, will be beneficial even without a consolidation plan, as was shown during the original DoD study. During that study, the intense interaction and sharing of ideas among the Services created policy changes even as the study progressed. For example, the Navy now has a plan to reduce the number of its exchange accountant positions and is proposing to reduce the number of its field support offices from seven to three. Appendix B summarizes the savings from unilateral improvements each exchange system has claimed either as existing

from the concepts. A whole range of further cooperation could ensue if AAFES were to provide the training and implementation management needed to make the concepts operational and the Navy and the Marine Corps were to operate them as franchises. The level of cooperation would depend on how widely the Navy and the Marine Corps chose to implement the AAFES concepts. From the results of initial surveys, AAFES believes that introducing all of its food franchising concepts on all Navy and Marine Corps installations could produce additional profits of $10 million per year. However, that amount is highly dependent on overall Navy and Marine Corps food service policies, such as how the exchanges would compete with the clubs. Thus, the AAFES figure was not included in the projected annual benefits of consolidation. Whatever the degree of cooperation, the exchange oversight board should mediate the level of reimbursement AAFES should receive for its support. Those funds, although transferred from one exchange system to another, will remain within DoD and go toward the MWR fund.

Standardizing Storeskeeping Units

The benefits of a common set of SKUs for the three exchanges are not as easy to quantify as those of the design and construction and the food franchising initiatives. SKUs are the units of measure and identification for ordering and controlling a retailer's stock. A common SKU base would be essential before implementing an IS for a consolidated exchange system. If the exchange systems remain independent, however, some indirect benefits may be realized. Having a common set of SKUs would allow more and easier comparisons among the exchange systems to identify vendors, contracts, and systems that are especially profitable. It would certainly facilitate coordination and cooperation among the exchange systems. Quantifying the increased revenues from those benefits, however, is beyond the scope of this analysis of the DoD study.

Creating a Standard Chart of Accounts

A standard chart of accounts is essential for a consolidated exchange system. Like SKUs, its use would also offer indirect benefits independent of consolidation although they, too, would be hard to quantify. Even if the exchange systems remain independent, a common chart of accounts would allow the Services to compare their operations regularly and in detail and would provide invaluable insights. Management could compare buying, distribution, and sales strategies to capitalize on

common set of consistent platforms that could facilitate a smooth transition to full consolidation.

The cost of developing a new IS architecture to handle all three exchange management strategies and merchandise line items would be about $5 million, a cost that would provide no added value unless it increased sales or reduced costs. For example, it could be developed before the consolidation of distribution centers recommended in the DoD study. Then, if the distribution centers, the ISs, the design and construction functions, and the food franchising development were all consolidated, the eventual steady-state annual savings would be an estimated $14.9 million and the NPV savings would be $72.6 million. Those savings are considerably lower than the savings expected from immediate, full consolidation because 70 percent of the expected savings from full consolidation come from the eliminating headquarters, buyers, and field support office functions. Without full consolidation, the value added from a consolidated IS is not worth the cost.

However, we neither assert nor imply that developing a common IS architecture during the 3 years before a consolidation decision would be fruitless. The coordination required for the development and the information derived from it would be of great value to the decision makers. If the exchange systems remain independent, the research and development needed for a common, state-of-the-art IS might be of some help to them when they develop their own next generations of ISs, but unless full consolidation were to be approved, the cost of developing a common IS architecture would essentially be lost.

A distinction must be made between developing a common IS architecture for the exchange systems, as discussed here, and the DoD's recommended approach of using AAFES's existing IS for the Navy and Marine Corps exchange systems. If the AAFES IS were to be used, the Navy and Marine Corps would have to adopt the AAFES centralized buying and other management strategies. We concur with the DoD's conclusion that to try and adapt the AAFES IS to handle the current strategies of the Navy and Marine Corps exchange systems would be unworkable. A common IS architecture still implies separate hardware, software, and operating personnel. However, the three systems would be compatible in case of a future consolidation of headquarters, G&A, and buying functions.

TABLE 3-4

COMPARISON OF SAVINGS

($ million)

	Integration followed by consolidation			Integration without consolidation		
	Pessimistic	Most likely	Optimistic	Pessimistic	Most likely	Optimistic
Steady-state annual savings	0.9	36.6	77.2	2.2	3.3	4.2
NPV	(30.1)	81.2	202.1	4.6	12.0	18.1

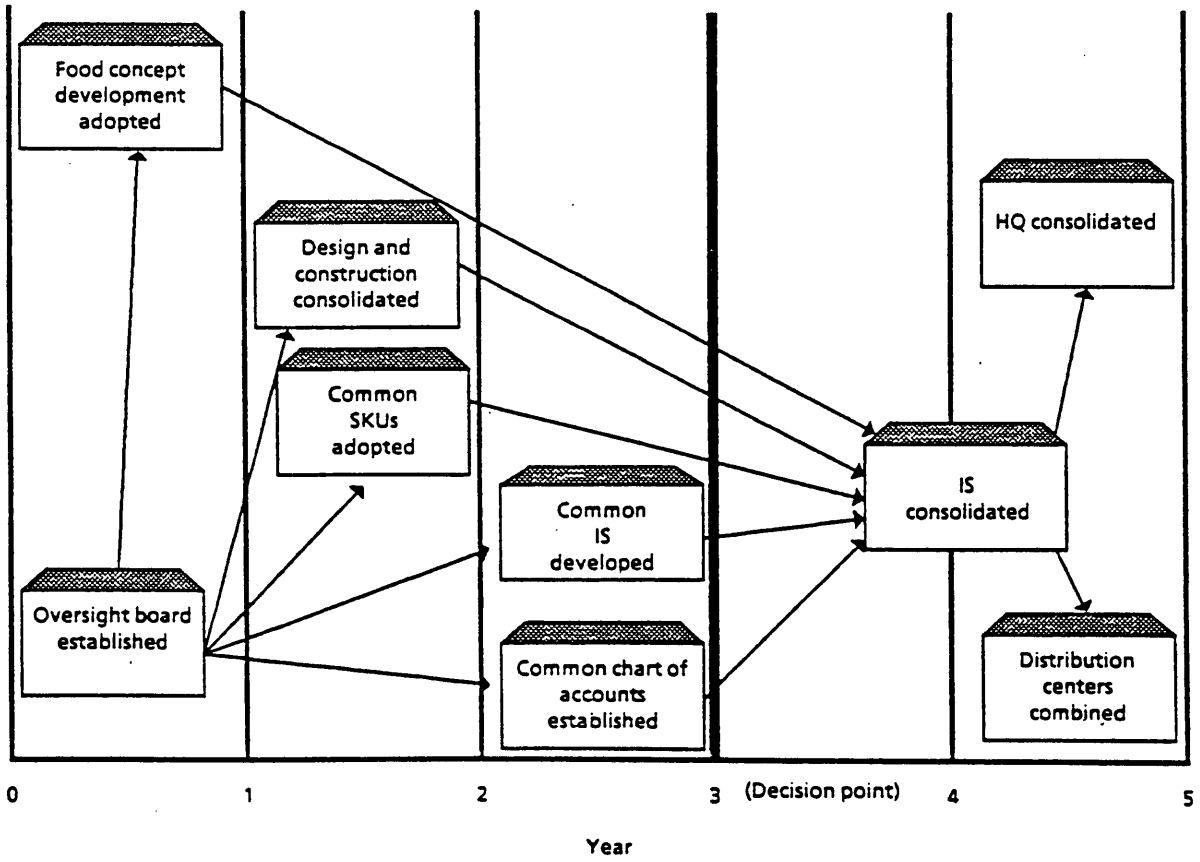


FIG. 3-2. MILESTONES FOR A DELAYED DECISION

across-the-board decisions in the retailing environment could quickly and drastically reduce profits. Such decisions for a profit-making organization should be business decisions and should be tailored and timed according to market conditions to minimize the impact on profits. Another advantage of a voting board is that it would maintain for the Services a measure of control over the strategic decisions that directly affect their exchanges. The chair could rotate among the Services and the OSD members. The AAFES governing board could be used as a model for an oversight board structured along these lines.

An alternative oversight board structure is to have an ASD(FM&P) representative as a permanent chairperson with two members from each Service acting as advisors to him or her. This structure would be closer to a Defense Agency form of management structure. The Services would still be able to influence the decision making although not through a formal vote. The AAFES board seldom takes a formal vote on policy issues, preferring to reach agreement by consensus, indicating that the vote itself may not be crucial. Moreover, having an OSD representative as a permanent chair recognizes the responsibility OSD has for oversight of the operation of the military exchange systems.

A third alternative for the oversight board is to structure it as a voting body of Services' representatives whose chairperson reports to the ASD(FM&P). Each Service could have three voting members and the chair of the board could rotate among the Services, but decisions would have to be approved by the ASD(FM&P). This alternative recognizes OSD's responsibility for the exchange systems but gives the Services more control over policy than if they were in strictly an advisory capacity.

Oversight Board Agenda

Whatever the configuration of the oversight board, it should be given a specific agenda for action. The issues discussed in this report should be part of that agenda: a continuation of the idea sharing and search for opportunities for mutual benefit that were sent into high gear by the scrutiny of the DoD study; a common chart of accounts within 3 years; a standard list of exchange SKUs within 2 years; a consolidated exchange design and construction organization; the transfer of the AAFES food concept to the Navy and Marine Corps; the design of a common IS architecture in case full exchange consolidation is later adopted; and a review of the

add to exchange earnings. Many exchanges at remote Army and Air Force installations, on the other hand, are kept open at a loss to provide a vital service to the Service member. Distributing MWR subsidies on the basis of total Service exchange earnings might tempt the Services to cut back unprofitable exchange services and locations to the detriment of the Service member. Moreover, the Navy could counter-argue that the Army and Air Force have more overseas exchanges, which are usually more profitable than their U.S. counterparts. Finally, distributing MWR subsidies according to exchange earnings does not relate the subsidies to the need, which is more closely related to the size of the Services' active duty populations.

An alternative is to distribute the available MWR subsidies on the basis of the square footage of exchange space in each Service. That criterion would address the problem of the different profit-earning potentials of each Service's stores and avoid the temptation to cut back on services to unprofitable locations. However, it would now increase the Services lobbying to build stores, some of which may not be needed, to garner a larger proportion of the MWR pie.

A third alternative is to distribute the MWR subsidies based simply on the relative sizes of the Services' active duty populations. This method is used by AAFES for MWR distribution between the Army and Air Force. It is simple and adopts the fairly safe assumption that there is a correlation between active duty population and MWR need. For the Navy and Marine Corps to fall under this distribution method, however, a minor adjustment is called for. Allowances should be made for the normal percentages of sailors and marines at sea at any one time. For example, on average, 8 to 10 percent of the Navy's active duty population is at sea. Aboard ship, MWR is provided from appropriated funds and not from exchange profits. Therefore, only 92 percent of the Navy's active duty population should be used in calculating the Navy's share of the exchange's MWR subsidies.

This last method of MWR subsidy distribution is simple to administer, relates subsidy to need, and provides few opportunities to distort the system to gain MWR share. Moreover, it has been tried and tested and has been successfully used by AAFES for many years.

APPENDIX A

MILITARY EXCHANGE ORGANIZATIONS

APPENDIX A

MILITARY EXCHANGE ORGANIZATIONS

ARMY AND AIR FORCE EXCHANGE SERVICE

The Army and Air Force Exchange Service (AAFES) organizational structur unique in that its command and control are integrated through a governing boa The commanding officer, who holds a rank of major general, is responsible to a member board of directors. This board is established by the Secretaries of the t Services through their respective chiefs of staff and is generally constituted provide equal Army and Air Force representation. This board is composed of following members:

- Comptroller of the Army
- Comptroller of the Air Force
- Commander, U.S. Army Community and Family Support Center
- Chairman, AAFES, Europe Council
- Chairman, AAFES, Pacific Council
- Commander, AAFES
- Sergeant Major of the Army
- Chief Master Sergeant of the Air Force
- A general officer designated by the Chief of Engineers, Department of Army
- Deputy Auditor General of the Air Force Audit Agency
- Director, Transportation Energy and Troop Support, Office of the Dep Chief of Staff for Logistics, Department of the Army
- Assistant Deputy Chief of Staff/Personnel for Military Personn Department of the Air Force

Operation of Navy exchanges at installation level falls under the command of the local commanding officer. The base commander writes the primary fitness report for the officer in charge of the Navy exchange and the secondary rating official is the commander of the cognizant FSO. Base commanders have the authority to review and approve budget requirements, organizational changes, and the types of business or services to be provided.

MARINE CORPS EXCHANGE SYSTEM

The Marine Corps exchange system differs substantially from the other systems. The Marine Corps has integrated its resale program with a full range of morale, welfare, and recreation (MWR) activities. This consolidated MWR system is operated under the Director, Morale, Welfare, and Recreation Support Activity (MWRSPTACT), Manpower Department, Headquarters, U.S. Marine Corps.

The MWRSPTACT director issues general policy and guidance concerning MWR activities but its execution is totally decentralized. Responsibility for administration, management, and operation of field activities lies with the installation commander. At the installation level, the exchange manager reports to the MWR director, who in turn reports to the installation commander. Any problems of a technical or policy nature are surfaced to the headquarters MWRSPTACT.

Each Marine Corps exchange has its own buying staff and most procurement is made by the store level buyers. Having Marine Corps exchange buyers at the store level has allowed a greater flexibility and independence for each exchange to react and adjust to unique marketing opportunities.

APPENDIX B

PROGRAMMED SAVINGS THROUGH INTERNAL STREAMLINING AND COOPERATIVE EFFORTS

APPENDIX B

PROGRAMMED SAVINGS THROUGH INTERNAL STREAMLINING AND COOPERATIVE EFFORTS

The three Military Department exchange systems have programmed initiatives for cost reductions which were accepted by the DoD study group at face value. After the DoD study was published, the Navy and Marine Corps presented new programs that were expected to save almost as much as the savings from the consolidation recommended by the DoD study. This appendix summarizes those savings.

Table B-1 presents the savings claimed by the Navy and Marine Corps in summary form and in each category in it is detailed in Tables B-2, B-3, and B-4. Table B-5 summarizes the savings the DoD study had credited to existing Army and Air Force Exchange Service (AAFES) initiatives.

TABLE B-1

SUMMARY OF SAVINGS CLAIMED FOR NAVY AND MARINE CORPS INITIATIVES

(FY89 $ millions)

Savings area	Fiscal year							Cumulative total
	92	93	94	95	96	97	98	
Navy exchange internal streamlining	7.0	12.0	17.0	22.0	22.0	29.0	29.0	138.0
Marine Corps exchange internal streamlining	5.1	10.3	10.8	11.1	11.1	11.1	11.1	70.6
Navy and Marine Corps exchanges' cooperative efforts	7.0	7.0	8.4	8.4	8.4	8.4	8.4	56.0
Total alternative savings	19.1	29.3	36.2	41.5	41.5	48.5	48.5	264.6

TABLE B-4

NAVY AND MARINE CORPS EXCHANGES' COOPERATIVE EFFORTS

Potential savings area	Anticipated annual savings ($000)
Facility design and construction Reduced expenses and added profit from faster implementation	900
IS hardware/software Avoids FAR and Brooks Act	200
Data communication networks Avoid duplicating networks in areas where both have operations	200
Off-shore procurement Avoids duplicative staffs and offices	500
Captive self-insurance cooperative Avoids premiums for excess liability coverage (property/casualty/liability) and frees up assets currently restricted for general corporate purposes	4,000
Overseas pay telephone program Piggyback on AAFES' Call America contract	2,000
Employee training Avoids duplicative training programs and staffs	600
Total	8,400

Note: FAR = Federal Acquisition Regulation.

APPENDIX C

LIST OF INDUSTRY FORUM ATTENDEES

APPENDIX C

LIST OF INDUSTRY FORUM ATTENDEES

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An April 1990 DoD study recommended a full consolidation of the three military exchange systems. Although the Army and Air Force generally concurred with the recommendation, the Navy and Marine Corps challenged the Study's analysis and results. Our independent review of the study and subsequent rebuttals recommend increasing cooperation and coordination among the current exchange systems and integrating some of their functions without a full and immediate consolidation. Expected annual savings from consolidation are $36.6 million with a net present value over 10 years of $104.9 million. Although those savings represent an 8 percent potential increase in annual profits, nonquantifiable issues raise the risks to a level too high to justify full and immediate consolidation. However, some of the first steps on the road to consolidation make good economic sense, whether or not the exchanges actually consolidate. They include increased management cooperation and coordination, a common chart of accounts, and a standard system of merchandise numbering. DoD should not make a decision on consolidation until at least 3 years have passed and the above actions have given decision makers a much better comparison of exchange operations and also time to reach consensus on buying and managing strategies.

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THE JONES COMMISSION

DOD STUDY OF THE MILITARY COMMISSARY SYSTEM

Volume I ✦ Study Report
December 18, 1989











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(FORCE MANAGEMENT AND PERSONNEL)
WASHINGTON, D.C.

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DOD Study of Military Commissaries - 1989

Volume I Study Report

Volume II Appendices

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PREFACE

The Department of Defense Study of Military Commissaries was initiated Mar 31, 1989 by the Deputy Assistant Secretary of Defense (Resource Management & Support), Mr. David J. Berteau. The study responds to a Congressional request that military commissaries be thoroughly and comprehensively analyzed. The study was to conduct an unrestrained baseline reassessment to be used to reduce the systems' dependence on appropriations and in the development of policies that will move the commissary system forward in an orderly and consistent manner into the next century. This study is submitted to fulfill this requirement.

The study organization included a steering group chaired by Lieutenant General Donald W. Jones, Deputy Assistant Secretary of Defense (Military Manpower & Personnel Policy) with Deputy Assistant Secretary and flag/general officer representation from the Office of the Secretary of Defense and the Military Departments. The steering group received assistance from a Technical Advisory Group composed of the four commissary system commanders. The steering group provided executive direction to a study staff composed of representatives from the Services's headquarters staffs, the commissary systems, and technical support agencies such as the Defense Personnel Support Center, Army and Air Force Exchange Service and Military Traffic Management Command. This structure brought together the most knowledgeable individuals in these organizations under a single oversight body and provided an effective way to approach and resolve the complex issues under review. The study group sought and received input from industry trade groups, commissary field activities, commissary support activities and various grocery industry corporations. The review took place between April and September 1989.

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Chapter 1

EXECUTIVE SUMMARY

BASIS FOR SUBMISSION

This report on the Department of Defense Commissary System is submitted in response to the request of the Honorable Marvin Leath (D-TX), Chairman of the Morale, Welfare and Recreation Panel, Subcommittee on Readiness, Committee on Armed Services, United States House of Representatives. The request to the Department of Defense was transmitted in a 2 March 1989 letter from Congressman Leath to Lieutenant General Donald W. Jones, Deputy Assistant Secretary of Defense (Military Manpower & Personnel Policy). This letter, attached as appendix A, led to the creation of the Jones Commission, the composite "team" representing the full spectrum of the Department's commissary functions. The Jones Commission staff prepared this macro, conceptual report with input from a steering group of senior military and civilian leaders and a technical review group of commissary systems commanders. *All cost projections are based on estimates developed by the commission staff.*

This report is organized into the following chapters:

- Chapter 1 summarizes the report and provides the basis for submission.

- Chapter 2 provides a history of the commissary, an analysis of each of the Service's commissary systems, and the military wholesale support role.
- Chapter 3 discusses the civilian grocery industry and the outlook for the future.
- Chapter 4 examines the commissary patron.
- Chapter 5 discusses the business, financial and organizational strategies of the commissary system.
- Chapter 6 focuses on the operation of a commissary store.
- Chapter 7 defines a short range product distribution strategy.
- Chapter 8 outlines a method of achieving standardization of engineering policies and procedures.
- Chapter 9 analyzes the various segments of manpower and personnel management.
- Chapter 10 discusses present and future information management requirements.
- Chapter 11 proposes an organization to transition military commissaries into the next century.
- Finally, there are several appendices showing, among other things, cost data elements for information management and contract distribution, ship sailings to support overseas commissaries, and other supporting documentation.

STUDY OBJECTIVE

The study mission was to provide an unrestrained baseline reassessment of the Department of Defense Commissary System in consultation with industry. The objective was to increase efficiency, reduce dependence on appropriations, and recommend policies that would move the system forward in an orderly and consistent manner into the 1990s and beyond. Options for ensuring a viable commissary program while protecting the commissary benefit were to be pursued. All actions were to be accomplished in light of the projected demand for services, the patron base, and the resourcing methodology needed to provide a satisfactory program.

MISSION

Commissaries, as an institutional economic benefit of military service providing noncash compensation to military personnel, sell groceries and authorized household supplies at the lowest practical price. Commissaries will be operated in facilities and under standards similar to those of commercial food stores, foster and maintain a sense of military

community relationship among military personnel and their families, and contribute to a sense of confidence among military personnel that their families are cared for by the military institution when military service requires their absence from their families, in peace and war. Additionally, commissaries will provide a peacetime training environment for food supply logisticians needed in wartime. The intent is to provide this support when a member is in a full compensation status. (DoD 1330.17-R)

FINDINGS

The report shows that the commissary system has been very successful in meeting the needs of the patron. This is evidenced by a tremendous growth in sales over the last ten years with a commensurate improvement in facilities and equipment. The outlook for the future is not as bright.

The demographics point to a continuing shift in the military from single Service members to married Service members with working spouses. The military will also experience a shrinking labor pool simultaneously with increasing requirements for a more technical work force. Retention will be the key to the success of the military.

Quality of life and morale are key retention issues. The Commissary benefit has traditionally been the most important non-pay benefit next to medical care, and it is a significant contributor to retention. If this benefit is to be fully exploited, commissary levels of support must continue to meet the demands of the military community as defined in the mission statement. An increase in service, however, requires additional revenue. The source of this revenue has traditionally been through the appropriation process, but future budgets in the government are very likely to be smaller, not bigger. Based on this reality, additional funding from appropriations becomes an unrealistic expectation. The commission found, however, that industry has experienced many of the same revenue constraints currently facing the military commissary system. Successful companies in the grocery industry have maintained profit levels and market share by improving productivity rather than increasing selling prices. The commission focused on the commercial grocery industry's most successful organizations, policies and procedures for potential application to military commissaries.

The recommendations of the report reflect this philosophy. The military commissary system is not drastically different from the commercial grocery industry, although in many areas a sense of "uniqueness" prevails in the military. This is found throughout the commissary system in areas such as information management, distribution and organization. If the commissary system is to be successful in the future, it will have to adopt the successful practices of the grocery industry, and use prevailing commercial state of the art equipment and practices--"off-the-shelf". This study focuses on this philosophy and details how increased service levels can be offered to patrons without increasing appropriations.

MAJOR CONCLUSIONS

Generally, the commissary system has been successful in meeting its assigned mission; however, the operational philosophy and associated levels of service provided by the respective commissary stores are not uniformly consistent in each of the four service systems. The system also faces numerous challenges in the near and long term that will affect the ability of the system to successfully achieve mission accomplishment.

Military members, regardless of service, are entitled to the commissary benefit in lieu of compensation that would otherwise have to be paid. This compensation, as depicted in Chapter 5 of this report, is estimated to be $1.7 billion annually. The net annual savings from providing the commissary benefit in lieu of compensation to members is just under one billion dollars.

All military members are entitled to the same level of commissary service regardless of which service operates the specific commissary store. Current practices among the services preclude this uniform exercise of the benefit. Since the commissary benefit is in lieu of compensation that would otherwise be paid, military members not receiving equitable commissary service are being disadvantaged. This trend can be reversed by developing a cost effective, responsive organization but left unchanged, the success of the commissary in meeting customer expectations will require more and more resources to meet the growing demand for service, extended hours, and facility improvements. This will occur at a time when fiscal resources are becoming more constrained.

With this constrained fiscal posture as a backdrop, the commission conducted an extensive review of the operations of each of the four individual services' commissary systems. The review found many of the functions currently being performed to be labor intensive, redundant, and often no longer performed in the commercial grocery industry. Some functions, however, were driven by the organizational configuration of the current commissary systems and thus determined to be difficult to eliminate without restructuring. Central distribution is one example of a process widely used in the private sector but difficult to implement in military commissaries due to the current organizational structure.

Many other recommendations were identified but the greatest potential for improvement revolves around two major issues: consolidation of the commissary systems and central distribution and its associated efficiency savings. For instance, a consolidated commissary system with central distribution can yield a net $93.3 million in annual savings to the taxpayer while providing needed improved patron service levels. When treated singularly, central distribution and its associated efficiency savings have the potential to save a net $44.0 million. The following are brief summaries of the alternatives.

CONSOLIDATED COMMISSARY SYSTEM

Consolidating the four separate service commissary organizations into one joint service organization eliminates the need for

redundant, coexisting management layers and automatically creates uniformity through singular policy direction. This centralized direction and policy formulation produces a greater potential for uniform standards of performance. In the commissary arena, this translates into a more uniform entitlement through equitable levels of service to commissary patrons.

Consolidating the separate systems also provides an organization that mirrors a commercial grocery chain and creates a platform for using off-the-shelf proven, industry equipment and procedures to automate many of the manual processes currently used within the various systems. Streamlining current procedures can achieve savings of $83.5 million from bill paying, accounting and warehousing. Table 1-1 outlines these potential savings. The commission developed a model organization patterned after private industry but encompassing the same number of management layers currently found in each of the service unique commissary systems; e.g., districts, regions, and central headquarters. The structure is based upon a philosophy of central control and oversight with decentralized management execution. This model organization is more cost effective as it operates with 1449 fewer spaces than currently utilized by the separate systems. Figure 1-1 outlines how these spaces are allocated to achieve an additional saving of $49.3 million. The combined savings of $132.8 million, offset with $39.5 million to improve service levels, provides a net $93.3 million saving to the taxpayer.

The new system, however, will have some startup costs. In Chapter 11, $30 million is projected as the cost of purchasing a new computer system to operate central distribution and the management function. This system can be procured with trust revolving funds if required. If real estate currently occupied by the separate systems is used, no new brick and mortar will be required to house various central and intermediate level management headquarters. A transition plan to implement a consolidated commissary system is discussed in Chapter 5. The proposed organization is at Figure 1-2.

Personnel costs to cover permanent change of station (PCS) and severance pay are the only identified major expenditure needed to transition to a consolidated organization. Locating headquarters at existing sites not only will save facility expenditures but this approach will also save personnel costs. These costs were determined by developing a model of possible headquarters locations and then arraying costs associated with moving personnel to fill the projected authorizations at these sites. Using this scenario, personnel transition costs, including transition team temporary duty costs, were estimated to be $6.6 million.

Consolidation is a cost effective and efficient proposal but it is not without drawbacks. One major concern is that when commissary sales are indexed to industry margins, consolidation of the separate commissary systems will create the sixth largest grocery chain in the United States and thus provide an inviting target for the anti-government lobby. The problem is not insurmountable but needs to be recognized as an issue.

Utilization by function
(in FTE)

Spaces Location	Army	Air Force	Navy	Marines	Total
Control	1095	592	62	0	1749
Region voucher exam	100	0*	49	7	156
Warehouse/Receiving	1218	1172	239	31	2660
					Total--4565

Analysis

Total spaces used 4565

Manning retained 1142
(25% of total spaces)

Cost avoidance in spaces 3423
(75% of total spaces)

Cost avoidance in $ $78,729,000
(@ $23,000 = 1 FTE)

* Air Force indirect cost
for bill paying $6,301,152

Air Force avoidance $4,725,864
(reduced by 75%)

TOTAL COST AVOIDANCE $83,454,864

Table 1-1. Organizational cost avoidance potential of central distribution procedures

CURRENT HQ MANNING	SPACES	SPACES
-HEADQUARTERS	759	
-INTERMEDIATE LEVEL	2228	
SUBTOTAL		2987
-LESS: CDC OFFSET (SEE-TBL 1-1)		**318
TOTAL		2669
PROPOSED HQ MANNING		
-HEADQUARTERS	300	
-REGIONS	700	
-DISTRICTS	220	
TOTAL		1220
SPACES AVOIDED		1449
COST AVOIDED	($34000 * 1 FTE)	$49.3 MILLION

**75% of NAVY/MARINE CDC (268); VOUCHER EXAM (156)

Figure 1-1. Cost avoidance through system consolidation

On the other hand, consolidation can create a much more efficient organization by reducing headquarters and region overhead by approximately 50%. The proposed system can save appropriated funds while improving patron support to a level higher than any service can provide individually. It can also standardize the organization, procedures and distribution methods and thus allow commercial industry practices to be integrated directly into commissary operations. Finally, consolidation will provide a platform to evolve the commissary system into the next century.

CENTRAL DISTRIBUTION WITHOUT CONSOLIDATION

As an alternative to total commissary consolidation, unification of specific functions such as central distribution and bill paying is another option. There are numerous redundant functions, within specific geographic areas, common to each of the services that could be eliminated to make resources available to meet other priorities if a joint effort was pursued. The greatest potential for centralizing existing commissary functions are in the areas of procurement, supply,

accounting, bill paying and distribution of resale products.

Central Distribution, although not currently used in either the Army or the Air Force systems, is the most cost effective concept available in the industry and is the primary distribution method used by all major grocery chains. Central distribution can reduce redundant warehousing functions currently performed at military commissaries worldwide and provide a platform for central bill paying and product buying. The current decentralized bill paying and ordering functions require over 1900 manpower authorizations systems-wide. Savings of $83.5 million from bill paying, accounting and warehousing can be achieved and are outlined in Table 1-1. Follow-on automation and electronic data interchange can provide a state-of-the-art, labor efficient operation to minimize the appropriated fund support to commissaries, a critical issue during the current budget crisis. If this alternative was selected as a course of action, an implementation team at DOD level would be organized to develop and execute a transition plan.

Appointing an executive agent for central distribution in a specific region or with CONUS wide responsibility and requiring each service to provide a long term commitment to use the distribution system has the potential to produce significant efficiencies. In theory, a consolidated DOD system is not a requirement when establishing central distribution and an executive agent could be made responsible for the mission. In practice, without consolidation, it will be extremely difficult to overcome the barriers in supporting four different commissary systems with one central distribution network. Each service currently has a different accounting system and a different "above-store level" automated system. Bill paying is also different, with the Air Force paying at installation, the Army and Marine Corps paying at region and the Navy paying at its NAVRESSO Headquarters.

If one service was made executive agent for central distribution CONUS wide or in a particular region, another, probably different, accounting system would have to be set up to manage the transfer of product accountability from the central distribution center (CDC) to the store, since two different accountable officers would be involved. The store would have to maintain a large number of receivers to insure merchandise accountability was properly transferred and it would be difficult to automate this procedure.

A fully integrated, consolidated system eliminates this problem. Since the region commander/director is accountable for inventory in both the CDC and the store, an elaborate store receiving procedure is not required. This procedure has been pioneered in the private sector and provides a medium for automating the receiving function and thus, eliminating the majority of receiving positions. Under this system, the region commander/director has geographic responsibility for all distribution, comptroller and retail functions in his region and is the single point of contact for all commissary related issues. A consolidated system, unlike the current system or the proposed executive agency CDC system, provides the region commander/director with the authority and responsibility to insure success.

Central Distribution and its associated labor efficiencies proposes savings of $83.5 million to

be offset with $39.5 million to improve service levels and provides a net $44 million saving to the taxpayer. The estimated net $44 million in savings attributed to central distribution and its associated efficiency savings will be difficult to realize without complete consolidation. Given the increased degree of difficulty in operating central distribution and bill paying without consolidation and the probability that the entire spectrum of savings may not materialize, central distribution without consolidation is not the optimum course of action.

SUMMARY OF ALTERNATIVES

The commission has identified two major alternatives to move the existing commissary system toward greater uniformity and efficiency. One proposes the total consolidation of the four service-unique commissary commands into a single integrated joint command responsible to a board of directors comprised of DOD and service executives. Implementation of this alternative would produce annual net savings of $93.3 million with the potential for follow-on innovations and efficiencies. The other would create joint centralized distribution centers operated by a designated service as an executive agent for a designated region(s). Potential annual savings of $44 million have been identified by implementing this alternative, but the report also identifies that this alternative will not produce the greatest potential savings, or necessarily produce greater uniformity nor improvement in service levels without major organizational changes.

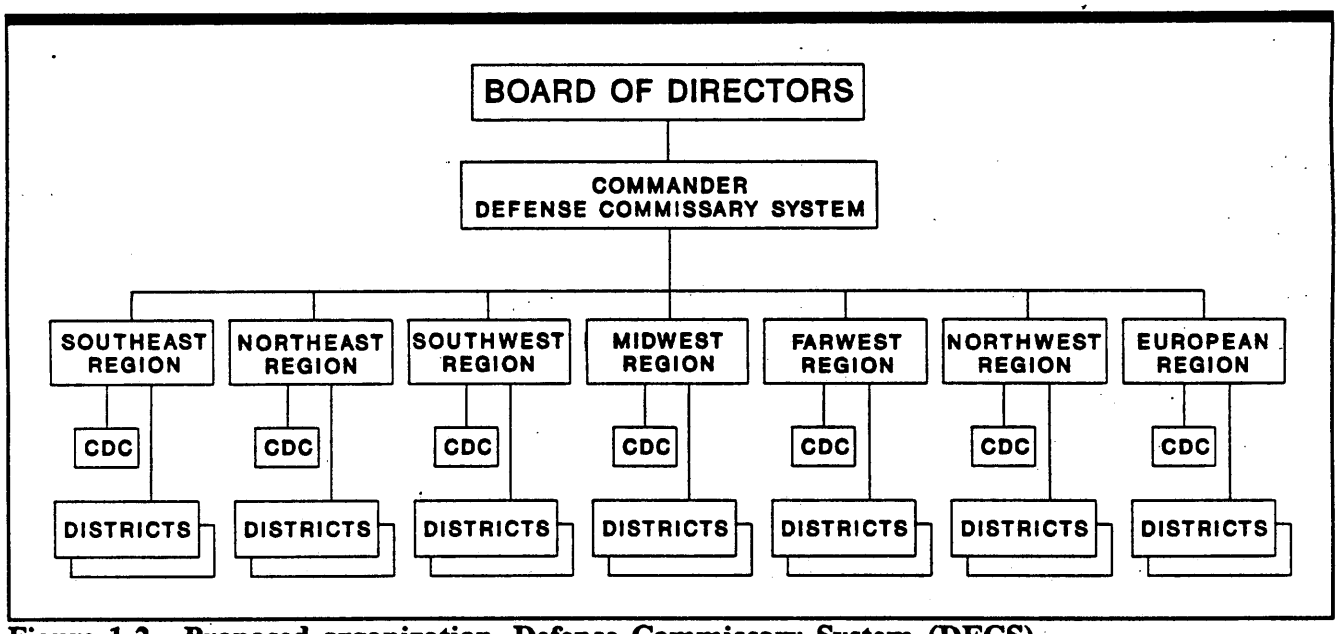


Figure 1-2. Proposed organization--Defense Commissary System (DECS)

BOARD OF DIRECTORS

Executive oversight is needed to insure success of both the proposed consolidated commissary system and/or the executive agency operated central distribution system. A Department of Defense (DOD) board of directors is recommended to perform this task while establishing commissary system policy within the authority and guidance provided by the Secretary of Defense. The board will review financial status of the commissary system and provide direct guidance on plans and programs. The objective is to enhance patron service and insure that a financially solvent, responsive system is maintained for the benefit of the authorized patron.

The board will need to be established immediately, meet at least quarterly and guide the service's commissary systems in the transition. As appropriate, the commissary systems commanders or the Commander, Defense Commissary System will implement the broad policy guidance emanating from the Board of Directors. Table 1-2 outlines the recommended composition.

Chairman	Deputy Assistant Secretary of Defense (Military Manpower & Personnel Policy)
Members	Deputy Assistant Secretary of Defense (Installations), OASD (P&L)
	Deputy Assistant Secretary of Defense (Management Systems), OASD (C)
	Deputy Chief of Staff, Logistics; Army
	Deputy Chief of Naval Operations, (Logistics); Navy
	Deputy Chief of Staff, Logistics and Engineering; Air Force
	Deputy Chief of Staff, Installations and Logistics; Marine Corps
	Commander, Defense Commissary System (DECS)
	General Officer, Unified Command representative (rotated annually)
	Sergeant Major of the Army
	Sergeant Major of the Marine Corps
	Master Chief Petty Officer of the Navy
	Chief Master Sergeant of the Air Force

Table 1-2. Board of Directors

COMMISSARIES : A LOCAL COMMANDER'S PROGRAM

The role of the local installation commander in commissary operations need not change under consolidation. Paralleling current policy in AFCOMS, TSA and the Marine Corps, the proposed Defense Commissary System (DECS) will continue the important role of providing direct support to the base commander who, as the senior representative of the community which the commissary serves, is responsible for the quality of life of his constituents. The installation commander will articulate the needs of the community, communicate them to the commissary system and evaluate the effectiveness of the commissary in meeting those needs.

Under DECS, as under the current system, the installation commander will

evaluate the commissary system and its support by:

- Providing input (oral/written) on the performance evaluation of commissary officers.
- Meeting regularly with members of the community on commissary matters and provide their concerns to DECS commanders or directors as appropriate.
- Providing periodic reports on effectiveness of commissary resale operations through his major command to Headquarters, DECS.
- Meeting with DECS management during staff assistance visits and provide input on current operations.

Under the proposed consolidated system, the installation commander will have avenues to influence the performance of his commissary. The patron should notice little difference outside improved level of support driven by a more efficient distribution system and longer hours of operation. The local commissary will still be "the commissary" in the eyes of the patrons.

SUMMARY

The business strategy proposed by the commission focuses the commissary's future on meeting the needs of authorized patrons by preserving the entitlement, optimizing organizational efficiencies, providing an equitable high quality system and managing economic and market forces. Forward thinking and innovation are stressed throughout the report.

Resources are the integral element in all facets of the commissary system. Recommendations include various revenue generation and cost reduction proposals to be used to offset the cost of increased service levels. All are based on the critical assumption that savings generated through productivity improvements and revenue generation will be made available to offset increased service level costs versus reductions in current levels of appropriations.

Revenue generation proposals include retaining the bad check processing fee and a cost reduction proposal includes the use of voluntary labor. The greatest potential for cost avoidance is through improving the current bill paying process by restructuring the commissary distribution system. The proposal is to use contractors to perform the warehouse and transportation functions and commissary regions to perform the inventory and financial management functions.

The commissary facility is very important in the process of meeting service requirements. A modern, efficient commissary store provides a pleasant shopping experience for the patron but it also optimizes the efficiencies of the work force. Much effort has gone into the analysis of the engineering function. One of the issues proposes to centralize the construction portion of the trust fund at the DOD level where a board of directors would

determine construction priority based on need. A second issue proposes a consolidated engineering activity to standardize equipment and commissary designs. This activity could also reduce the current facility construction backlog while optimizing the use of commissary construction dollars. The third issue in this area proposes a greater use of contract authority to accelerate the construction program.

A great organization needs more than brick and mortar to be effective. The study has expended considerable effort on improving the productivity of the work force. A complete chapter is devoted to incentives, recruitment and training to optimize the work force. Other chapters devote considerable time to the identification of "good ideas" from one Service or industry to be exported to the other Services. The report strives to reduce redundant controls, particularly when it involves paper driven systems, and replace the manual processes with computer driven applications.

Information management plays an important role in this evolution. Many of the recommendations in this area are based on procedures observed in the grocery industry. While store level systems are excellent and similar across the spectrum of all Services, the above store systems are generally different. Proposals are directed towards purchasing more "off-the-shelf" software and hardware and restructuring the commissary system like a commercial grocery chain to accommodate these procedures.

The most dynamic recommendations are directly related to this restructuring. One alternative proposes consolidating military commissaries into a Department of Defense Commissary System with a substructure interfacing with contract central distribution centers. A second alternative proposes establishing central distribution centers for use by all separate commissary systems and implementing all recommendations short of complete consolidation.

All of the recommendations retain the integrity of the current commissary store and outside of improved service, the patron should notice little change. The 25 percent savings objective is retained, as is the cost plus 5 percent pricing policy. Savings generated will offset the costs of increasing service levels, particularly during evening hours. The commission has deliberately kept recommendations for improving service within resource constraints.

Chapter 2

THE CURRENT COMMISSARY SYSTEM

OVERVIEW

This chapter explains the commissary system as it presently exists. In the first section, a brief history of the commissary system provides a backdrop into how the system has evolved. The history of commissaries is followed by a stratification of the current system costs with emphasis on growth during the last 10 years. An analysis of the components of the entire system then follows. The analysis includes the role of Troop Support Agency (TSA), Air Force Commissary Service (AFCOMS), Navy Resale and Services Support Office (NAVRESSO), and Marine Corps Headquarters in providing commissary support to its patrons. As part of the analysis, current procedures are outlined and compared to the procedures used in other Services. Finally, the mission of commissary support provided by the defense wholesale system is examined with emphasis on the role of the Defense Logistics Agency and its subordinate activities; Defense Personnel Support Center (DPSC), Defense Depot Mechanicsburg, and Defense Depot Tracy.

HISTORY

The modern military commissary system did not begin overnight; it was the result of a long, slow evolution that had its beginnings during the revolutionary war.

Ever since the inception of the Continental Army in 1775, it was apparent that the United States Government could not provide fully for the soldier's dietary needs. Basic military diets consisted of scant, low-quality rations; and the soldiers went hungry much of the time. This situation seriously impacted upon the Continental Army's morale and readiness, thus causing General George Washington to seek a remedy to supplying the soldiers with a steady ration in the field.

This bleak situation forced by necessity a system of supplying the Army by contracts with local civilian suppliers. These suppliers charged exorbitant prices, frequently five times the value of the items sold. This method left the burden of delivery and distribution of supplies with the suppliers which proved quite satisfactory, though expensive. However, during the post-war years, the contract system was characterized by greed, embezzlement, and fraud. Supplies were not delivered in a timely manner and spoilage of foodstuffs resulted.

The suppliers known as sutlers, quick to assess the monetary worth of the government's inability to supply the Army, greatly inflated their prices and charged a "risk" premium when selling rations to troops, on credit. The risk premium was applied to recoup losses from death, desertion, or unwillingness to pay and greatly contributed to increased cost.

Soon, every regiment, garrison, and camp had at least one sutler, and the local merchants did a landslide business with the troops. However, while soldiers could now depend on a steady supply of food, many problems emerged. Generally, sutlers took advantage of the soldier's dependence on them for food; and, in addition to charging high prices, they cheated on the weights and even set up their own monetary systems by using chits or notes that could be redeemed only at particular sites.

Finally, military commanders and government officials began to recognize the inadequacies of supplying the Army with provisions and discussed several options for rectifying the situation. Proposals included licensing and regulating the sutlers, creating military agents, and establishing post traders. Other considerations were joint military-civilian operations, contract systems patterned after methods used by European armies and autonomous military operations.

In 1818, after considerable debate on the subject, the Secretary of War, John C. Calhoun, established the Military Subsistence Department, and the military became responsible for the procurement and issuance of provisions. In 1826, the Congress authorized the Army to sell food and other items at cost to officers stationed at isolated areas, thus establishing the first Army commissary store system. The War Department order establishing commissaries read as follows: "Purchase reasonable quantities of the articles usually required for the subsistence of an officer, and cause the

same to be forwarded to posts and stations remote from markets, where officers are mainly dependent upon the Subsistence Department for supplies, or where they cannot purchase groceries at reasonable prices."

Sutlers came back into prominence during the Civil War. Despite hundreds of pricing abuses, they provided the valuable service of selling soldiers goods that would otherwise have been totally unavailable to them. The approved ration was still Spartan and unhealthy, but knowledgeable officers procured canned milk, beans, fruit, and vegetables for their men. This time, lessons learned about subsistence during the war remained clear: a year after the war ended, Congress formally abolished sutlers and allowed enlisted men at remote posts to purchase goods from the commissary department. In 1867, the Army built its first commissary 'stores,' which were similar to the general stores of the period. Though the stores had limited hours and carried only 200-300 items, high patronage enabled the idea to spread.

A variety of new ideas came to the forefront starting in 1876, when the Army contracted with "post traders" to sell goods not provided through the official ration to soldiers at remote posts on a 'cost-price' basis, with the "trader" paid according to the number of patrons he served. Three years later, Congress experimented with a ten percent surcharge on all commissary items except tobacco in order to help defray spoilage and transportation costs. Improved rail transport enabled the idea to be abandoned in 1884. In 1889, post canteens, soldiers' social clubs that had developed on an informal basis, became officially recognized organizations, a development that prompted Congress to abolish the post trader system in 1893 and officially establish the first post exchanges in 1895.

The order authorizing the post exchanges read as follows: "Exchanges will be operated at military posts to supply the troops, at reasonable prices, the articles of ordinary use, wear and consumption not supplied by the Government--and to afford them a rational means of entertainment."

The early post exchanges were a combination of club, grocery store, and department store; and were operated by Service members or Army officers. The abuses which plagued the early frontier soldier and hampered the Army from fulfilling its mission were finally overcome through the establishment of the military retail system and control of the functions by the military. The commissary system supplied the soldier with quality food at below market prices; the PX provided those items necessary for morale and entertainment.

The commissary system, a direct result of mobilization during World Wars I and II, greatly expanded during the first half of the twentieth century with the Marine Corps opening its first commissary in 1909, the Navy in 1910, and the Air Force in 1947. In 1943 women were allowed shopping privileges to the commissary when their husbands were away at war, and perishable subsistence was added in 1945. This expansion, in consonance with the construction of new military installations, eventually resulted in commissaries being built throughout the United States; and their importance to the military Services for retention, recruitment, and economic benefit became key issues. The importance and

commitment of the military Services towards supporting commissaries can best be illustrated by the words of the Secretary of Defense, Caspar W. Weinberger, in his March 1984 rebuttal to the Grace Commission report on privatizing or eliminating commissaries; "Military personnel are entitled to enjoy modern on-base community facilities offering the same services available on the streets of their hometown. To us, commissaries are more than just grocery stores."

Studies of the commissary systems have occurred frequently since 1815, and the best means of supplying rations has been an object of debate since 1775. The most recent noteworthy studies occurred in 1967 (the "Hubbell Study"), 1969 (the "Momyer Investigation"), 1970 and 1972 (reports by a special HASC subcommittee), 1975 (the "Bowers Study"), 1979-80 (a report by the General Accounting Office), and the 1983 (the Grace Commission). The major recommendation of the Bowers Commission was to centralize command and control. The structure of commissaries under a central organization in the Army, Air Force, and Marines is a direct result of this study. The improvements in level of service, facilities construction and maintenance, commitment to training, career progression, and professional management have been extremely noticeable compared to the benign neglect of the previous century and a half.

Today military commissaries are located throughout the world and total 424 stores. Nearly everywhere American Service members and their families are stationed, military commissaries are close by. They have become an essential entitlement for enlisted personnel, officers, and their families, perceived by Service members as their most important benefit second only to military medical benefits.

THE CURRENT COMMISSARY SYSTEM

SCOPE

The existing commissary systems of the Military Services are basically similar but there are important differences. Military commissaries are operated pursuant to the laws cited in the annual Department of Defense Appropriations Acts, and Department of Defense Directive 1330.17-R, dated April 1987. The Department of Defense prescribes broad commissary policy. Operating procedures are established by each of the Military Services.

Table 2-1 shows the scope of the military commissary system for Fiscal Year 1988. Table 2-2 shows the costs of military commissary operations financed by direct appropriated funds and costs financed by surcharge. Table 2-3 isolates the personnel costs incurred by direct or indirect support.

Table 2-4 shows the indirect costs incurred by local installations to support commissary operations to include the personnel costs reported in the previous figure. The relationship of resource categories to the proportion of sales for the different Services is arrayed in Table 2-5, and reflects some of the differences between the Services. The significantly higher usage of indirect support for the Air Force represents the higher dependency on installation support for functions provided in-house by the other Services, for example, contracting and bill paying. The Army high usage of overseas transportation is attributed to the large number of Army overseas commissaries. For information, the transportation cost was extracted from the total to show the usage of the resources over which the Services have some degree of control. The distribution by Service of total cost (direct and indirect appropriated funds) is depicted in Figure 2-1.

The real growth in sales from Fiscal Years 1978 to 1988 is charted in Figure 2-2. The real operational cost increase during the same period (direct and indirect costs less overseas transportation) is charted in figure 2-3. Figure 2-4 compares the real growth in sales with the real cost increase. As the caption on the figure indicates, operational costs (direct and indirect appropriated costs less transportation) grew at less than half the pace of the growth of sales.

Figure 2-5 depicts the categories of the DOD Appropriated Fund Support proposed in the President's Budget for FY 1988-FY 1991. A significant point is the 5 percent increase in the overseas transportation share during the budget period at the expense of the other categories. It should also be noted that the Services do not have any influence on overseas transportation costs, as Congress has limited the number of items that may be acquired off-shore. With the addition of the congressionally mandated CONUS procurement of meat and meat products program, transportation costs will increase by approximately $8 million.

In Table 2-6 selected data from industry are compared with the DOD Commissaries. While sales data for DOD commissaries has not been indexed to reflect industry margins, productivity standards still reflect favorably on the DOD commissary system.

The current DOD commissary systems, operated by the different Services, are further detailed in this chapter. Also explored is the wholesale system structure to support the DOD commissary retail activities: Defense Personnel Support Center under the authority of the Defense Logistic Agency, and its subordinate activities.

	ARMY	NAVY	MARINE CORPS	AIR FORCE	TOTALS
SALES & INVENTORY					
Sales in U.S.	$1,371.9	$800.8	$176.1	$2,030.1	$4378.9
Sales Overseas	549.7	109.0	3.8	406.1	1068.6
Total Sales[1]	1,921.6	909.8	179.9	2436.2	5447.5
Inventory[2] (Average)	169.1	72.7	8.8	231.4	482.0
On Order (Average)	82.3	46.9	5.1	90.6	224.9
Stock Turns/Yr[2]	10.8	11.9	19.5	10.0	10.8
STORES					
No. Stores in U.S.	76	63	14	100	253
No. Stores Overseas	102	19	1	49	171
Total Stores	178	82	15	149	424
STAFFING--					
Headquarters					
Military	34	0	0	75	109
Civilian	283	127	3	237	650
Total	317	127	3	312	759
Intermediate[3]					
Military	40	112	0	58	210
Civilian	954	602	95	367	2,018
Total	994	714	95	425	2,228
At Store Level					
Military	154	909	2	810	1,875
Civilian	8,265	2,855	691	7,132	18,943
Total	8,419	3,764	693	7,942	20,818
Combined Total					
Military	228	1,021	2	943	2,194
Civilian	9,502	3,584	789	7,736	21,611
Total	9,730	4,605	791	8,679	23,805

[1]Sales include surcharge. [2]At cost of goods. [3]Include CDC (Navy and Marine Corps).
Source: Individual Services

Table 2-1. Scope of military commissary stores--FY 1988 ($millions)

DIRECT APPROPRIATED FUND COST

	ARMY	NAVY	MARINE	AIR FORCE	TOTAL
Military Personnel	$7,176	$34,607	$72	$33,369	$75,224
Civilian Personnel	215,281	65,242	18,403	185,264	484,190
Purchased Services	9,025	24,421	1,105	38,529	73,080
Travel	2,596	382	28	3425	6431
Supplies	2917	77	158	578	3,730
Equipment	0	0	182	905	1087
Sub-Total	$236,995	$124,729	$19,948	$262,070	$643,742
Overseas Transportation	$41,694	$11,571	$90	$27,606	$80,961
TOTAL	**$278,689**	**$136,300**	**$20,038**	**$289,676**	**$724,703**

Source: Services DOD Report for FY88.

COSTS TO SURCHARGE

ADP	$11,191			$400	$11,591
Equipment	2,195	7,066	3,333	6,077	18,671
Supplies	14,102	8,097	1,679	27,295	51,173
Equipment Maintenance	10,710	5,030	743	9,980	26,463
Utilities	9,813	7,958	1,367	13,195	32,333
Linen Svc/Laundry	410	506	0	726	1,642
Facilities	53,318	18,365	0	62,000	133,683
2d Dest. Transportation	56	0	286	176	518
Losses	Unav	Unav	110	Unav	110
Other Services	Unav	991	Unav	Unav	991
TOTAL	**$101,795**	**$48,013**	**$7,518**	**$119,849**	**$277,175**

Source: Individual Services

GRAND TOTAL	$380,484	$184,313	$27,556	$409,525	$1,001,878

Table 2-2. Military commissary operations--direct costs for FY 1988 ($thousands)

PERSONNEL COSTS	ARMY	NAVY	MARINES	AIR FORCE	TOTAL
DIRECT					
Military Personnel	$7,176	$34,607	$72	$33,369	$75,224
Civilian Personnel	215,281	65,242	18,430	185,264	484,217
Purchased Services	5,650	18,997	0	35,865	60,512
Total Direct	$228,407	$118,846	$18,502	$254,498	$619,953
INDIRECT					
Veterinary Services	$4,711	$2,162	$200	$4,472	$11,545
Audit & Inspections	161	0	9	166	336
Data Automation	0	0	1	0	1
Financial Management	173	564	282	9,777	10,796
Contracting	510	29	36	1,150	1,725
Personnel Management	1,911	636	238	4,414	7,199
Salaries pd by others	-	-	-	711	711
Total Indirect	$7,466	$3,391	$766	$20,690	$32,313
GRAND TOTAL	$235,873	$122,237	$19,268	$275,188	$652,266

Source: Services' DOD Report for FY88.

Table 2-3. Personnel costs incurred by direct or indirect support ($thousands)

TOTAL US FORCES	CONUS	HAWAII	ALASKA	OVERSEAS	TOTAL
Veterinary Services	$6,047,246	$133,001	$245,901	$2,956,700	$9,382,848
Audit & Inspections	180,584	665	0	154,934	336,183
Data Automation	1,499	0	0	0	1,499
Financial Management	9,696,808	159,036	94,801	845,086	10,795,731
Contracting	1,362,003	19,357	29,166	315,222	1,725,748
Personnel Management	5,500,301	148,340	74,954	1,475,007	7,198,602
Exterior Main/Repair	6,189,110	379,311	34,902	2,414,890	9,018,213
Pest Control	190,483	22,367	5,099	138,549	356,498
Utilities	56,500	609,209	339,285	13,163,803	14,168,797
Communication	254,666	22,927	33,002	262,519	573,114
Custodial	52,565	954	1,908	25,093	80,520
Refuse	5,266,164	74,859	136,301	1,705,453	7,182,777
Second Dest. Transp.	5,300	6,946	0	7,026,120	7,038,366
Sub Total	**$34,803,229**	**1,576,972**	**$995,319**	**$30,483,376**	**$67,858,896**
Vet and Audit	1,581,986	79,099	0	500,962	2,162,047
Salaries pd by other	0	0	0	711,470	711,470
Total FY88 Expense	**$36,385,215**	**$1,656,071**	**$995,319**	**$31,695,808**	**$70,732,413**

Table 2-4. Indirect costs incurred by installations--DoD

ARMY	CONUS	HAWAII	ALASKA	OVERSEAS	TOTAL
Veterinary Services	$2,732,784	$56,929	$93,858	$1,827,404	$4,710,975
Audit & Inspections	69,234	0	0	91,300	160,534
Data Automation	0	0	0	0	0
Financial Management	86,448	0	0	86,448	172,896
Contracting	204,062	5,200	8,686	292,025	509,973
Personnel Management	1,439,717	3,100	2,800	465,339	1,910,956
Exterior Main/Repair	4,646,281	25,072	24,100	1,785,119	6,480,572
Pest Control	56,483	3,800	4,200	64,725	129,208
Utilities	56,500	340,000	47,104	3,904,958	4,348,562
Communication	125,042	13,376	13,900	66,515	218,833
Custodial	0	0	0	0	0
Refuse	559,437	3,800	4,200	892,432	1,459,869
Second Dest. Transp.	0	0	0	2,516,378	2,516,378
Sub Total	**$9,975,988**	**$451,277**	**$198,848**	**$11,992,643**	**$22,618,756**
Vet and Audit Salaries pd by other					
Total FY88 Expenses	**$9,975,988**	**$451,277**	**$198,848**	**$11,992,643**	**$22,618,756**

Table 2-4a. Indirect costs incurred by installations--Army

NAVY	CONUS	HAWAII	ALASKA	OVERSEAS	TOTAL
Veterinary Services	$0	$0	$0	$0	$0
Audit & Inspections	0	0	0	0	0
Data Automation	0	0	0	0	0
Financial Management	435,535	48,448	174	79,598	563,755
Contracting	26,649	0	0	2,569	29,218
Personnel Management	430,856	97,578	244	107,326	636,004
Exterior Maint/Repair	797,798	103,639	250	504,704	1,406,391
Pest Control	82,918	14,000	100	48,285	145,303
Utilities	0	3,118	20,000	2,398,503	2,421,621
Communication	79,397	0	0	73,910	153,307
Custodial	0	0	0	0	0
Refuse	667,421	52,531	154	115,419	835,525
Second Dest. Transp.	0	0	0	0	0
Sub Total	**$2,520,574**	**$319,314**	**$20,922**	**$3,330,314**	**$6,191,124**
Vet. and Audit	1,581,986	79,099		500,962	2,162,047
Salaries pd by other	0	0	0	0	0
Total FY88 Expenses	**$4,102,560**	**$398,413**	**$20,922**	**$3,831,276**	**$8,353,171**

Table 2-4b. Indirect costs incurred by installations--Navy

MARINE CORPS	CONUS	HAWAII	ALASKA	OVERSEAS	TOTAL
Veterinary Services	$184,157	$50	$0	$15,802	$200,009
Audit & Inspections	5,032	665	0	3,541	9,238
Data Automation	1,499	0	0	0	1,499
Financial Management	267,806	243	0	13,713	281,762
Contracting	32,180	3,917	0	148	36,245
Personnel Management	216,988	11,707	0	9,165	237,860
Exterior Maint/Repair	149,184	244,200	0	0	393,384
Pest Control	2,345	2,200	0	790	5,335
Utilities	0	130,000	0	191,902	321,902
Communication	151	0	0	94	245
Custodial	0	0	0	0	0
Refuse	18,120	4,560	0	2,166	24,846
Second Dest. Transp.	5,300	6,946	0	42	12,288
Sub Total	**$882,762**	**$404,488**	**$0**	**$237,363**	**$1,524,613**
Vet. and Audit Salaries pd by other					
Total FY88 Expenses	**$882,762**	**$404,488**	**$0**	**$237,363**	**$1,524,613**

Table 2-4c. Indirect costs incurred by installations--Marine Corps

AIR FORCE	CONUS	HAWAII	ALASKA	OVERSEAS	TOTAL
Veterinary Services	$3,130,305	$76,022	$152,043	$1,113,494	$4,471,864
Audit & Inspection	106,318	0	0	60,093	166,411
Data Automation	0	0	0	0	0
Financial Management	8,907,019	110,345	94,627	665,327	9,777,318
Contracting	1,099,112	10,240	20,480	20,480	1,150,312
Personnel Management	3,412,740	35,955	71,910	893,177	4,413,782
Exterior Maint/Repair	595,847	6,400	10,552	125,067	737,866
Pest Control	48,737	2,367	799	24,749	76,652
Utilities	0	136,091	272,181	6,668,440	7,076,712
Communication	50,076	9,551	19,102	122,000	200,729
Custodial	52,565	954	1,908	25,093	80,520
Refuse	4,021,186	13,968	131,947	695,436	4,862,537
Second Dest. Transp.	0	0	0	4,509,700	4,509,700
Sub Total	**$21,423,905**	**$401,893**	**$775,549**	**$14,923,056**	**$37,524,403**
Vet. and Audit Salaries pd by other				$711,470	$711,470
Total FY88 Expense	**$21,423,905**	**$401,893**	**$775,549**	**$15,634,526**	**$38,235,873**

Table 2-4d. Indirect costs incurred by installations--Air Force

	ARMY	NAVY	MARINES	AIR FORCE	TOTAL
Proportion of sale	35.3%	16.7%	3.3%	44.7%	100.0%
Category of resource:					
Direct APF proportion of operations	36.8%	19.4%	3.1%	40.7%	100.0%
Prop of transp	51.5%	14.3%	0.1%	34.1%	100.0%
Prop of direct	38.5%	18.8%	2.8%	40.0%	100.0%
Prop of indirect	32.0%	11.8%	2.2%	54.1%	100.0%
Prop of total APF	37.9%	18.2%	2.7%	41.2%	100.0%
Prop opns+indirect	36.3%	18.6%	3.0%	42.0%	100.0%

Source: Services DoD Report for FY88.

Table 2-5. Relationship between sales and resource use--FY 1988

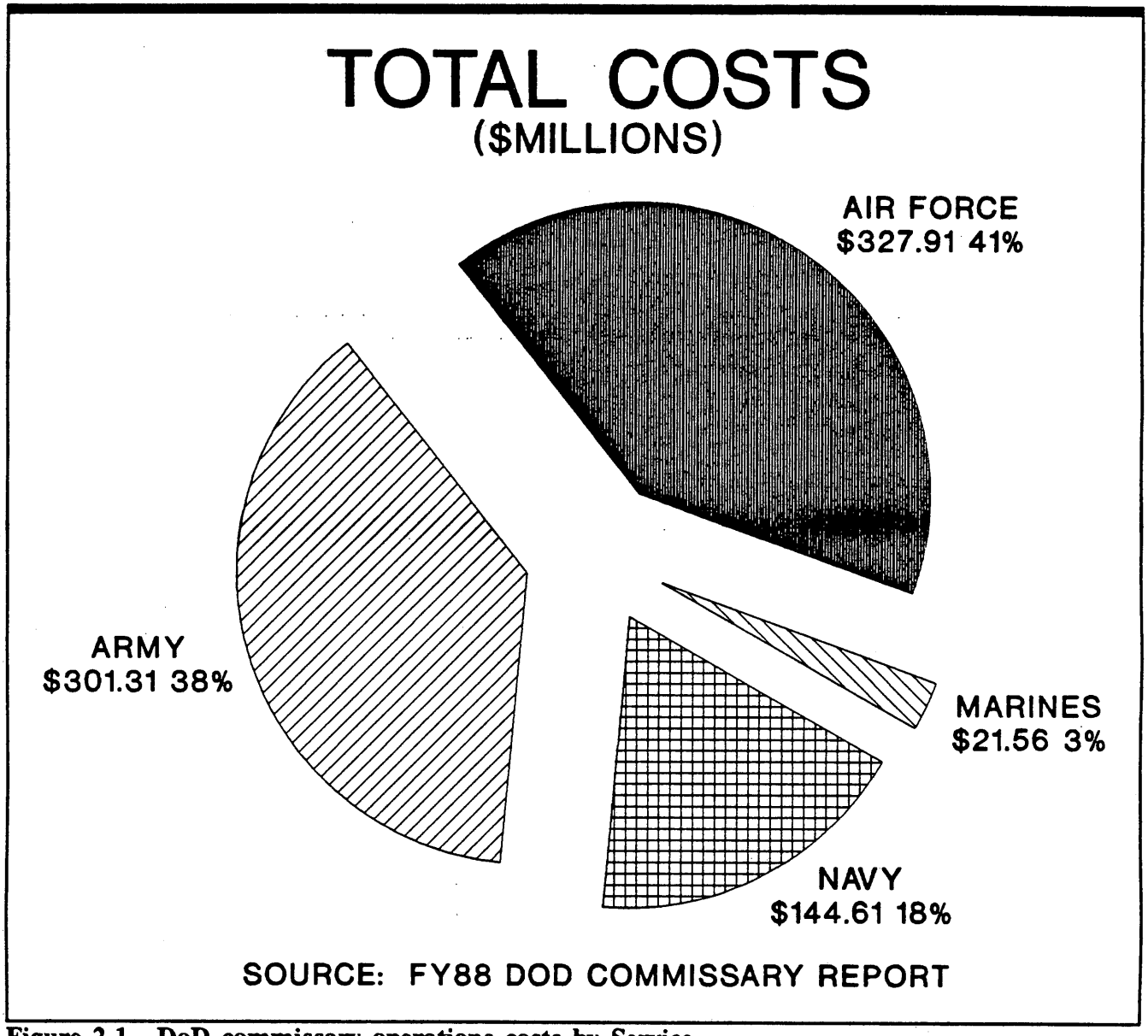


Figure 2-1. DoD commissary operations costs by Service

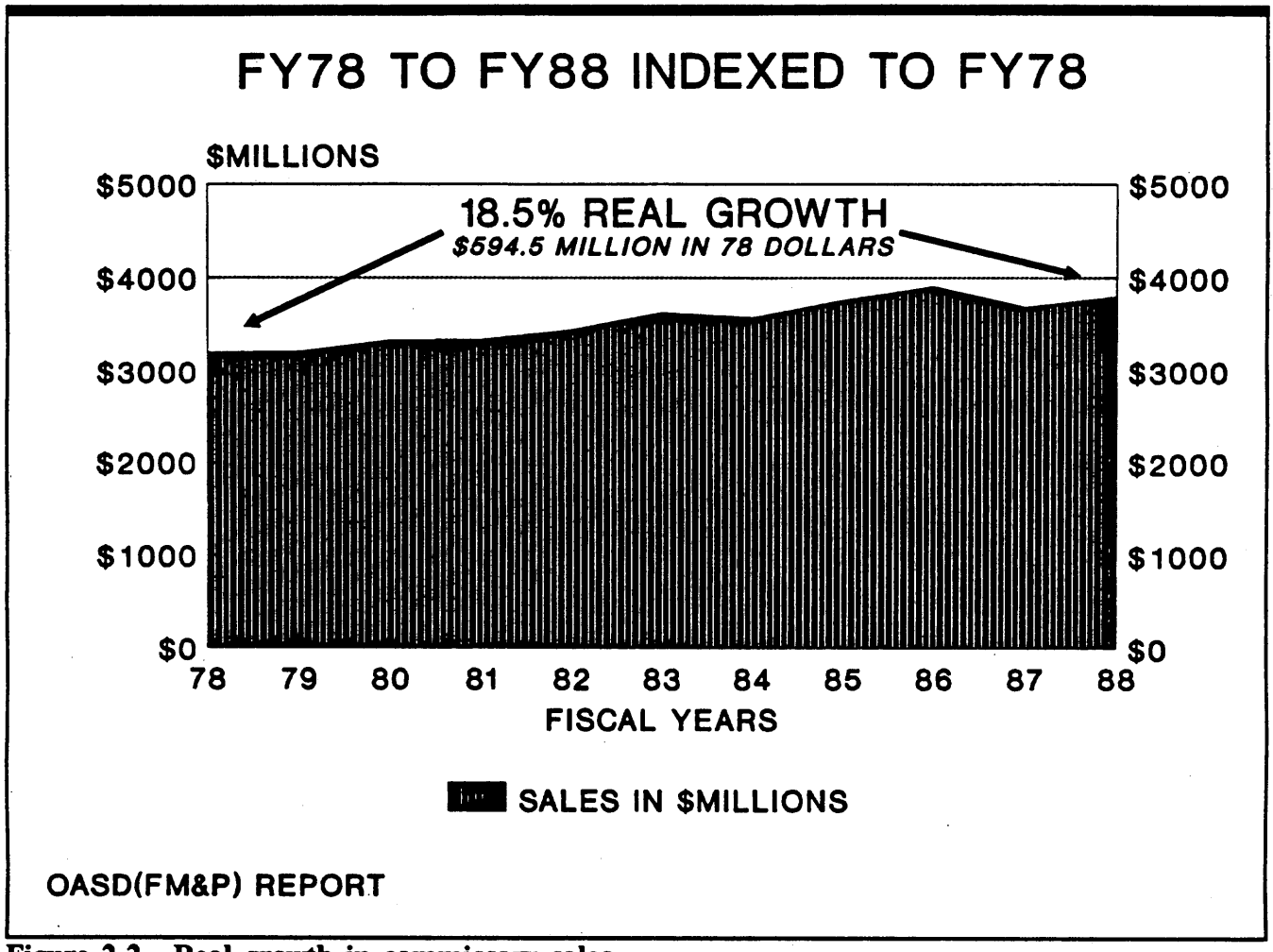


Figure 2-2. Real growth in commissary sales

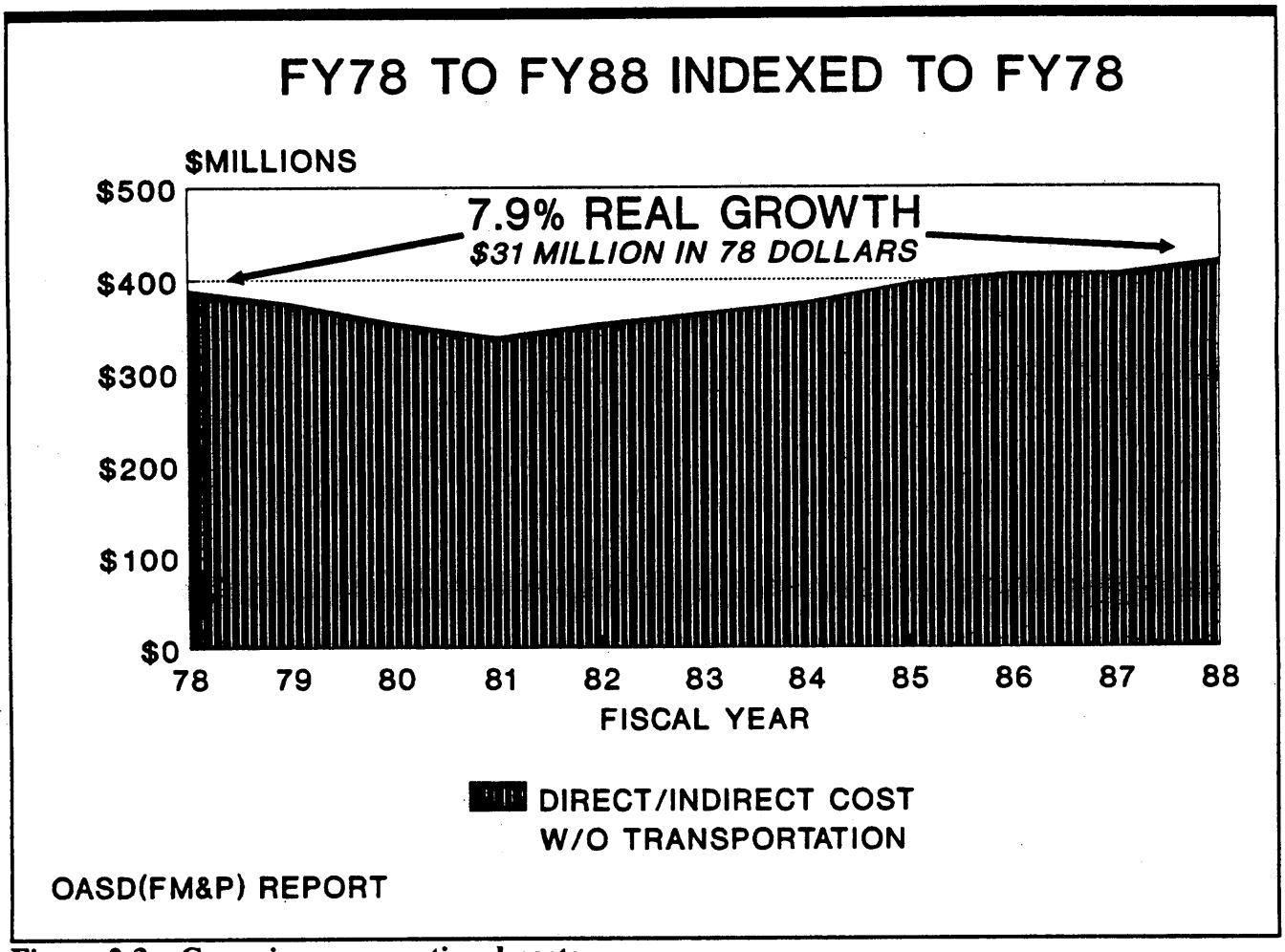


Figure 2-3. Commissary operational costs

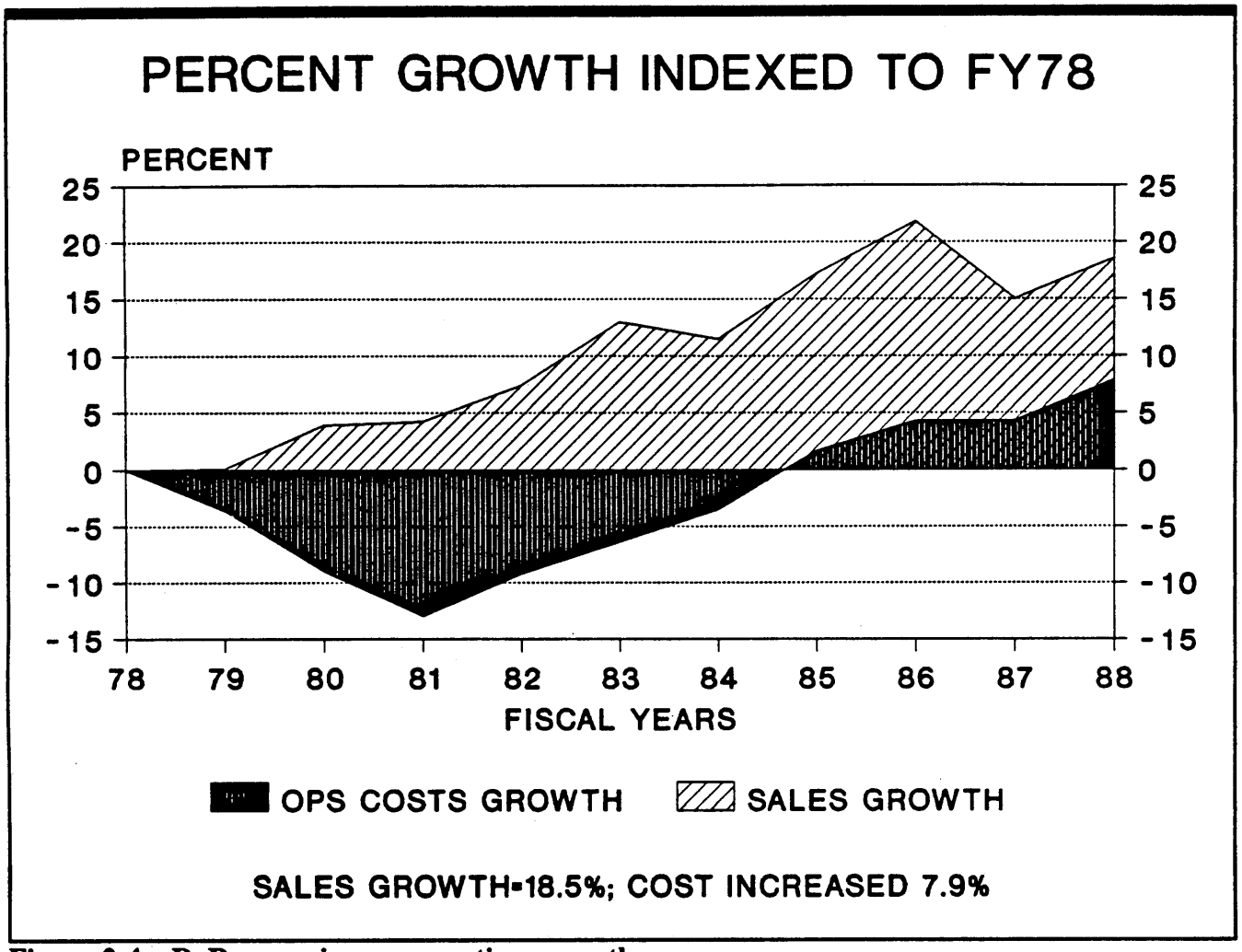


Figure 2-4. DoD commissary operations growth

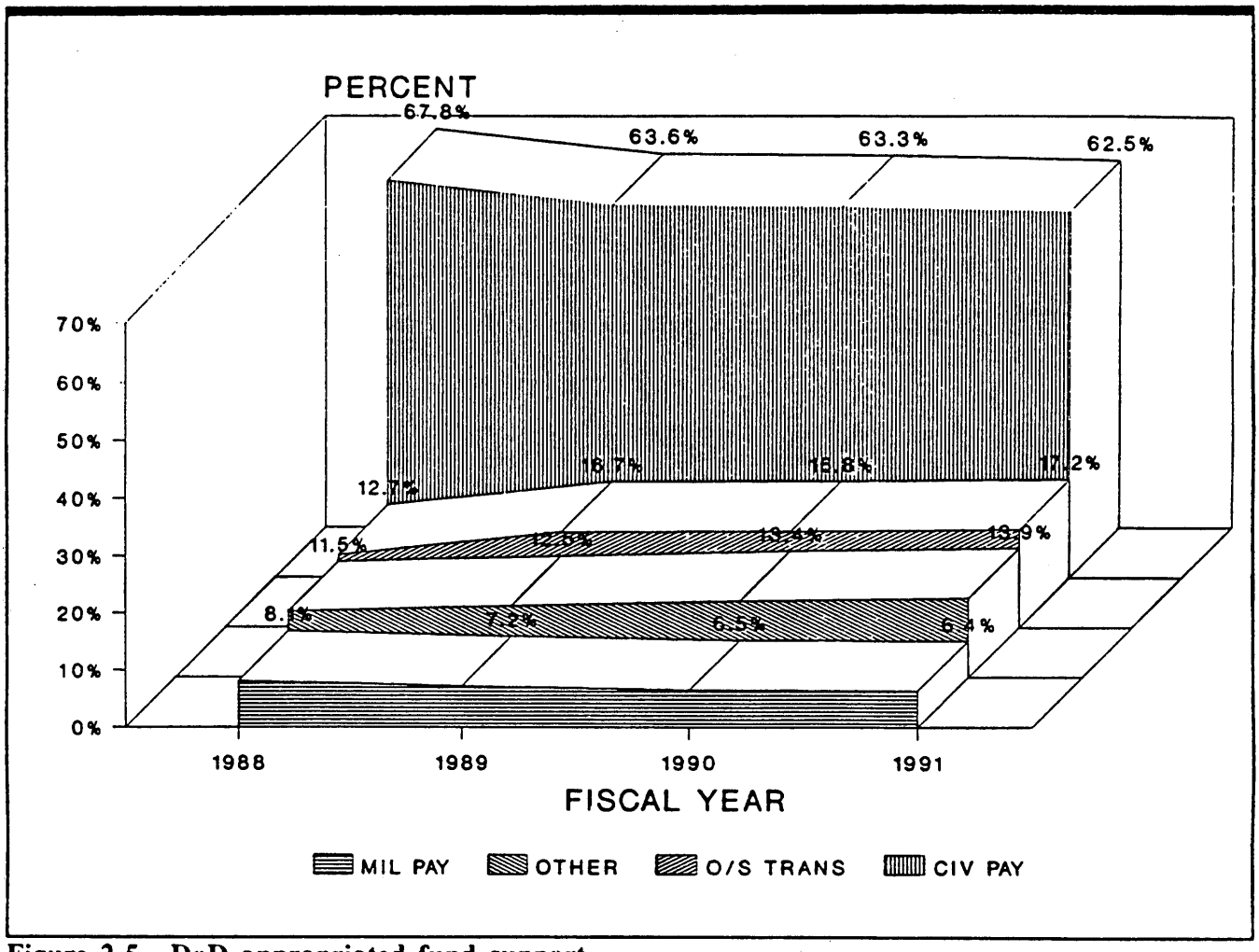


Figure 2-5. DoD appropriated fund support

	GIANT	FOOD LION	A&P	DoD COMSY
Sales	$5,200	$9,000	$15,250	$5,448
Gross Margin	32.0%	20.0%	27.6%	5.0%
Number of stores	170	1,120	1,360	424
Net Profit	$175	$275	$260	None
Tax rate	38.5%	38.0%	41.0%	None
Profit margin	3.37%	3.06%	1.70%	None
Inventory turns	15.8	10.0	13.5	16.0
Labor to sales	12.0%	Unk	11.0%	11.4%[1]

[1]Including vendor stocking/indirect costs.

Table 2-6. Grocery industry balance sheet comparison ($millions)

PRESENT ARMY COMMISSARY SYSTEM

US Army commissaries worldwide operate under the central management and operational guidance of the US Army Troop Support Agency (TSA) located at Fort Lee, VA. The scope of the present Army program in terms financial, personnel, and related data is at Table 2-7 at the end of this section. TSA operates under broad general guidance provided by the Deputy Chief of Staff for Logistics, Department of Army, and manages 178 commissaries through five regional offices (four in the Continental United States (CONUS) and one in Europe). Note that in addition to the Commissary Management, TSA HQ also has responsibility for food service, and clothing and other services. TSA plans, develops, and establishes policies and objectives and provides guidance, financial management, force development, internal controls, and construction and equipment replacement programs for the entire Army commissary system. Management of the commissary management career program is also centralized at TSA as is the commissary support procurement function. Organization chart is at Figure 2-6.

The four CONUS regions are responsible for managing 21 to 28 stores each. The regions implement TSA plans, policies, programs, and procedures and exercise overall command and control of commissary operations within their assigned stores. Each CONUS region commander/director is accountable for all commissary assets within his/her region to include commissary resale merchandise. Each region has a Contracting Division that is responsible for providing contracting support to assigned commissaries to include negotiating contracts to buy subsistence items, supplies, and services needed to run the commissaries. Organization chart is at Figure 2-7.

The European Commissary Region (EURCOR) is comprised of 84 stores and is divided into six districts to further reduce the span of control. Each district manager acts under the direct supervision of the region commander and manages commissary operations in 12 to 16 commissaries. Each district manager is accountable for all commissary assets within his/her district. Organization charts are at Figures 2-8 and 2-9.

Commissary officers are responsible for the day-to-day operations of their respective stores to include ordering receiving, inspecting, pricing, and selling resale merchandise. Organization chart is at Figure 2-10.

Subsistence inventories are procured with Troop Support Agency Division, Army Stock Funds (TSADASF). Reimbursement to the Army Stock Fund for commissary subsistence is made from cash/charge sales and for troop issue subsistence by direct charge to the Military Personnel, Army, appropriation. The requirements are developed by the regions based on projected sales to customers for the budget year, taking in consideration the beginning and ending inventories. The TSADASF budget is submitted annually to Department of the Army to support a request for Army Stock Fund (ASF) Obligation Authority (O/A). Obligation Authority is granted subject to targets contained in the

approved funding program. The O/A approved for the procurement of commissary resale inventory cannot be reprogrammed for other purposes. Following OSD approval of the operating program, the O/A is distributed to the region.

Appropriated funds are used to finance the salaries and wages of military and civilian personnel, TDY and PCS, contracted services e.g., shelf stocking, commercial inventory base operations support at industrially funded installations, above store level administrative supplies and equipment, and transportation of goods to overseas locations. However, installations also provide nonreimbursable base operation support such as security, civilian personnel, finance and accounting, overseas utilities, transportation, and maintenance of buildings and grounds from funds allocated to them. Income derived from coupon handling fees is used to offset all appropriated costs associated with handling of coupons which is a labor intensive process.

Appropriated funds are allocated through normal budget channels based on DA and higher authority approval of the TSA budget submission. DA, Comptroller of the Army (COA), furnishes Funding Authorization Documents (FAD) through the U.S. Army Finance and Accounting Center (USAFAC) which acts as the financial operating agency for TSA. TSA, in turn, programs funds to each regional office. These funds are accounted for by servicing Finance and Accounting Officers (F&AO) where TSA regional offices are located. These offices report monthly to HQDA on the status of these funds, i.e., obligations, expenditures, etc., through Integrated Cost Accounting and Reporting (ICAR) procedures (AR 37-108, AR 37-151). Statutory controls inherent in 31 U.S.C. 1517 provide that funds will not be expended (obligated) in amounts greater than funds allotted or allocated. TSA, through its internal fund control procedure, command management emphasis, and finance and accounting reports, monitors the expenditures of funds to assure no over-obligation occurs.

Surcharge funds, which accrue from the collection of a 5 percent surcharge on commissary sales, are used to purchase and maintain commissary operating equipment, supplies, construct and improve commissary facilities, pay for the cost of commissary utilities in CONUS facilities, laundry, and offset costs resulting from shrinkage, spoilage, and pilferage of merchandise. Although the use of Appropriated Funds for commissary construction is not prohibited by law, surcharge funds have been used for all commissary construction in the United States since 1977 and overseas since 1978. Control of the Trust Revolving Fund Account is exercised by HQ, TSA, the commissary regions and individual commissary officer. Commissary officers order the majority of their subsistence requirements under contracts awarded by the Defense Personnel Support Center (DPSC). Local purchase is authorized for fresh fruits and vegetables when they are not available from DPSC sources. Payment to vendors for all subsistence received by CONUS commissaries is made by the respective region servicing finance and accounting office after the commissary officer verifies receipt of the subsistence and the region accounting branch matches and verifies the receipt document with the appropriate invoice, prepares the disbursement vouchers and authorizes payment.

Overseas commissary officers requisition subsistence from the Defense Personnel Support Center (DPSC) in Philadelphia, PA; Defense Subsistence Region Europe (DSRE) in Zweibrucken, Germany; or Defense Subsistence Region Pacific (DSRPAC) in Oakland, CA. Semi-perishables are ordered monthly. Individual commissary orders are consolidated at the region level and transmitted to DPSC. DPSC supports the brand name semi-perishable requirements of overseas commissaries through a system known as the Direct Commissary Support System (DICOMSS). Payment for semi-perishable subsistence is made by the Accounting Office (FAO), located in Zweibrucken, Germany, and the Western Commissary Region servicing FAO, located at Fort Lewis, WA, to DPSC by interfund transfer. Accounts are later reconciled with receiving reports results provided by individual commissaries.

Twice a month European commissary officers place orders to DSRE for perishable subsistence. DSRE is headquartered in Zweibrucken, Germany, with depots located at Kaiserslautern, Bremerhaven, and Germersheim. DSRE supplies perishables ordered from CONUS and also from off-shore acquisition sources. Payment for subsistence obtained from DSRE is made by the EURCOR servicing FAO at Zweibrucken directly to the individual suppliers after receiving report data are matched to invoices.

The product groups which may be stocked in Army commissaries are restricted to those specified in DOD Directive 1330.17-R, Armed Services Commissary Store Regulations. Products to be carried in individual Army commissaries are determined by a three-tier approach. TSA Headquarters publishes a core list of nationally available strategic items that are mandatory for stockage in all commissaries worldwide. The five commissary regions also provide their stores with mandatory stockage lists of items which have attained significant market shares within their respective geographic areas. A merchandising review committee at each Region determines which items to buy for resale and which items to retain or delete from the current authorized stockage list. Only products approved by the Region may be ordered and stocked by commissaries subordinate to that Region. Commissary Officers recommend to their respective Region the remainder of line items to be stocked in their commissaries based on local customer desires.

Appropriated funding and staffing for Army commissary operations are controlled and administered, through the five regional offices, by TSA Headquarters. Funding and staffing levels, initially authorized in the annual OSD President's Budget, are allocated by TSA Headquarters to the five Regions based upon the requirements of the Regions and funds availability. Commissary staffing levels are determined by TSA Headquarters by applying departmental-level staffing standards to workload factors for individual commissary departments.

Army commissary stores and warehouses are generally inadequate. Less than one half of all Army commissaries were originally built as commissaries. In addition, 114 of 178 commissaries are 25 years or older. For these reasons, many facilities are congested, inefficient, and unattractive to customers. The Army currently has two central distribution centers (CDCs) in Europe and one in Panama. Plans are to establish additional CDCs, first

overseas and then in CONUS. The Army and Air Force are coordinating a contract-study effort to determine the best site location and method of operating a CDC to support both Army and Air Force commissaries in Europe. The contract has follow-on options for CDC studies to support Army and Air Force commissaries in the Mediterranean and Pacific areas and Air Force commissaries in the United Kingdom.

Equipment utilized in Army commissaries and warehouses is generally state-of-the-art. New and more sophisticated automated systems and equipment are contributing to better and more efficient commissary services. For example, scanning has been installed in the majority of CONUS and OCONUS commissaries. The District Oriented Store System (DOSS) is an automated ordering, receiving, and inventory management system that has been installed in the six European districts. A new commercial accounts system (Standard Automated Voucher Examination System (SAVES)) is being implemented in all regions. CONUS stores meeting specified meat sales volumes are being equipped with meat room controller systems to provide more efficient and effective pricing of meat products. Property accountability is at the store level. Equipment is replaced when maintenance and repair costs equate to 65 percent of the acquisition cost. Generally, the supporting Directorate of Engineering and Housing is responsible for equipment maintenance. However, installation maintenance resources are often insufficient. In these instances maintenance contracts are let with the equipment manufacturers or their representatives. In all cases, new and replacement equipment and equipment maintenance costs are funded with surcharge funds.

Sales and inventory data ($millions)--

	FY 1988	% of Sales FY 88
Sales in U.S.	$1,307.8	71.4%
Sales Overseas	$524.0	28.6%
Total Sales	$1,831.8	100.0%
Sales Grocery	$1,491.1	81.4%
Sales Meat	$254.6	13.9%
Sales Produce	$86.1	4.7%
Inventory (Average)	$169.1	
On Order (Average)	$82.3	
Stock Turn	10.8 times per year	

Number of stores (FY 1988)--:

	Stores
U.S.	76
Overseas	102
Total	178

Authorized staffing (FY 1988)--

	Military	Civilian	Total
Above Store Level	74	1,237	1,311
At Store Level	154	8,265	8,419
Total	228	9,502	9,730

Productivity measures--

Average Sales per work year	$212,928
Average Sales per work hour	$102
Average Sales per transaction	$41
Average Sales per sq foot per month	$79

Table 2-7. Army commissary program--FY 1988

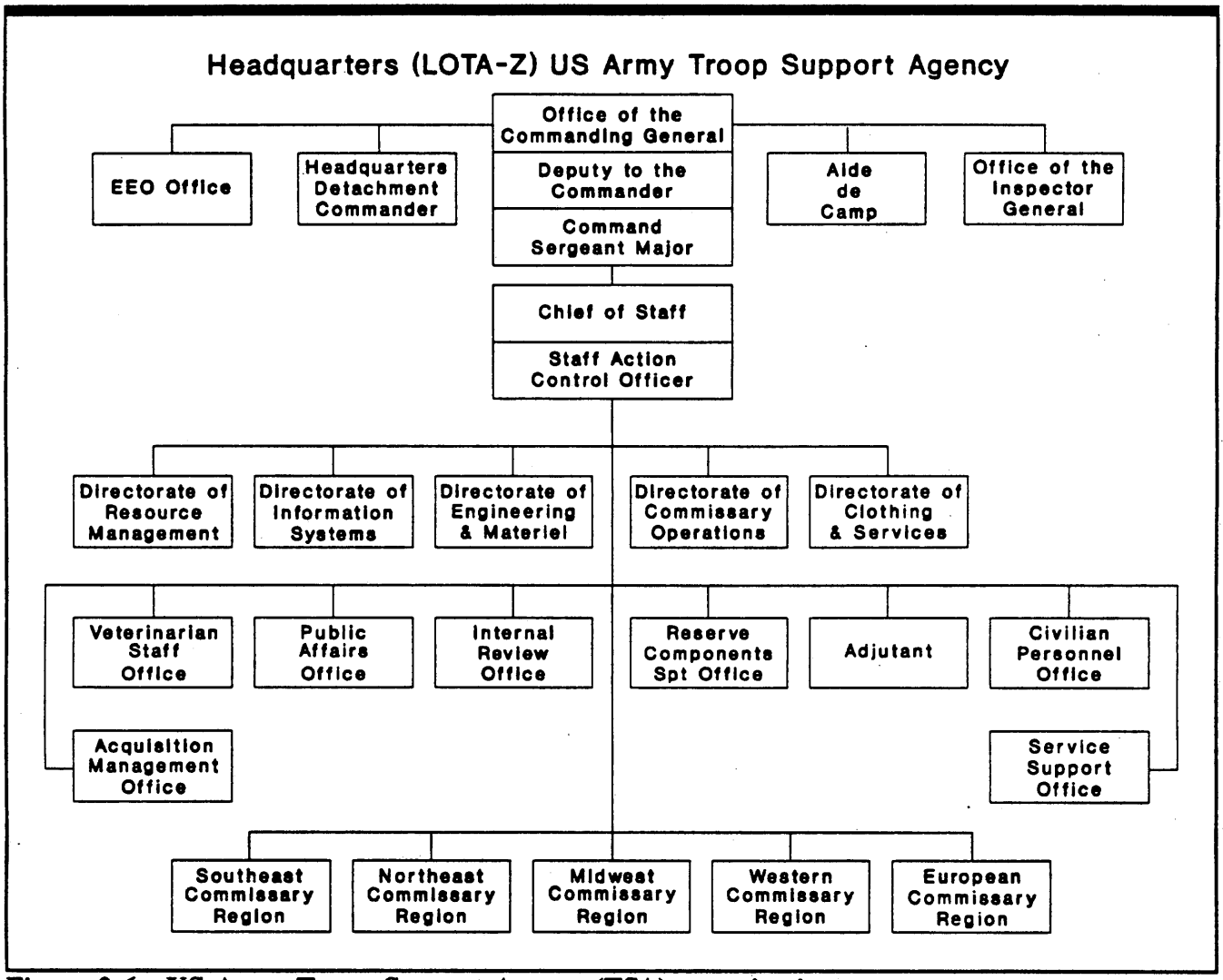


Figure 2-6. US Army Troop Support Agency (TSA) organization

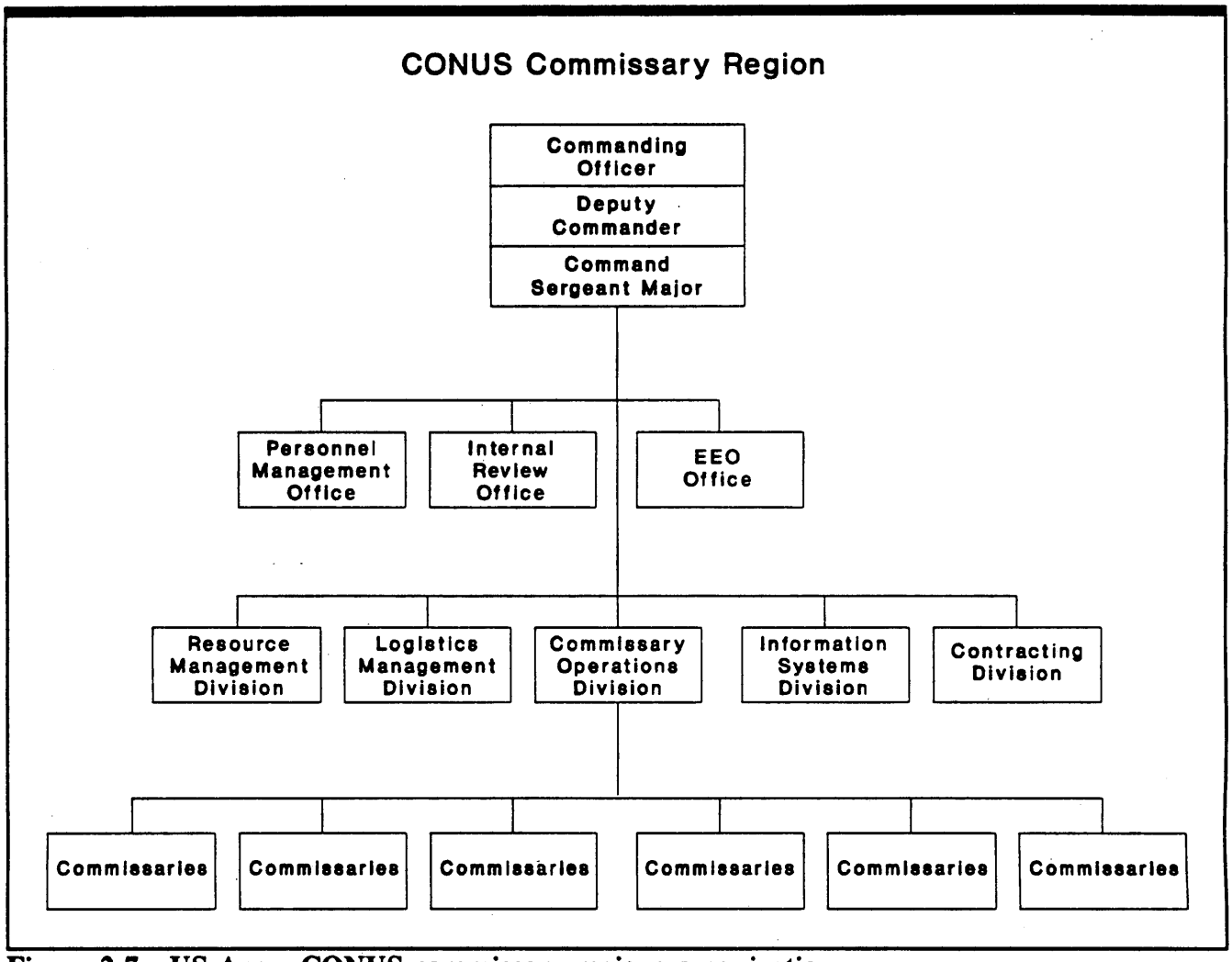


Figure 2-7. US Army CONUS commissary regions organization

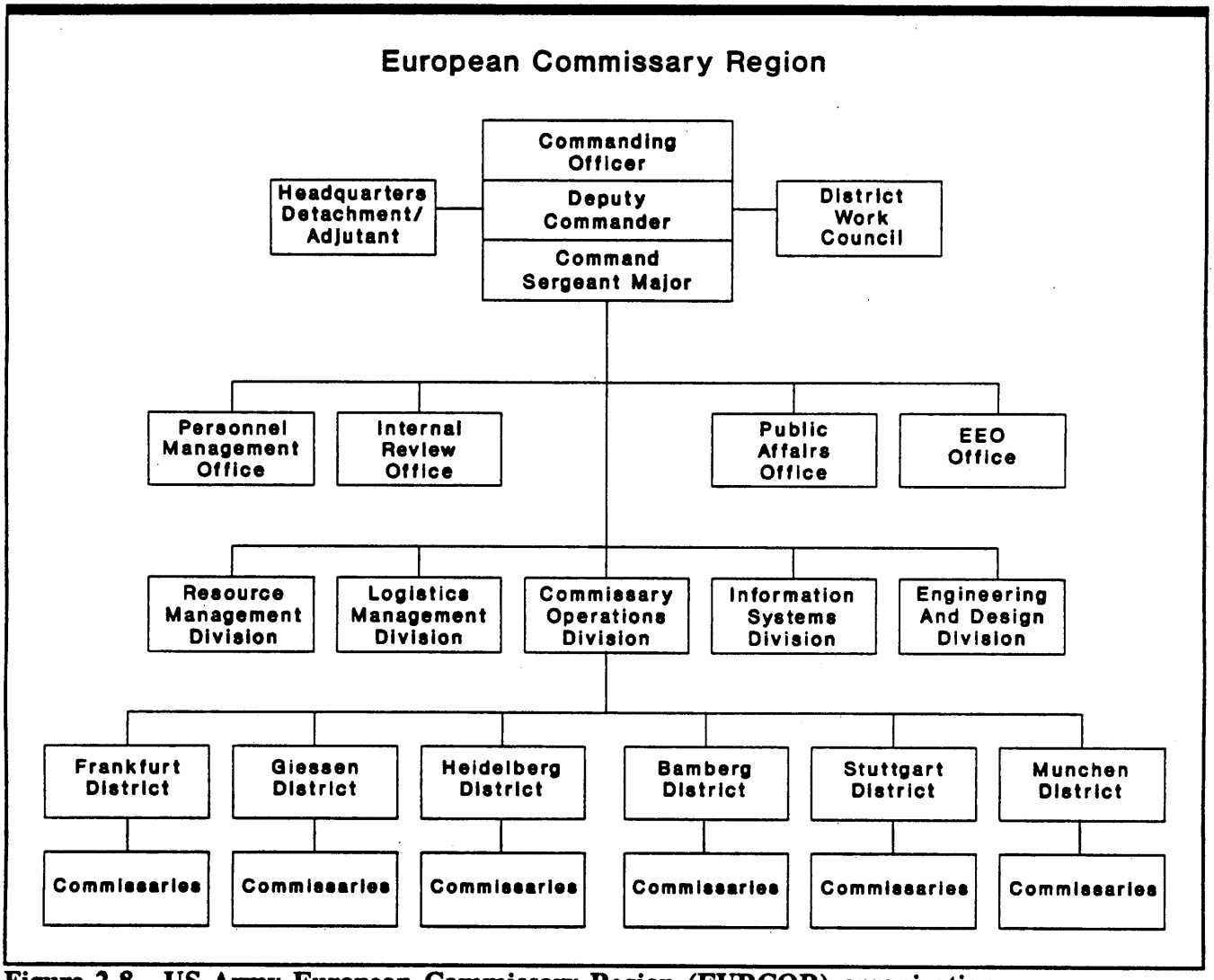


Figure 2-8. US Army European Commissary Region (EURCOR) organization

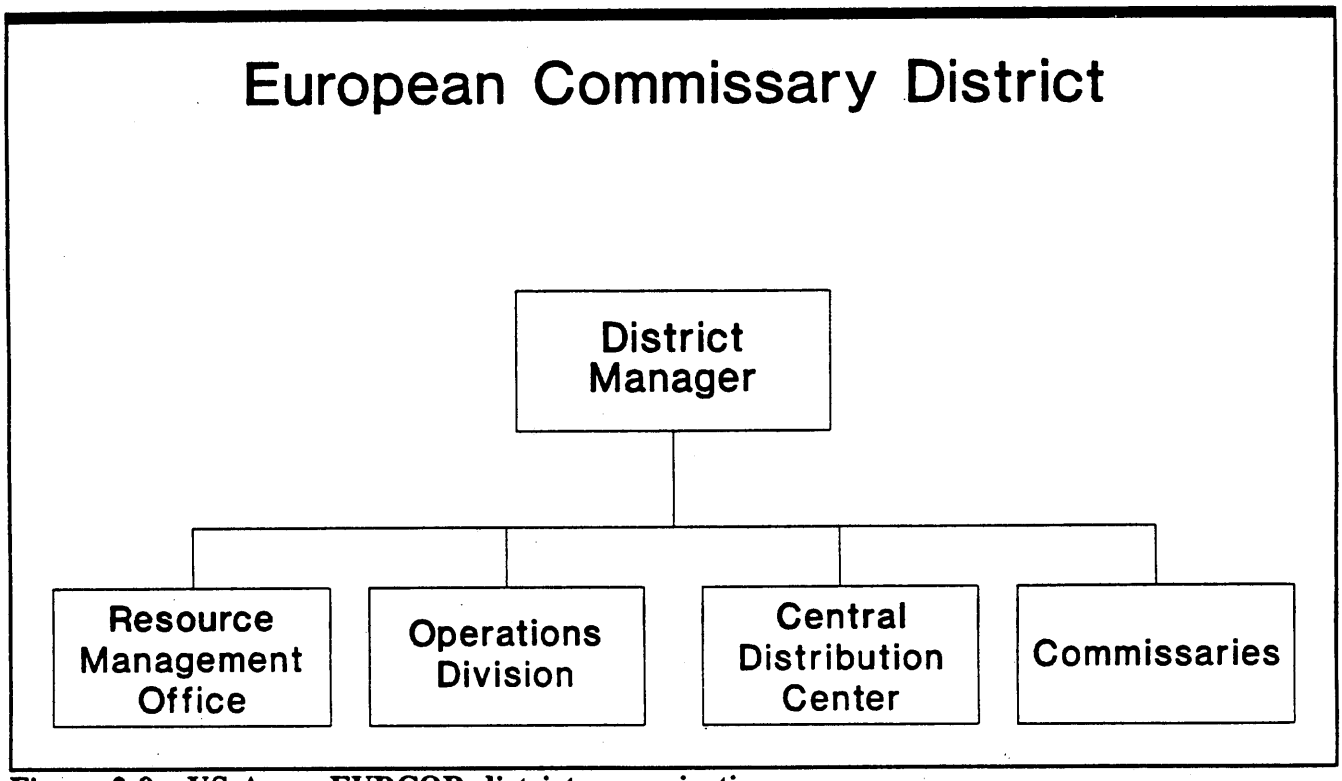


Figure 2-9. US Army EURCOR districts organization

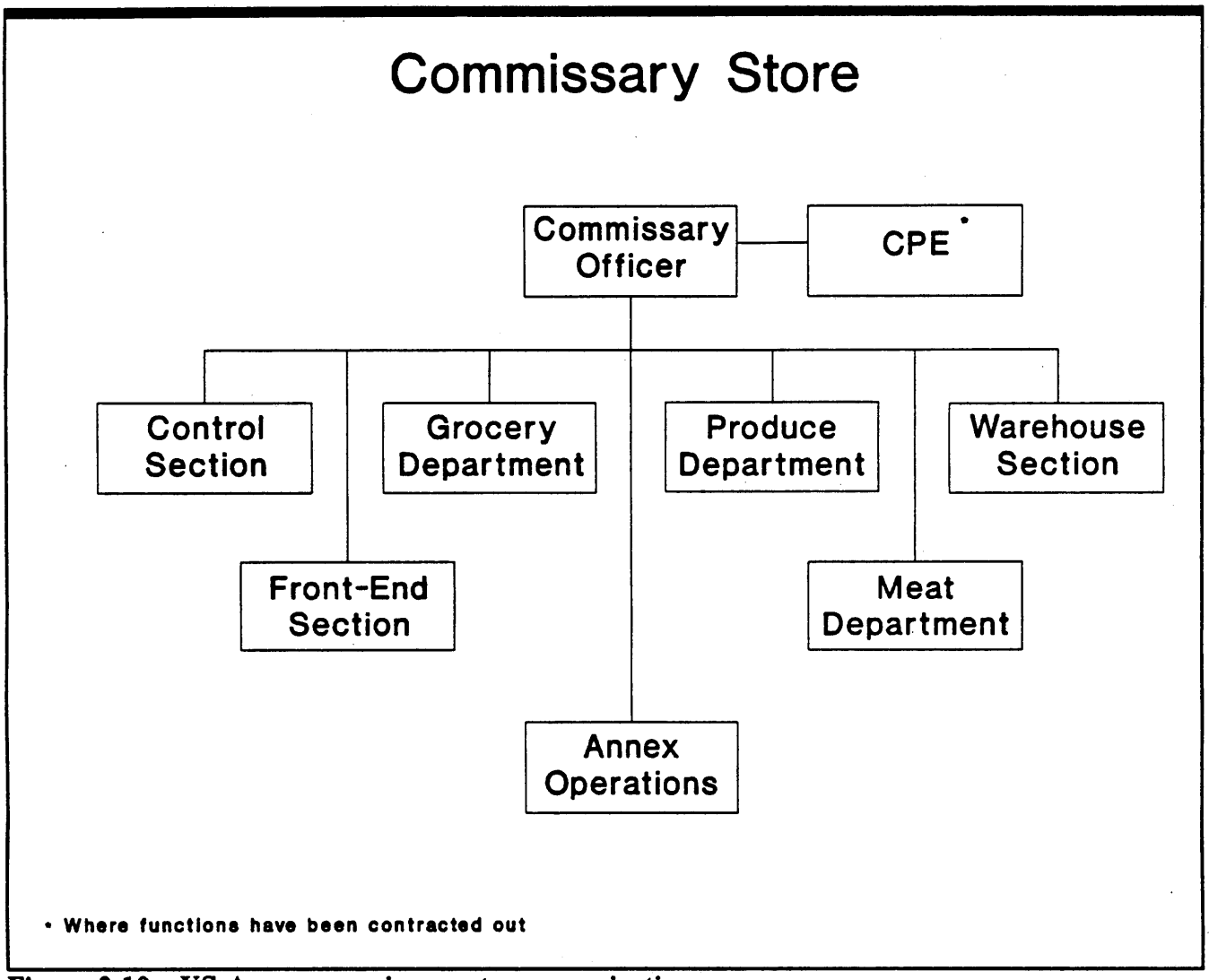


Figure 2-10. US Army commissary store organization

PRESENT NAVY COMMISSARY SYSTEM

Navy commissaries worldwide currently operate under the direct command and control of the local installation commanding officer, in the same manner as Navy exchanges. Data on the scope of the present Navy program is at Table 2-8. Technical control, funds management, and operating policies and procedures are administered by the Commander, Naval Supply Systems Command (NAVSUP) through the Navy Resale and Services Support Office (NAVRESSO), Naval Station New York Staten Island in New York. Prior to 1 October 1987, Navy commissaries were centrally commanded and managed by NAVSUP through NAVRESSO. The change in command and control of commissaries occurred as the result of a military realignment of Navy exchanges on 1 October 1985, and a subsequent military realignment of both Navy exchanges and commissaries in 1987, explained as follows:

- Prior to 1985, unlike commissaries, Navy exchanges were not centrally commanded by NAVRESSO. While NAVRESSO did provide technical support to exchanges in the areas of procurement, pricing, personnel management, accounting, data processing, etc., exchanges were under the control of the commanding officers of the installations on which they were located.

- In 1985, the Chief of Naval Operations (CNO) authorized a reorganization which brought both the Navy exchange and commissary at each installation under the umbrella of a Navy Resale Activity, headed by a military Officer in Charge (OIC). Both components of the Resale Activity were kept separate to ensure proper accountability of appropriated and nonappropriated funds. This OIC of Resale reported to NAVRESSO for primary duty, through a NAVRESSO Field Support Office (FSO) or directly if not under the cognizance of a NAVRESSOFSO or another resale activity.

- In 1987, however, in order to strengthen the authority and responsibility of installation commanding officers to enhance support to the fleet and to military members and their families, CNO approved a second realignment which placed resale activities under the base commanding officers. Now, commanding officers exercise command control of both commissaries and exchanges on their installations; NAVRESSO is still responsible for technical control, operating policies and procedures and retail management of commissaries and exchanges.

Of the four DOD commissary systems, the Navy is unique in its organizational yoking of the two major resale programs. At each level of NAVRESSOs organizational structure (NAVRESSO headquarters, NAVRESSO Field Support Office, local command Resale Activity), the organizational entity is composed of two major components: one responsible for commissary operations and the other for exchange operations. Figures 2-11 through 2-13 provide organizational charts depicting the Navy's chain of command for the Resale Program. For the Navy commissary program,

the Navy resale system is organized into geographical regional or independent components, shown in Figures 2-14, and 2-15, as follows:

- NAVRESSO Field Support Office with a Commissary Operations Division (COD). There are 8 CODs, all in the United States.

- Resale Activity with a Commissary Region Support Office (COMSYREGSUPOFF), if more than one commissary; or with a Commissary Support Office (COMYSUPOFF) if only one commissary. There are 5 COMSYREGSUPOFFs and 5 COMSYSUPOFFs; one COMSYREGSUPOFF in the United States and the remaining overseas.

The Navy Commissary Program is comprised of 82 commissaries worldwide, 63 in the United States and 19 overseas. Technical funds control and operational management is provided by a NAVRESSOFSO or resale activity through a regional commissary office, normally headed by a civilian director of the COD, COMSYREGSUPOFF, or COMSYSUPOFF. These offices provide regional support for operations, merchandising, procurement, data processing, accounting, distribution, facilities/equipment, and administrative functions. A region may contain from 2 to 11 commissaries, depending on the geographical locations and span of control.

The FSO does not exercise command control of the Resale activities within its region; that responsibility rests with the commanding officers of the installations on which they are located. FSO commanding officers do, however, prepare concurrent fitness reports on the officers in charge of the resale activities within their regions. Independent resale activities are those which do not receive the bulk of their support from FSOs. They are usually geographically remote form the nearest FSO or are located overseas. As with FSO-supported resale activities, the officer in charge of an independent resale activity reports for command purposes to the commanding officer of the base on which it is located and to NAVRESSO for policy guidance, management support, technical guidance and assistance.

In addition to the 82 Navy commissaries, NAVRESSO also manages 12 combined commissary/exchange activities that are operated under one roof by the Navy exchange (NEX), on a reimbursable basis (Figure 2-16). A NEX-managed location commissary is defined as an extension or "additional register" of another commissary and is only located outside of CONUS. The establishment of these 12 location commissaries was effected through the conversion of 10 existing NEX grocery sections where no commissary was in existence and 2 existing commissaries which were converted. Additionally, a 13th combined commissary/exchange under one roof was opened in Guantanamo Bay, Cuba, in July 1989, to replace a separately located commissary and exchange. The OIC of the resale activity at each location is responsible for the control and direct management of this operation. The "commissary" portion of the combined operation is paid with commissary funds based on actual expenditures:

- Merchandise is owned by the Navy Stock Fund and sold to the customer at commissary cost plus the 5 percent surcharge. Sales are credited monthly to

the commissary stock account of the "extension" commissary.

- Surcharge funds generated are credited to the commissary trust revolving fund for purchase of supplies,equipment, and other operating costs.

- Operations and Maintenance, Navy (O&M,N) funds are used to reimburse NEX labor costs for the portion of payroll expenses that are directly related to commissary sales. Funds for these operations are included in the O&M,N budget for the Navy Commissary Program.

The operation of the Navy Commissary Program is financed by the following fund appropriations which are subsequently described: the Navy Stock Fund; the Trust Revolving Fund; the Operations and Maintenance, Navy Fund; the Military Personnel Navy Fund.

The Navy Stock Fund (NSF) is a revolving fund used to procure commissary subsistence inventory for resale. The NSF is established as a working capital fund with basic funds provided by congressional appropriation. Items purchased by NSF money are Navy Stock Account material. Cash from the sale of stock account material is deposited with a disbursing officer, who in turn credits the NSF with the amount of such deposit. Each year a budget is formulated for the NSF by NAVRESSO and submitted to NAVSUP for review. NAVSUP coordinates Navy budget requirements which are then submitted to the Navy Comptroller, CNO, and subsequently to the Department of Defense (DOD). The detailed budget is based on anticipated demand, stock levels, and known changes in support; it includes a monthly phasing plan of sales, obligations, and expenditures. NAVSUP is responsible for the management of the NSF under the direction of the Secretary of the Navy (SECNAV) and CNO. NAVSUP centrally administers the NSF through decentralized inventory management assigned to NAVRESSO and approves the funding quarterly through suballocations to NAVRESSO. NAVRESSO is operationally responsible for the NSF to maintain sufficient inventory, prevent overobligations, provide allotments for inventory levels to the field region level, and submit monthly reports of the status of the NSF authorization.

The Trust Revolving Fund (TRF) is a revolving fund used to fund commissary construction, facility improvements and modifications, equipment, services, utility expenses (CONUS) and other operating costs. In 1978, Congress stipulated that the commissary system should be self-sufficient in terms of facilities replacement/construction. Navy commissaries have not received any Military Construction Fund (MILCON) support since 1974 (The last Navy commissary constructed with MILCON funds was Adak, Alaska). Revenue for this fund is generated from a five percent (5 percent) surcharge applied to customer purchases at the cash register and is collected and deposited to the TRF account. Each year a budget is formulated for the TRF by NAVRESSO, based on projected TRF surcharge revenue available. Approximately 60 percent of the surcharge monies generated are managed at the field level to finance operating costs and other expenses which have been budgeted. The remaining portion is administered by NAVRESSO and provided to the field in the form of major construction grants, alteration

projects and equipment purchases over $2500.00. These major projects are determined and prioritized by a special NAVRESSO committee and forwarded to NAVSUP for approval.

The Operations and Maintenance, Navy Fund (O&M,N) is an annual appropriation which funds civilian payroll; contract labor costs for shelf-stocking, janitorial, and commercial inventory services; transportation of U.S. goods to overseas commissaries; and administrative operating expenses such as travel, training, computer operations and supplies, armored car services, and protective clothing. Income derived from coupon handling fees is also credited to the O&M,N account to pay for appropriated costs associated with handling of coupons. The annual O&M,N requirement for the Navy Commissary Program is reduced by the amount of revenues projected for coupon handling.

The Military Personnel Navy Fund (MPN) is an annual appropriation which funds military personnel costs for military personnel assigned to commissary billets for sea/shore rotation purposes.

In addition to the O&M,N and MPN direct appropriated fund support, Navy commissaries receive some indirect fund support for utilities overseas, veterinary services, certain administrative support, and common services - most of it through the local installation. Navy commissaries also use some services provided by the Defense Personnel Support Center (DPSC).

The Navy commissary program operates under a central distribution center (CDC) concept, in most cases, where one distribution center supports all the commissaries in a geographical area for semi-perishable warehouse type items. Items not stored in the CDC are considered to be direct store delivery (DSD) items and are received from manufacturers or their distributors at the store level.

In the United States, Navy commissaries procure subsistence requirements against DPSC supply bulletins and indefinite delivery type contracts or commissary FSO/region blanket purchase agreements. Produce is purchased through DPSC local buying offices. The Navy system utilizes an Automated Commissary System (ACS) at the region level. The ACS includes an automated inventory model that maintains CDC (or warehouse) inventories and automatically determines reorder requirements for delivery to CDCs and a few remote warehouses, using an economic order quantity (EOQ) model. Commissaries order daily from the warehouse by scanning bar-code shelf labels with a hand-held device to transfer merchandise from the CDC to the store that night. For DSD items, order quantities are determined by store personnel, using region produced procurement order/requisition documents; assistance for the DSD ordering process may be provided by manufacturer representatives. DSD receipts must be entered into the ACS system, once the receipt process has been completed.

Outside of the United States, overseas Navy commissaries receive support for semi-perishable subsistence items and operating supplies from a CONUS NAVRESSO FSO commissary CDC at Norfolk (Europe), Oakland (Pacific), Jacksonville (Caribbean) or Davisville (Canada). In some cases, a large

commissary may source-load merchandise direct from the manufacturer, when requirements are met on a continuing basis. The CDC at Navy overseas regions further distributes this merchandise from the region CDC to smaller branch commissaries. Perishable subsistence support is provided by DPSC overseas depots where available; where not available, overseas Navy commissaries order merchandise direct from the manufacturer for consolidation and transshipping from a CONUS port. Order requirements for almost all items are determined by the automated Commissary Overseas Inventory Control Navy System (COINS) on a microcomputer, using an unsophisticated inventory model. Orders are normally placed every 14 days, or once per month if required to meet source loads or shipping schedules. This process takes place at the region level.

The accounting and invoice processing functions are handled at the region level for the Navy Commissary System. In CONUS, invoices for commercially procured merchandise are received and processed by the region accounting branch and forwarded to NAVRESSO where they are paid centrally. Outside CONUS, including Hawaii, invoices from commercial sources are processed by the region and forwarded for payment to Fleet Accounting and Disbursing Centers, Atlantic/Pacific (FAADCLANT, FAADCPAC) for CONUS purchases or local disbursing officers. Payments are made with a Treasurer of the United States check, specifying a charge to the stock fund. Once payments are made, a copy of the paid voucher is sent back to the cognizant region to match with receipt documents accordingly. Procurements from DPSC or other government agencies are charged/invoiced on interfund bills from the respective agency, which are forwarded to the cognizant region for matching/processing.

Navy commissaries stock items in accordance with those authorized for sale in DOD Directive 1330.17-R, with the exception of tobacco products, soft drinks, charcoal, charcoal lighter, potted plants, salad bars, and hair colorings. NAVRESSO provides guidance for the range of product categories to be stocked and publishes a Master Stock Assortment (MSA) list of approximately 1100 line items that customers expect to find in any store they might enter and it also serves as the required basic stock list for overseas commissaries. MSA item selection is based on item popularity from internal as well as commercial item movement reports. All other items stocked are determined at the field regional commissary divisions by a merchandising review committee; individual commissaries may provide input for this process to the region. Stores can only order and stock items which have been approved at the region level.

Navy commissary facilities, in general, require improvement. Approximately half of the buildings occupied by commissaries are more than 40 years old, many of which are "temporary" structures from World War II, which were not designed as commissaries. These facilities tend to be congested, inefficient, and unattractive to customers. The remaining commissaries have been replaced, expanded, or improved and contain modern-day equipment. All Navy commissaries built since the mid-1970s have been constructed without attached warehouses, as a result of the implementation of central distribution centers (CDCs). Except for the San Diego CDC, all

other CDCs were established in existing warehouses or existing structures which were improved to support a CDC function. The major portion of equipment purchased over the past 5 years has been concentrated on major state-of-art replacements such as refrigeration, scanning, and store fixtures. Front-end scanning systems have been in place at all Navy commissaries since 1986; additionally, all meat department equipment was recently upgraded to provide the ability for 100 percent scanning of meat items, as well as grocery and household items. Productivity in Navy commissaries has increased over the years as the result of efficiencies gained through automation.

Sales and inventory data ($millions)--

	FY 1988	% of Sales FY 88
Sales in U.S.	$781.3	89%
Sales Overseas	$88.3	11%
Total Sales	$869.6	100%
Sales Grocery	$661.9	76%
Sales Meat	$148.8	17%
Sales Produce	$58.9	27%
Inventory (Average)	$72.7	
On Order (Average)	$72.7	
Stock Turn	11.9 times per year	

Number of stores (FY 1988)--:

	Stores
U.S.	63
Overseas	19
Total	82

Authorized staffing (FY 1988)--

	Military	Civilian	Total
Above Store Level	112	729	841
At Store Level	909	2,855	3,764
Total	1,021	3,584	4,605

Productivity measures--

Average Sales per work year	$227,228
Average Sales per work hour	$108.80
Average Sales per transaction	$44.20
Average Sales per sq foot per month	$69.00

Table 2-8. Navy commissary program--FY 1988

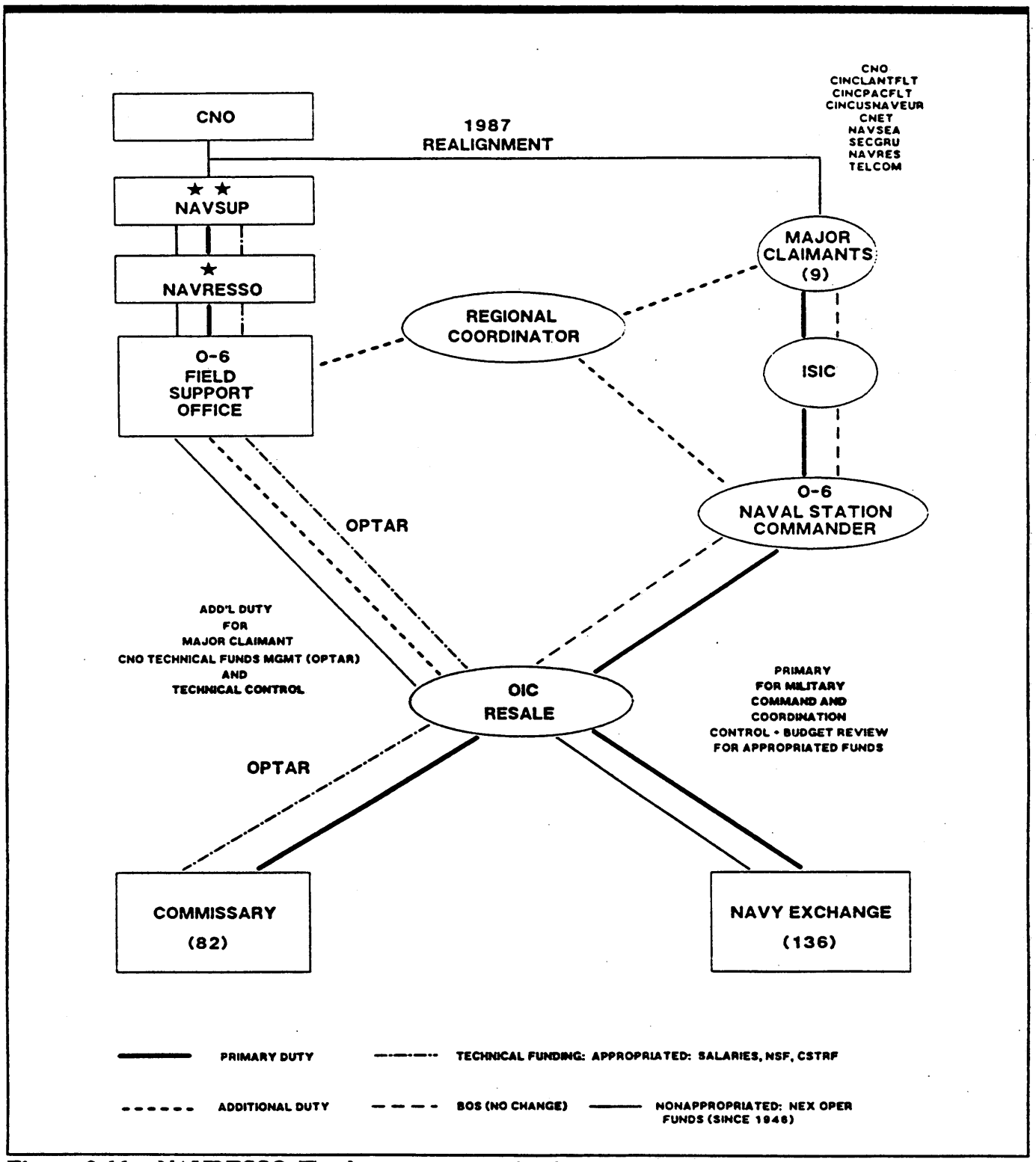


Figure 2-11. NAVRESSO Headquarters organization

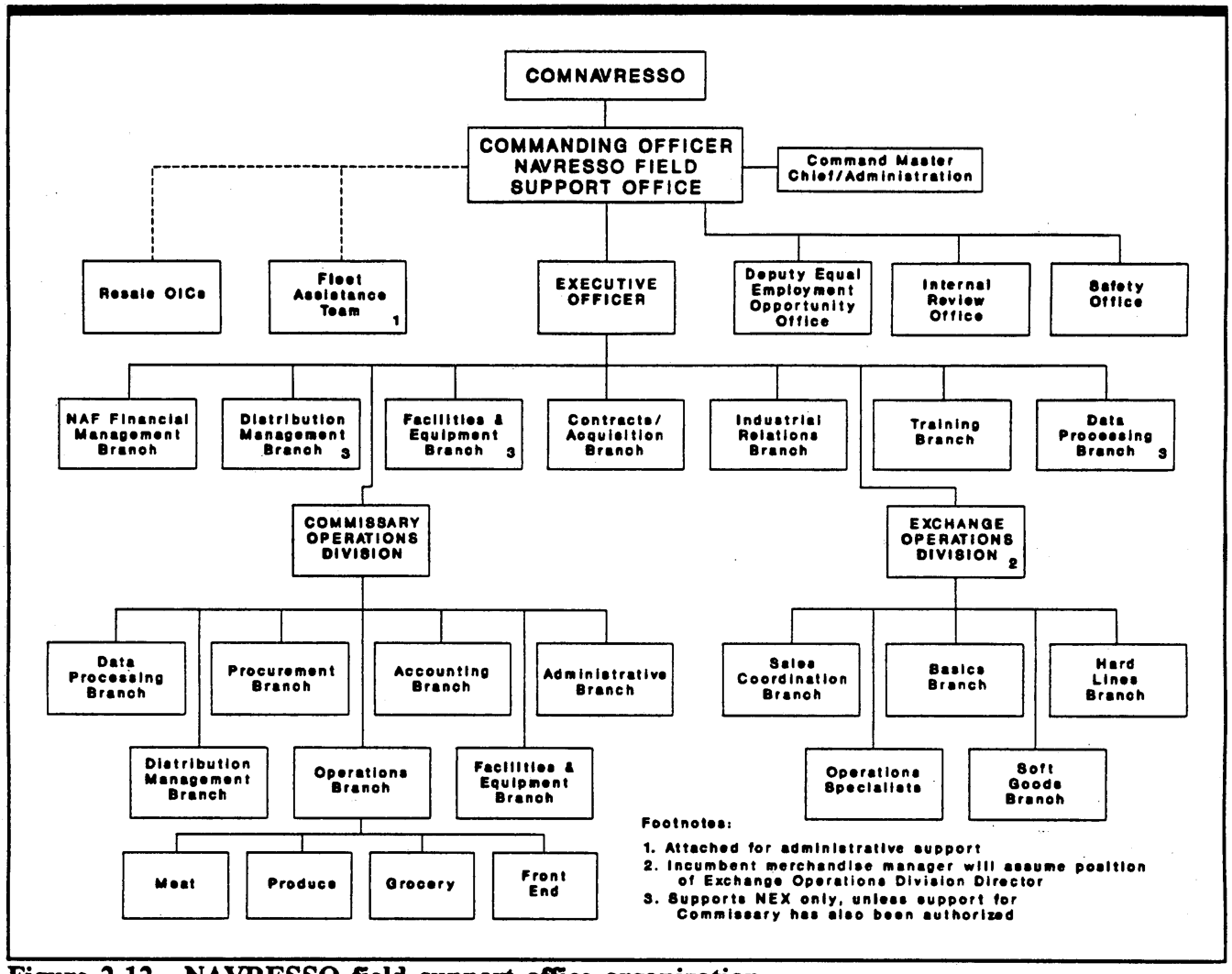


Figure 2-12. NAVRESSO field support office organization

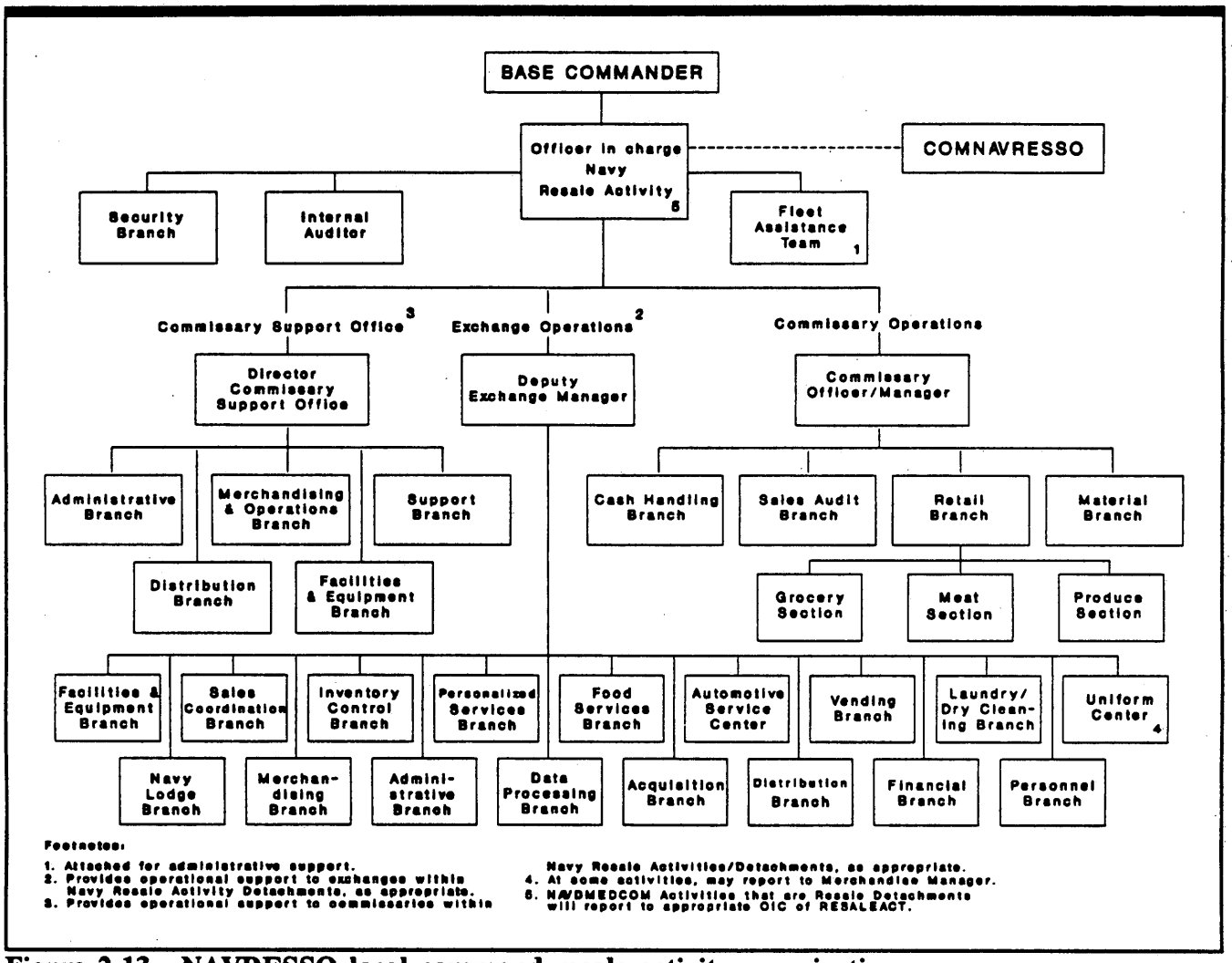


Figure 2-13. NAVRESSO local command resale activity organization

COD San Diego CA (10 stores)
- Miramar
- San Diego
- Imperial Beach
- Long Beach
- Port Hueneme
- NTC San Diego
- North Island
- Point Mugu
- China Lake
- El Centro

COD Pearl Harbor HI (2 stores)
- Pearl Harbor
- Barbers Point

COD Jacksonville FL (11 stores)
- Jacksonville
- Orlando
- Mayport
- NWS Charleston
- NS Charleston
- Roosevelt Rds
- Guantanamo Bay
- Cecil Field
- Key West
- Kings Bay
- Athens

COD Auborn WA (5 stores)
- Bangor
- Whidbey Island
- Bremerton
- Adak
- Lakehurst
- Dahlgren
- Crane

COD Norfolk VA (5 stores)
- Little Creek
- Oceana
- Norfolk
- Portsmouth
- Yorktown

COD Mechanicsburg PA (7 stores)
- Great Lakes
- Philadelphia
- Annapolis
- Patuxent River
- Lakehurst
- Dalgren
- Crane

COD Oakland CA (9 stores)
- Moffett Field
- Alameda
- Mare Island
- Hamilton
- Lemoore
- Stockton
- Treasure Island
- Fallon
- Skaggs Island

COD Davisville RI (8 stores)
- New London
- Newport
- Brunswick
- Mitchell Field
- Scotia
- Governors Island*
- Argentia
- Cutler
- Winter Harbor

* The Governors Island Commissary is a U.S. Coast Guard commissary operated by the Navy Commissary Program for the Coast Guard on a reimbursable basis.

Figure 2-14. NAVRESSO commissary operations divisions (COD)(8)

RESALE ACTIVITY COMMISSARY REGION SUPPORT OFFICES (5)

COMSYREGSUPOFF Pensacola, Florida (9 stores)

- Pensacola
- Memphis
- New Orleans
- Corpus Christi
- Gulfport
- Meridian
- Whiting Field
- Beeville
- Kingsville

COMSYREGSUPOFF Yokosuka Japan (4 stores)

- Yokosuka
- Atsugi
- Sasebo
- Chinhae

COMSYREGSUPOFF Naples Italy (3 stores)

- Naples
- Sigonella
- La Maddalena

CONSYREGSUPOFF Dunstable, United Kingdom (2 stores)

- Holy Loch
- Edzell

COMSYREGSUPOFF Subic Bay, Philippines (2 stores)

- Subic Bay
- San Miguel

RESALE ACTIVITY COMMISSARY SUPPORT OFFICES (5)

- Keflavik, Iceland
- Bermuda
- Exmouth, Australia
- Rota, Spain
- Guam, Mariana Islands

Figure 2-15. NAVRESSO resale activity commissary regions and support offices

NEX-MANAGED LOCATION COMMISSARIES

Region Responsible	Location	No.
Pearl Harbor	Lualualei, Ford Island	2
Yokosuka	Negishi heights, Hario	2
Bermuda	Bermuda Annex	1
Naples	Gaeta	1
United Kingdom	West Ruislip, London, Brawdy, St. Mawgan, Thurso, Machrihanish	6

Figure 2-16. NAVRESSO combined commissary/exchange activities

PRESENT MARINE CORPS COMMISSARY SYSTEM

The Secretary of the Navy (SECNAV) has delegated to the Commandant of the Marine Corps (CMC) the authority to establish (overseas only) or disestablish (U.S. and overseas) commissaries and to designate categories of items for resale. The CMC has coequal status with the heads of the other military Services in the development of overall Department of Defense (DoD) commissary operating policy.

The Marine Corps commissary system is centrally managed by Headquarters Marine Corps (HQMC). Data on the scope of the present Marine Corps program is at Table 2-9. The Deputy Chief of Staff for Installations and Logistics (DC/S I&L) acts on behalf of the CMC as the Quartermaster General of the Marine Corps. The DC/S I&L has management responsibility for the Marine Corps supply system, Marine Corps installations worldwide and the Marine Corps commissary system.

The Director, Facilities and Services Division, serves as the principal Headquarters staff head with responsibility for commissary operations (See Figure 2-17). In addition, the Director serves as the funds manager for the Marine Corps Trust Revolving Fund (MCTRF). Policy guidance and financial management are established and exercised by HQMC (LFS). The Head of the Services Branch (LFS) assists the Director of the Facilities and Services Division in the development, publication and implementation of policies and procedures for the management of commissaries and commissary complexes. The Head, Services Branch exercises command and control over commissary complex directors. Organization is depicted in Figures 2-17, 2-18, 2-19, and 2-20.

The Marine Corps operates 15 commissaries under the cognizance of two complexes located at Marine Corps Base, Camp Lejeune, North Carolina (7 stores) and Marine Corps Air Station, El Toro, California (8 stores). See Figure 2-17. Each Complex also operates a Central Distribution Center in support of complex stores. The Commissary Complex Director is responsible for the management of central inventory control, central distribution centers, automated data processing centers and commissary operations. See Figure 2-21. The functions of the complex director are further detailed in Figure 2-22.

Operations of the Marine Corps commissary system are financed by Department of the Navy Stock Fund (Marine Corps Division), Operations & Maintenance Marine Corps, Military Personnel Marine Corps and Marine Corps Trust Revolving Fund.

The Department of the Navy Stock Fund (Marine Corps Division) is a revolving fund under the control of the DC/S I&L. The Stock Fund finances the procurement of resale inventories in support of Marine Corps commissaries worldwide. Requirements are developed at the complex headquarters and forwarded to HQMC (LFS) for review and consolidation. HQMC (LFS) develops and justifies requirements for the upcoming fiscal year and forwards the requirements to the DC/S I&L for review and approval. Stock

Fund authorization is issued to the host installation supporting the Commissary Complex Headquarters.

Operations and Maintenance, Marine Corps (O&MMC) and Military Personnel, Marine Corps (MPMC) are appropriated funds supporting civilian and military pay and benefits. In addition, appropriated fund support is provided to support transportation of merchandise overseas. Funding and staffing for Marine Corps commissary operations are controlled and administered at the respective complexes under the principle of managing to payroll. Consequently, the staffing level of the Marine Corps Commissaries is based on management needs rather than a firm table of allowances.

The Marine Corps Trust Revolving Fund (MCTRF), is used for facility improvements and new commissary construction, equipment replacement, services, utilities (CONUS) and operating supplies. MCTRF is centrally managed at HQMC (LFS).

Within the United States, contracts for the procurement of brand name merchandise are administered by Defense Personnel Support Center (DPSC). Non-brand name items are purchased locally by Blanket Purchase Agreements (BPA). Replenishment requirements for Central Distribution Center inventory are automated using the capabilities of the Commissary management Information System (CMIS) to generate order quantities. CONUS stores determine requirements for CDC stocked items and electronically transmit order data to the CDC. Orders are prepared and shipped within 24 hours based on a predetermined order cycle. The exceptions for this procedure are the commissaries located at Quantico, Virginia; Albany, Georgia; and Kanehoe Bay, Hawaii. These stores maintain their own warehouses. Requirements for BPA items are determined at store level. All billing is centralized at the complex level using CMIS capabilities to consolidate and track receipt documents awaiting processing for payment. The host Finance and Accounting Office for the complex processes bills for payment.

Overseas orders are processed in the same manner as CONUS orders utilizing the capabilities of CMIS. Predetermined container bookings and standardization of requirements have minimized order ship time. The use of the CDC for shipment of orders to the overseas store affords the OCONUS customer the same price benefits provided to the CONUS patron. Order ship time to the Iwakuni, Japan Commissary is only 27 days due to the aforementioned efficiencies.

The Marine Corps commissary system consolidates all receipt information via automated data transfer to the complex headquarters for payment purposes. In the case of BPAs, the hard copy of the delivery ticket remains at the store with the receipt information electronically transferred to the complex for consolidation and payment. CDC items are charged to the stores as individual customers, using automated billings generated by CMIS.

Line item stockage in Marine Corps Commissaries is limited to those items authorized in DoD Directive 1330.17-R with the exception, that the Marine Corps Commissaries do not stock tobacco products. Health and beauty aid products are limited to family size only. Local items are approved by

the commissary officer with concurrence of the Complex Director.

The Marine Corps commissary system has converted all front end operating systems to scanning check-out registers. The scanned data becomes a base for shelf allocation and item selection. The current CMIS (operational since 1979) supports information processing for the Marine Corps Complexes utilizing Sterling Software's Distribution IV applications. Automated functions provided by this system include:

- Processing store orders to the CDC.
- Invoicing CDC to store shipments.
- General accounting functions.
- Voucher processing.
- Inventory management.
- Suggested order quantities using a scientific order model.

The Commissary Construction Program is managed at HQMC (LFS). New commissary construction is approved and prioritized based on a determination of need and available surcharge dollars. The replacement of equipment determined to be a capital asset is submitted at HQMC (LFS) for review and approval.

Sales and inventory data ($millions)--

	FY 1988	% of Sales FY 88
Sales in U.S.	$1,67.7	98%
Sales Overseas	$3.6	2%
Total Sales[1]	$171.3	100%
Sales Grocery[2]	$133.1	78%
Sales Meat	$27.9	16%
Sales Produce	$10.3	6%
Inventory (Average)	$8.8	
On Order (Average)	$5.1	
Stock Turn	18.6 times per year	

Number of stores (FY 1988)--:

	Stores
U.S.	14
Overseas	1
Total	15

Authorized staffing (FY 1988)--

	Military	Civilian	Total
Above Store Level	0	98	98[3]
At Store Level	2	691	693
Total	2	789	791

Productivity measures--

Average Sales per work year	$217,110
Average Sales per work hour	$104
Average Sales per transaction	$44
Average Sales per sq foot per month	$63

[1]Sales stated at cost of goods sold
[2]Sales stated at retail
[3]Includes 31 CDC man-years

Table 2-9. Marine Corps commissary program--FY 1988

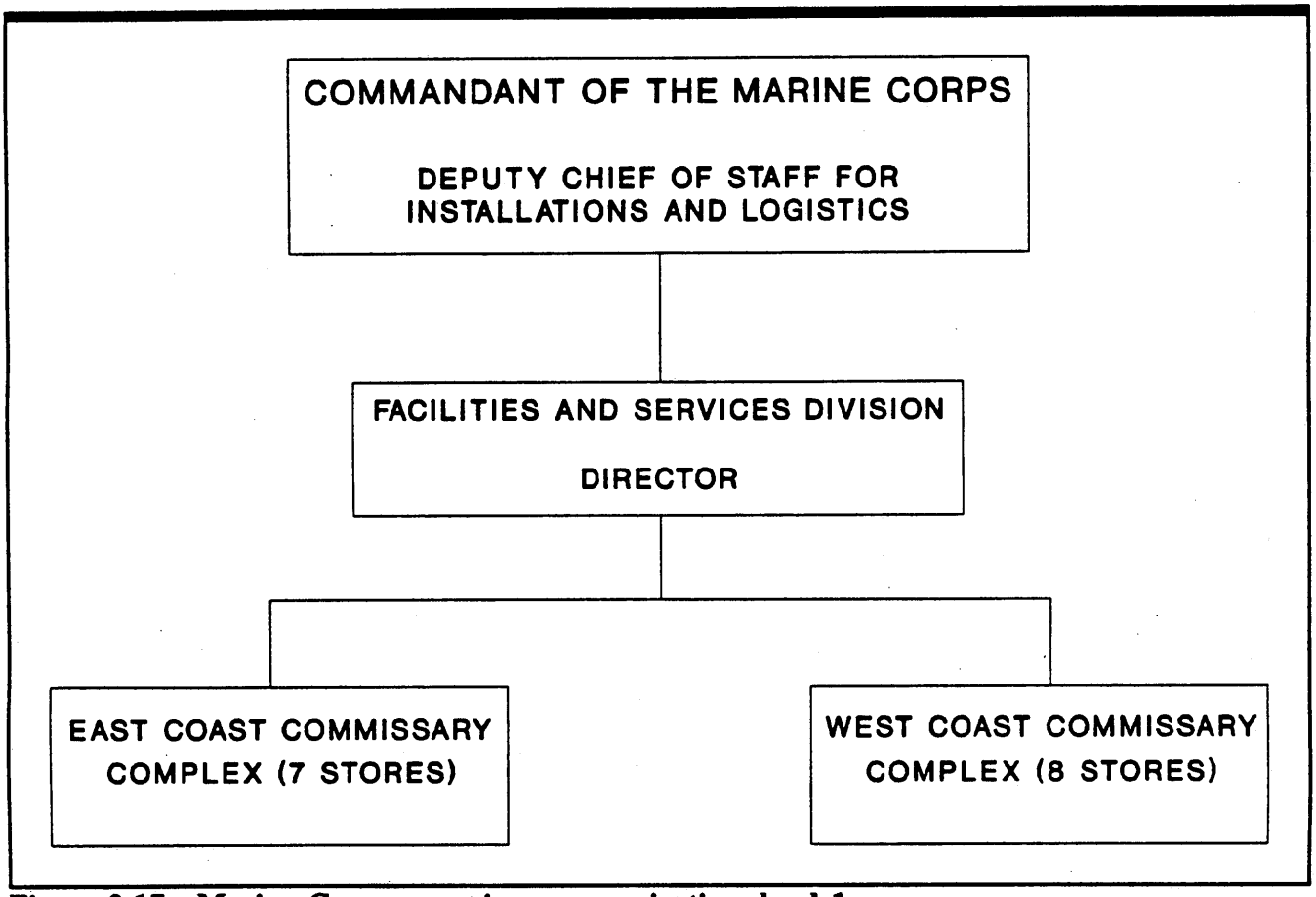


Figure 2-17. Marine Corps commissary organization--level 1

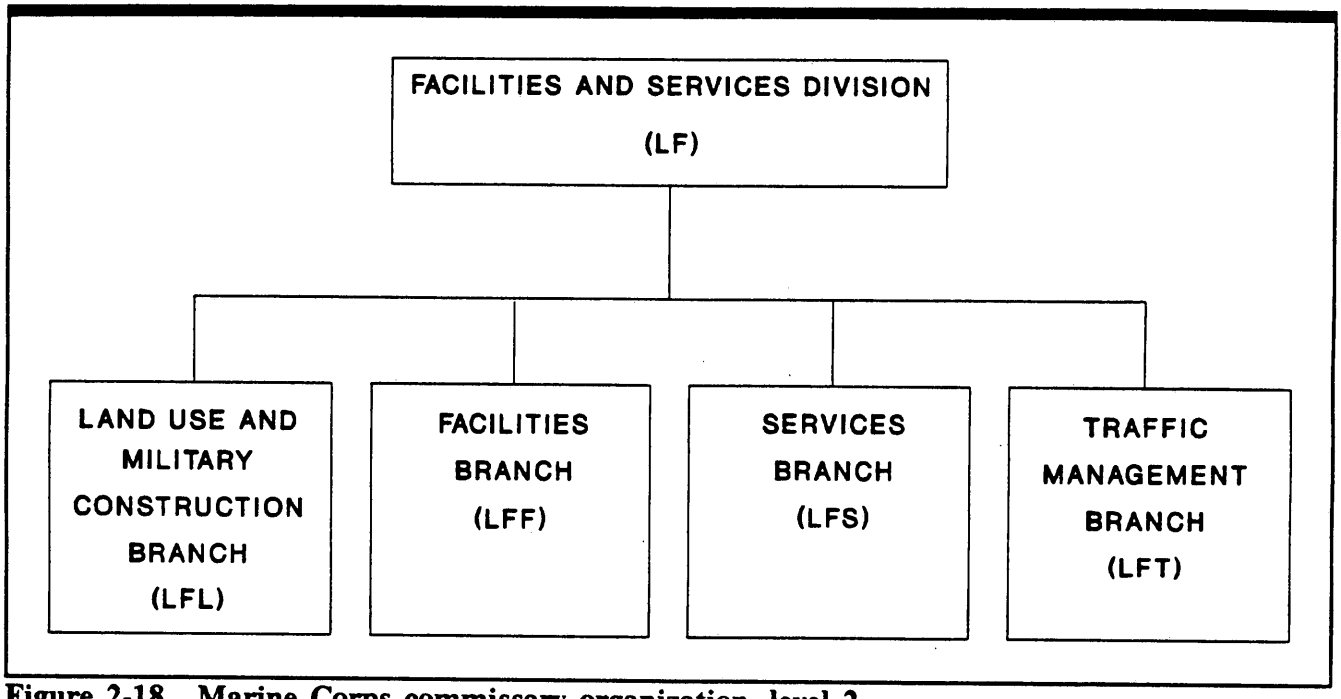


Figure 2-18. Marine Corps commissary organization--level 2

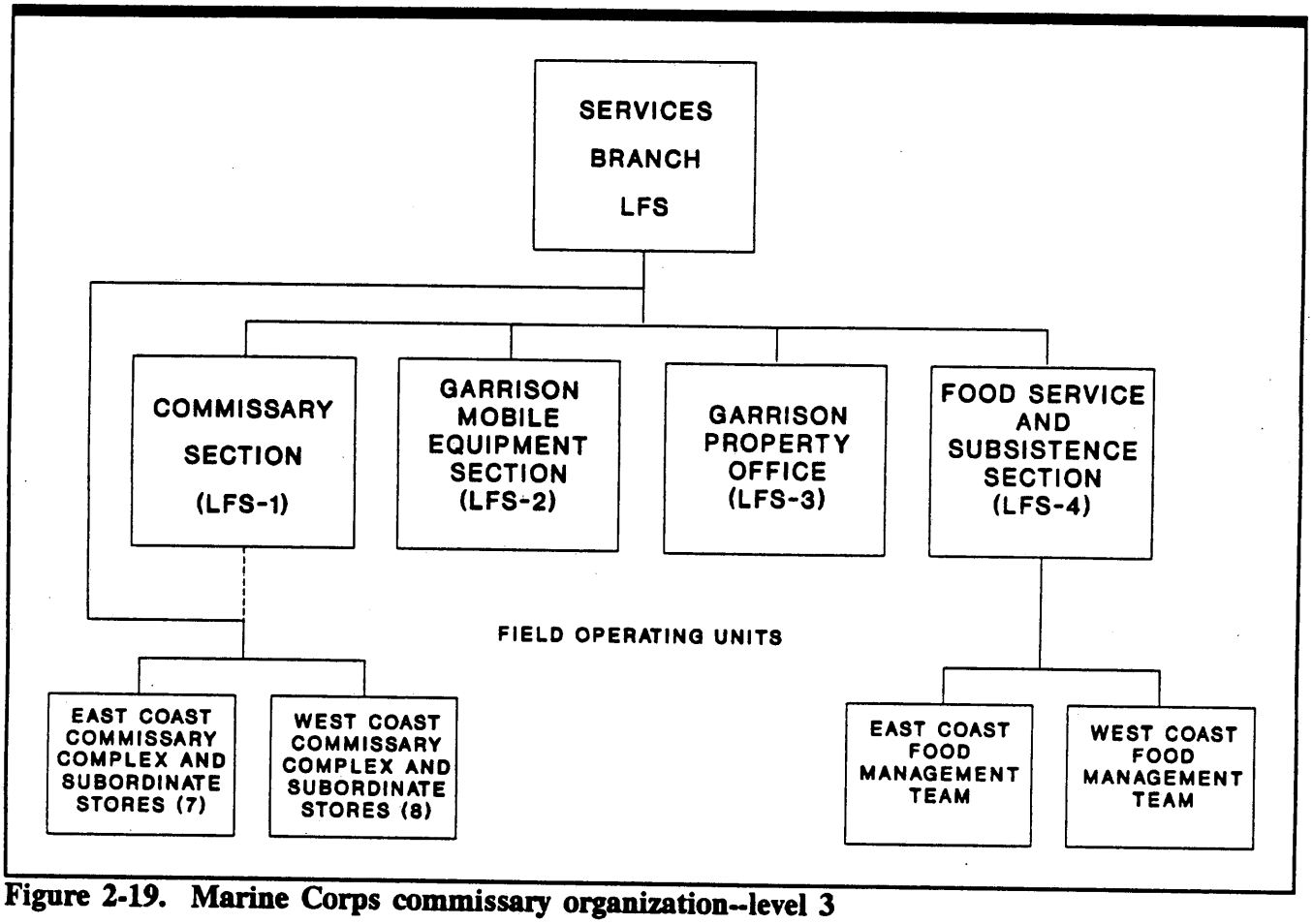


Figure 2-19. Marine Corps commissary organization--level 3

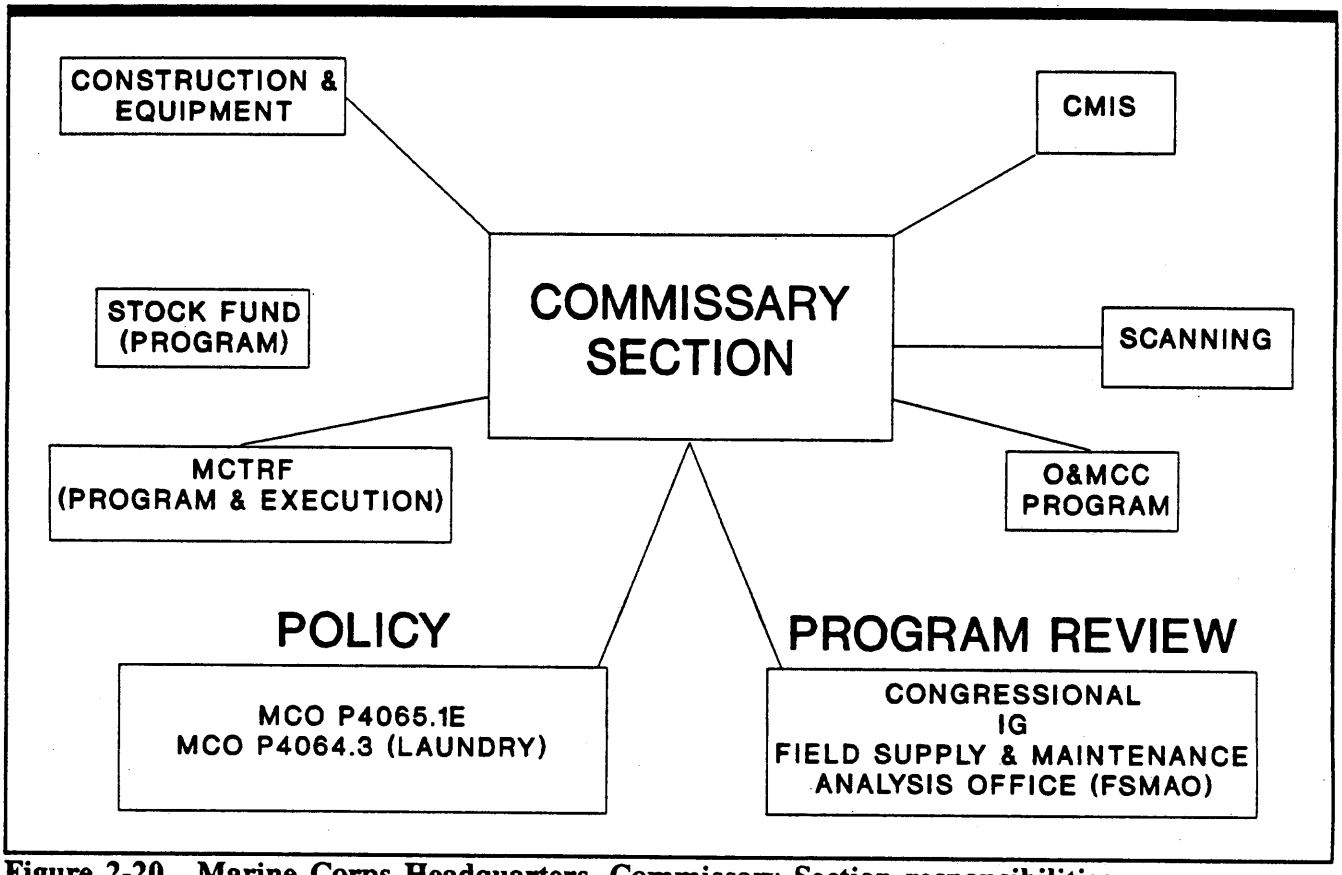


Figure 2-20. Marine Corps Headquarters--Commissary Section responsibilities

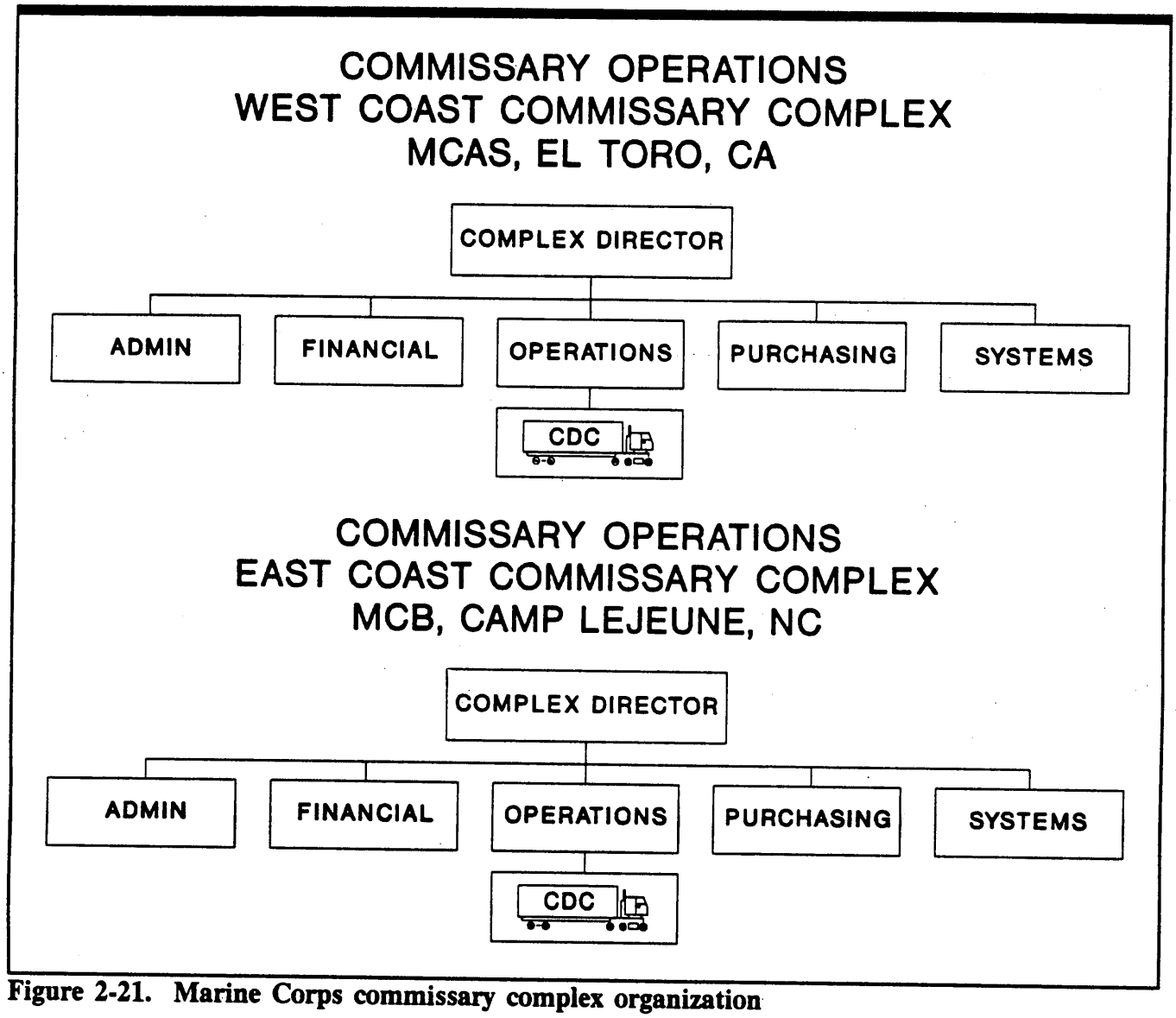


Figure 2-21. Marine Corps commissary complex organization

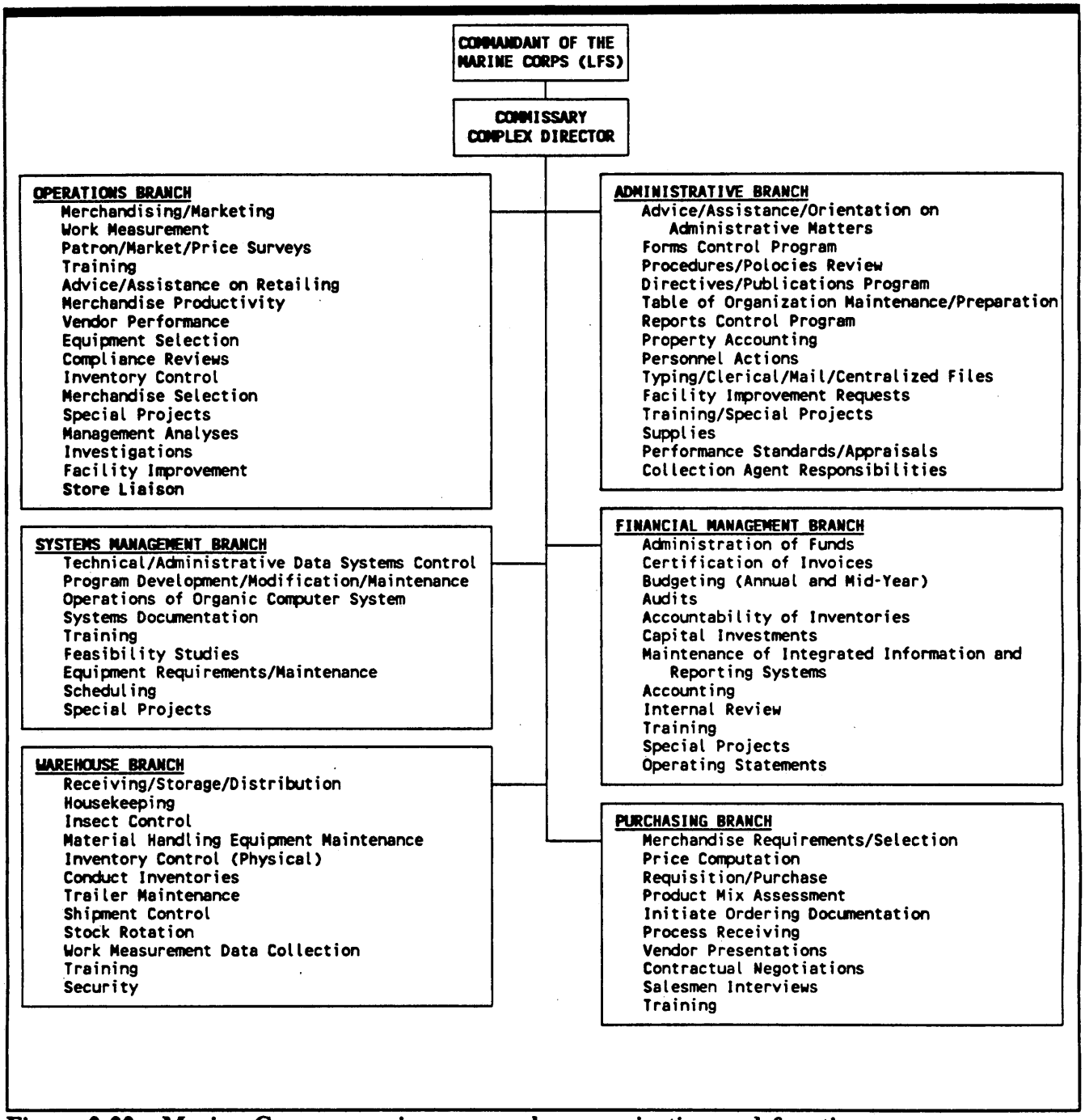


Figure 2-22. Marine Corps commissary complex organization and functions

PRESENT AIR FORCE COMMISSARY SYSTEM

The Air Force Commissary Service (AFCOMS) is a separate operating agency (SOA) under the direction and control of the Board of Directors (BOD), AFCOMS, whose chair person is the Director of Engineering and Services, HQ USAF/LEE. Data on the scope of the present Air Force program is at Table 2-10. AFCOMS provides food to Air Force dining halls and 149 commissary resale stores around the world.

AFCOMS consists of four elements: A board of directors, headquarters, regions, and commissary stores. The board of directors is responsible to the Air Force Chief of Staff. It consists of senior officers at the Air Staff and the Chief Master Sergeant of The Air Force. The board provides direction to the AFCOMS commander for commissary operations; approves basic policies, plans and programs; reviews and approves financial plans and goals; and reviews operating results.

AFCOMS headquarters is located at Kelly AFB TX. Personnel include specialists in finance, administration, computer sciences, personnel, engineering, and commissary operations. Organization chart is at Figure 2-24.

AFCOMS consists of seven stateside and four overseas regions. Region directors and commanders supervise seven or more stores, each headed by a commissary officer or store manager. Approximately 7,736 civilians and 940 military are assigned to AFCOMS throughout the world. The regions are responsible for implementing AFCOMS plans, policies, programs, and procedures. Regions provide close supervision and assistance to stores when needed.

Organization chart depicting the worldwide structure is at Figure 2-25. Detailed organization chart for AFCOMS Regions is at Figure 2-26, and the typical CONUS Commissary at Figure 2-27. The structure of the Headquarters Air Force Commissary--Europe is depicted at Figure 2-28; (European Regions are organized in the same manner as CONUS Regions). See Figure 2-29 for the stand-alone Commissary Europe Region organization. Figure 2-30 shows the structure of the Headquarters Air Force Complex; Figure 2-31 the Okinawa Complex, Figure 2-32 the Distribution Center; and Figure 2-33 the typical Okinawa Complex Commissary. The stand-alone commissary (Pacific Region) is shown at Figure 2-34.

Commissary subsistence inventories are financed with Air Force revolving stock fund. This fund is reimbursed from sales receipts and charge sales generated through the resale commissary stores. Troop support inventories and issues are supported solely from appropriated funds. Additionally, appropriated funds pay military and civilian personnel costs and TDY, PCS, contracted services (e.g., shelf stocking, warehousing, etc.), administrative supplies, and equipment at the above store level, transportation of subsistence and supplies to overseas commissaries.

The Air Force revolving stock fund budget is developed at Headquarters AFCOMS, based on prior two year sales history and most recent five months sales data. Regions review and

make recommended changes. Headquarters AFCOMS then submits the budget to Headquarters Air Force, Director of Budget Operations (AF/ACBO), who in turn submits it to OSD for final approval. Upon approval the budget is furnished to regions and stores for execution.

Each year AF/ACBO furnishes HQ AFCOMS with Operations and Maintenance (O&MAF) funds. The HQ AFCOMS Comptroller then distributes funds to regions separately for travel and personnel costs. Travel funds are sent to AFCOMS Region Headquarters. The regions control and issue travel funds. Funds for personnel costs are sent directly to the using AFCOMS activity, except in the case of AFCOMS Europe and Pacific Regions where funds are issued to respective Region Headquarters who in turn issue funds and funding documents to the servicing Accounting and Finance Office (AFO). Funding documents are sent from HQ AFCOMS to each AFCOMS activity and servicing AFO. Surcharge funds are sent from HQ AFCOMS directly to each region. The regions are responsible to control and administer these funds. Orders placed against these funds are approved by the regions except as authorized by the Region Commander or Director.

The Air Force trust revolving fund (surcharge) collections (5 percent of sales) are used for new commissary construction, facility improvement, equipment repair and replacements, services, utilities (CONUS) and operating supplies. Surcharge is also used to offset loss to the revolving stock fund resulting from shrinkage, spoilage, and pilferage of inventory.

In CONUS, commissary officers requisition the majority of their subsistence against supply bulletin contracts awarded by the Defense Personnel Support Center (DPSC). These contracts are administered by the region directors/commanders. Non brand name items are purchased locally against blanket purchase agreements (BPA). These contracts are awarded by the local base procurement officer and administered by region directors/commanders. Commissary officers determine requirements using the automated commissary operations system (ACOS) which maintains a perpetual inventory system, processes receipts, generates suggested orders, and updates general ledger accounts. Payment of subsistence receipts at CONUS commissaries is made by each local servicing accounting and finance office after the commissary officer verifies receipts and prepares a receiving report.

Overseas commissary officers requisition subsistence directly from the Defense Personnel Support Center (DPSC), Defense Subsistence Region Europe (DSRE) and Defense Subsistence Region Pacific (DSRPAC). Semiperishable requisitions are generated at store level, using as a guide line, the suggested order produced from the automated commissary operations system (ACOS). These requisitions are transmitted from each store to DPSC on a monthly cycle. Semiperishable subsistence requisitions are processed through the direct commissary support system (DICOMSS). Payment under DICOMSS is effected by each individual servicing accounting and finance office through the interfund billing process between finance and DPSC. Perishable requisitions are handled much the same as semiperishables, except generated semimonthly to DSRE or

(DSRPAC). DISCOMSS procedures are used for shipment of perishable merchandise to commissaries overseas which are not supported by overseas perishable depots. The Zweibrucken Army Finance and Accounting Division pays for all merchandise procured locally through DSRE, charging the Air Force Stock Fund account through cross-disbursing procedures. Payment support is provided by the AFO at RAF Lakenheath, UK, to DSRE-UK for DSRE subsistence procurement in the UK.

Product groups which may be stocked in Air Force commissaries are limited to these authorized in DOD directive 1330.17-R, Armed Service Commissary Store regulation. Line item stock assortment authorized to be carried in each store is determined through a three tier selection process. The program consists of the master stock list (MSL), managed and maintained at Headquarters AFCOMS. This list consists of the top selling national brand name products. Only brand name products which have national distribution and are considered essential to support patron demand are considered for the MSL. The MSL represents approximately 80 percent of CONUS sales. In addition to the MSL, each region may supplement the MSL with a region stock list (RSL) and store stock list (SSL), which normally are regional type items, local product, and ethnic items. Items selected for the RSL and SSL are unique to specific geographical and local areas. Periodically, headquarters and region review boards are convened to update MSLs and RSLs.

In 1987, AFCOMS began support of the three commissaries in Turkey from the Robins AFB Commissary. The goal was to reduce order-ship-time (OST), improve the not-in-stock position and reduce inventory levels. All three stores are now ordering semiperishables and perishables from Robins AFB, Georgia, and the objectives have been achieved. Fresher product at better prices and a wider selection are now provided. The OST has been reduced from 120 to 65 days. Out-of-stocks have been reduced. A small distribution center has been established at Lackland AFB, Texas, that supports commissaries at Kelly and Brooks AFBs. The Kelly and Brooks stores were converted to a truck-to-shelf operation with inventory levels significantly reduced. The Gunter AFB Commissary is supported from Maxwell AFB Commissary in a similar manner with similar results.

Due to an aggressive and well managed construction update program, significant progress has been realized in the facilities improvement area. The key to success has been the use of provisions of P.L. 97-321, which is incorporated in section 2685(c) of title 10, United States Code, and authorizes contract authority for the surcharge account. It has permitted the AFCOMS construction program to move ahead at least four years in the priority list. New requirements are prioritized and presented to the Board of Directors for approval and funding. After a design instruction is requested and provided by HQ USAF, it is provided to the MAJCOM, who in turn provides it to the base for review and submission to the Secretary of Air Force for project approval. Current requirements for new construction/alteration of commissary stores, including equipment, are estimated at $495 million.

Sales and inventory data ($millions)--

	FY 1988	% of Sales FY 88
Sales in U.S.	$2,018.6	82.0%
Sales Overseas	$442.1	18.0%
Total Sales	$2,460.7	100.0%
Sales Grocery	$1,832.8	78.9%
Sales Meat	$365.2	15.7%
Sales Produce	$125.6	5.4%
Inventory (Average)	$231.4	
On Order (Average)	$90.6	
Stock Turn	10.6 times per year	

Number of stores (FY 1988)--:

	Stores
U.S.	100
Overseas	49
Total	149

Authorized staffing (FY 1988)--

	Military	Civilian	Total
Above Store Level	136	622	758
At Store Level	944	7,775	8,719
Total	1,080	8,397	9,477

Note: Data includes troop issue

Productivity measures--

Average Sales per work year	$221,927
Average Sales per work hour	$106
Average Sales per transaction	$45
Average Sales per sq foot per month	$72

Table 2-10. Air Force commissary program--FY 1988

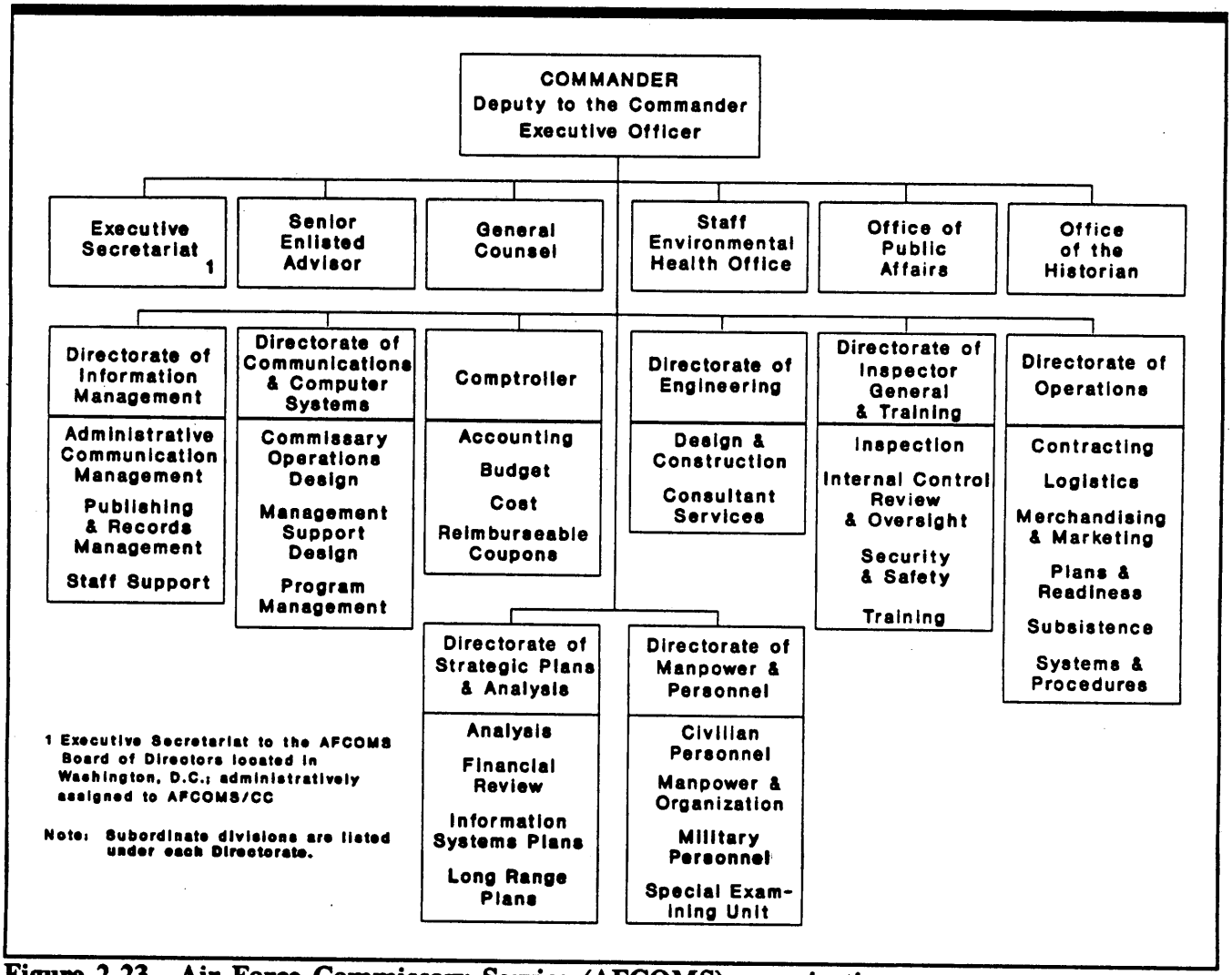


Figure 2-23. Air Force Commissary Service (AFCOMS) organization

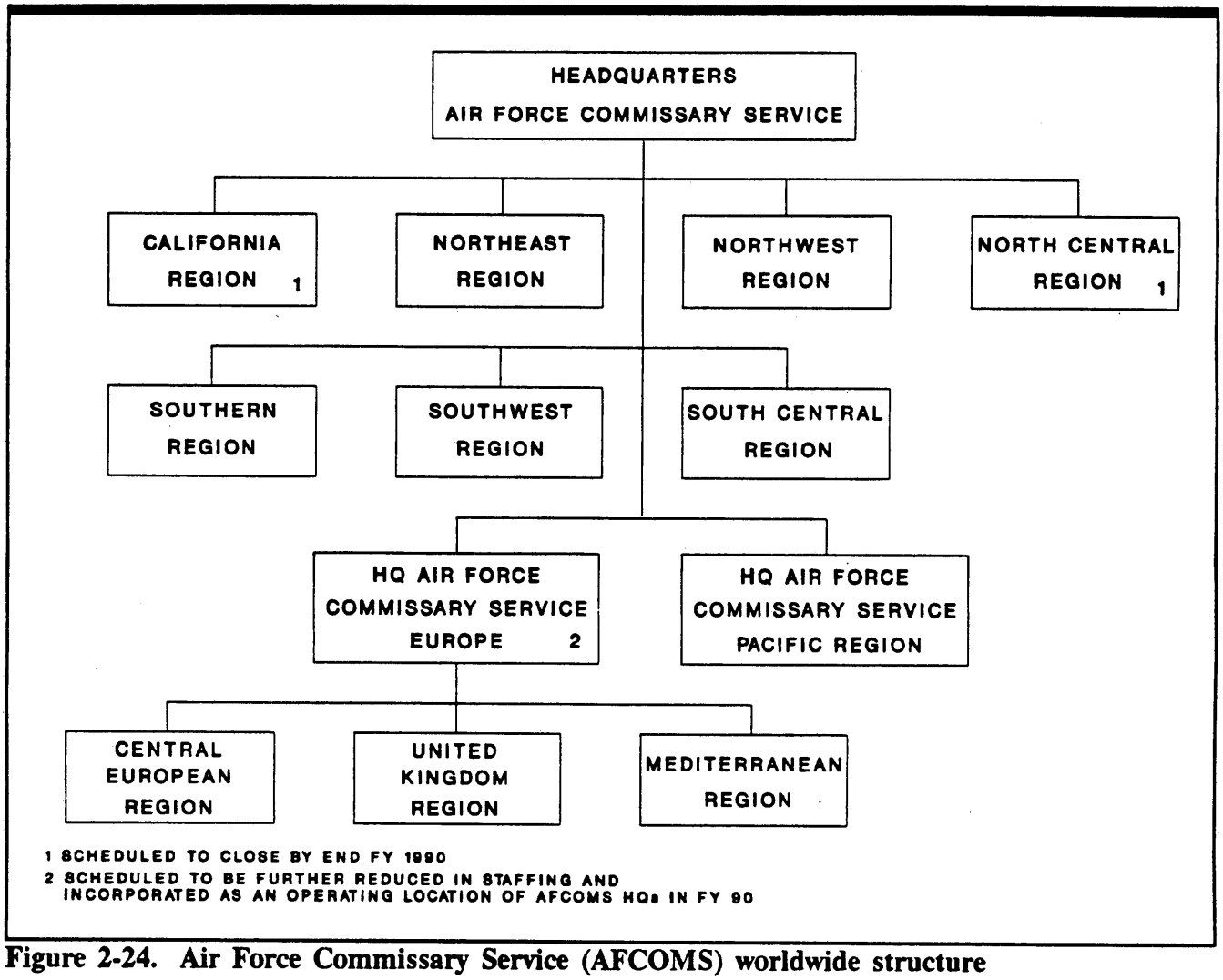


Figure 2-24. Air Force Commissary Service (AFCOMS) worldwide structure

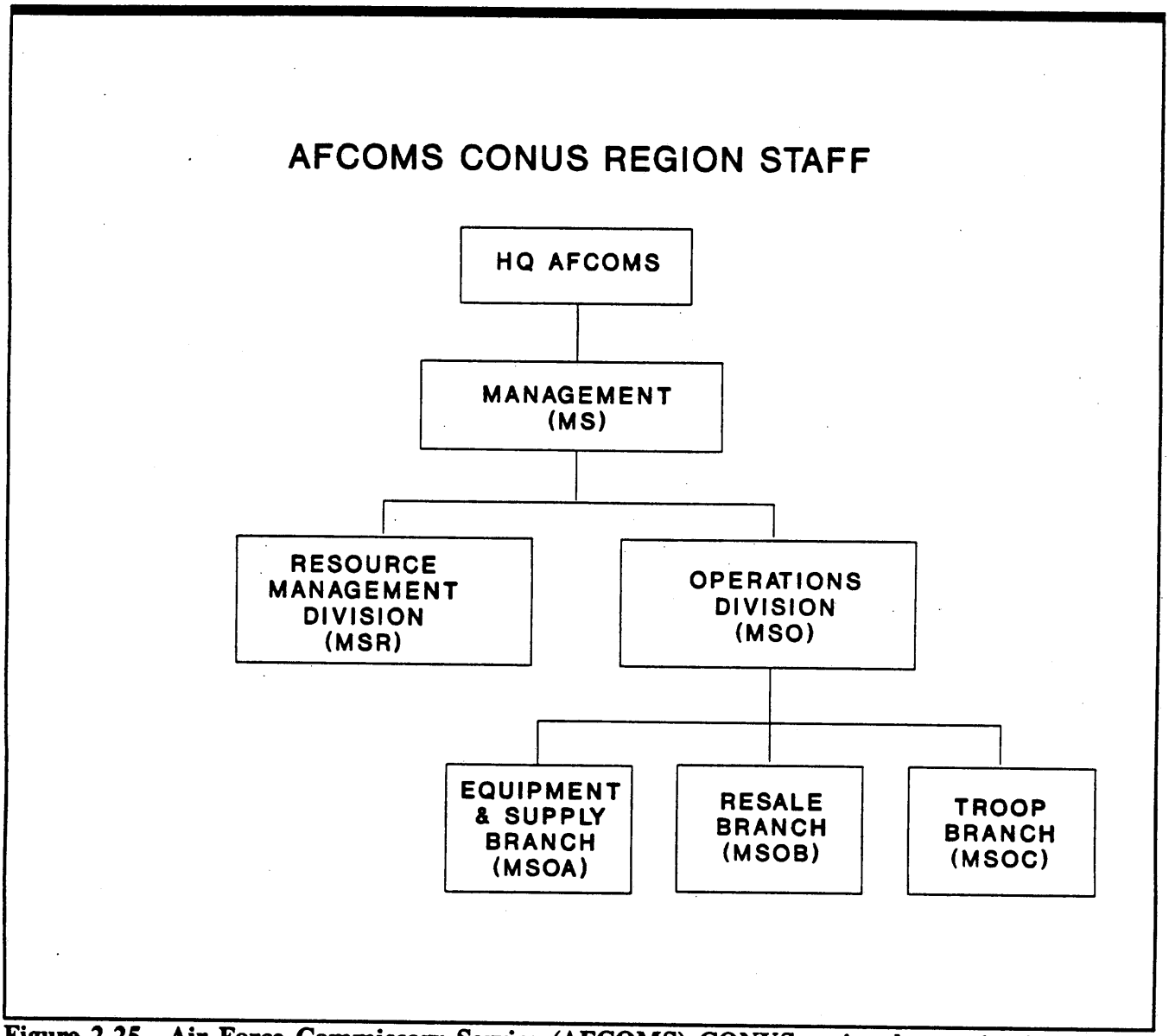


Figure 2-25. Air Force Commissary Service (AFCOMS) CONUS regional organization

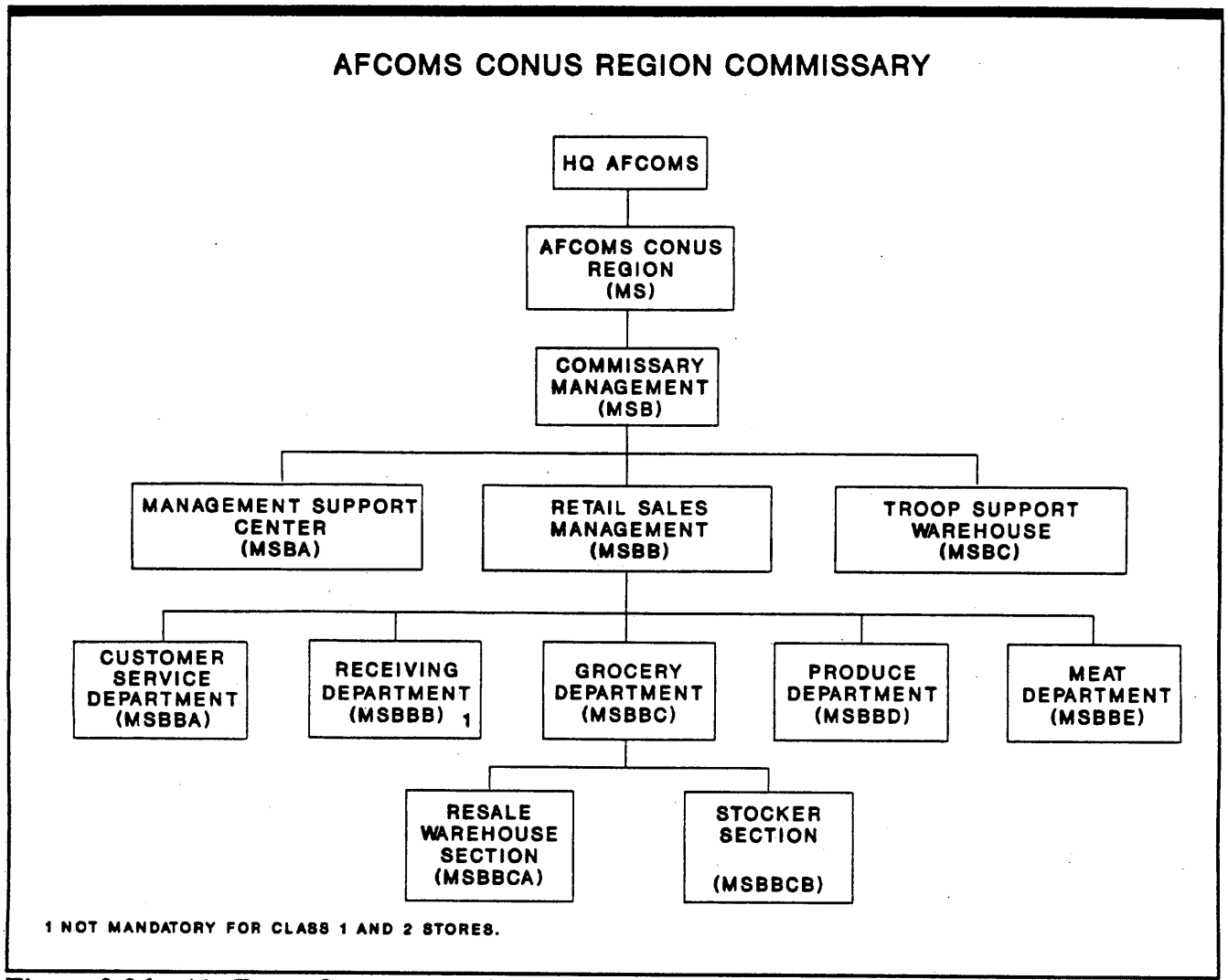


Figure 2-26. Air Force Commissary Service (AFCOMS) typical CONUS commissary

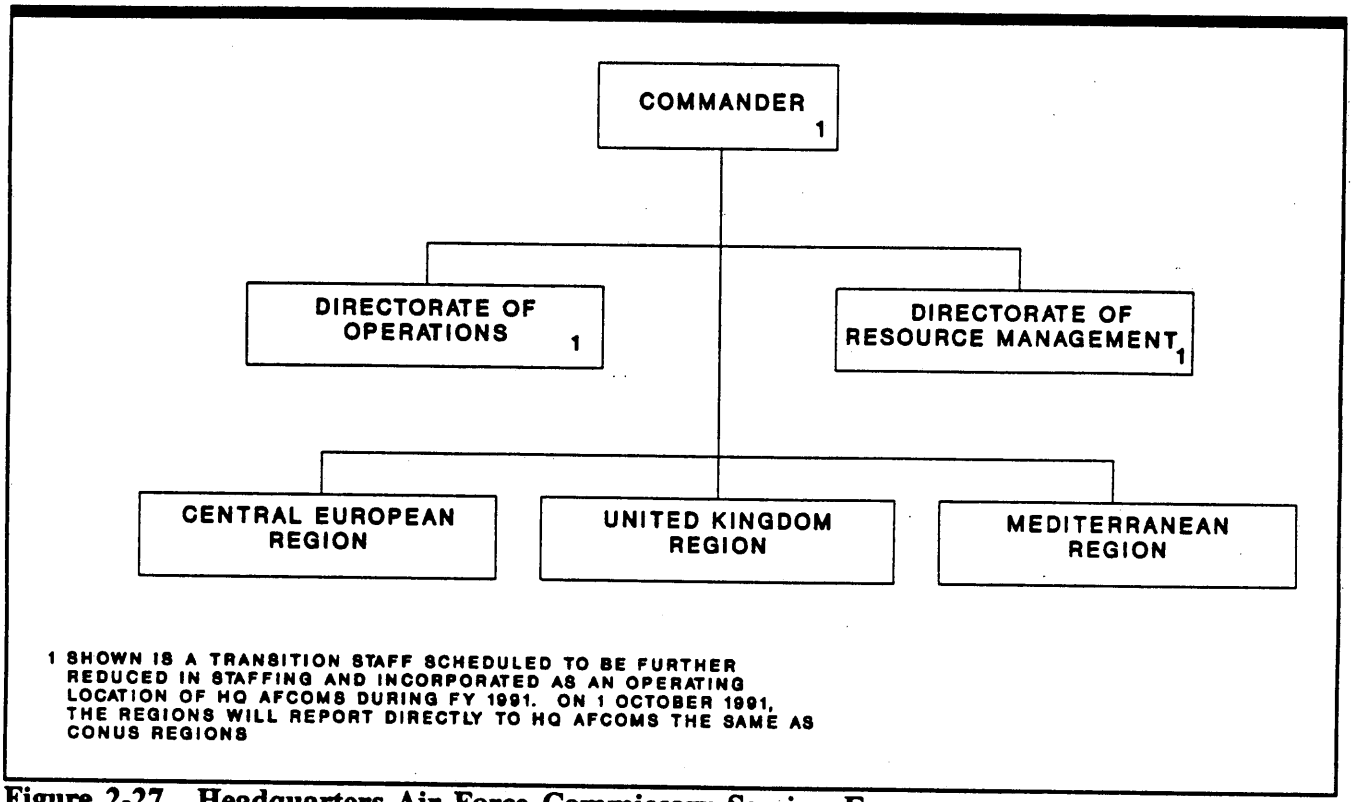


Figure 2-27. Headquarters Air Force Commissary Service--Europe

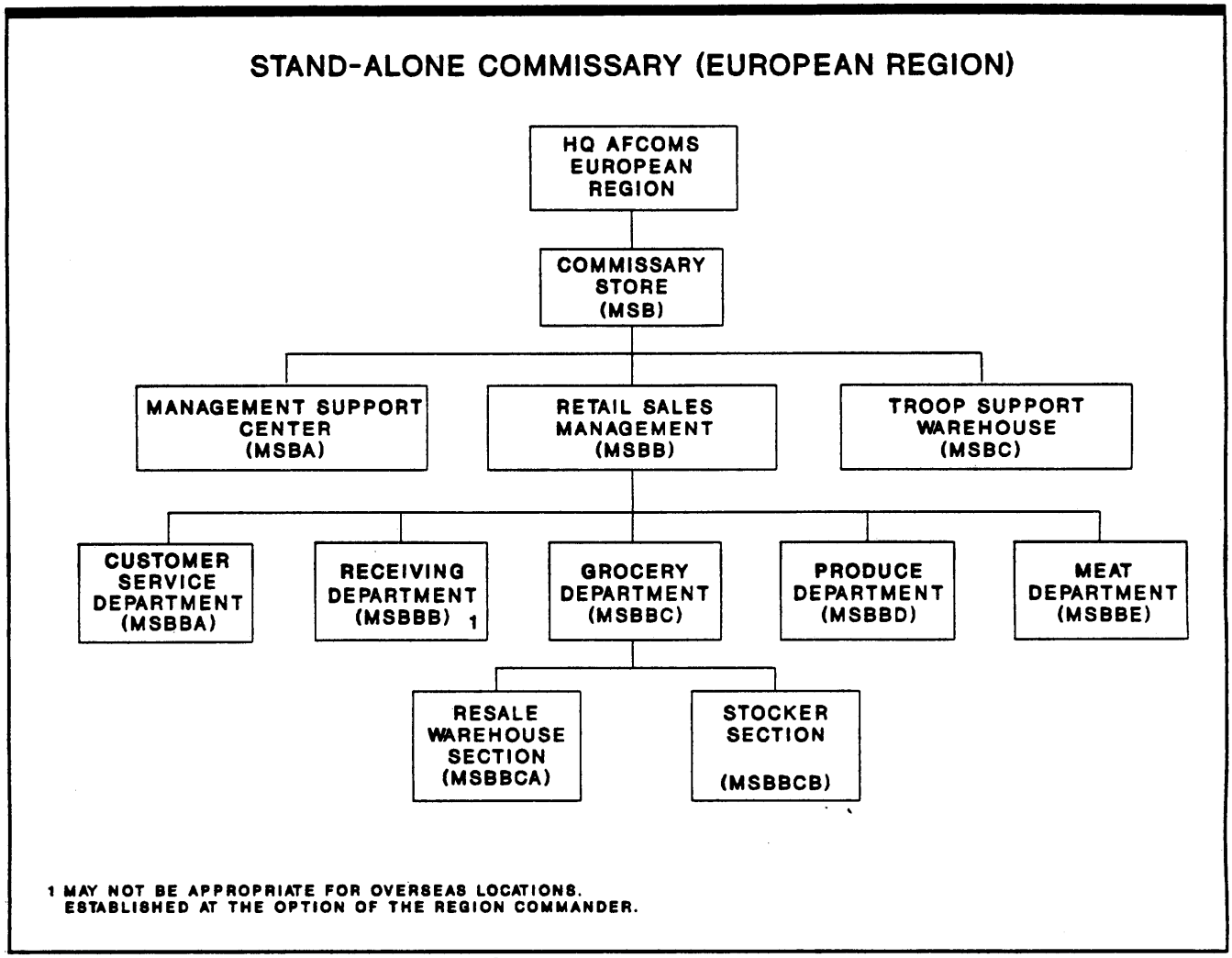


Figure 2-28. Air Force Commissary System--Europe regional organization

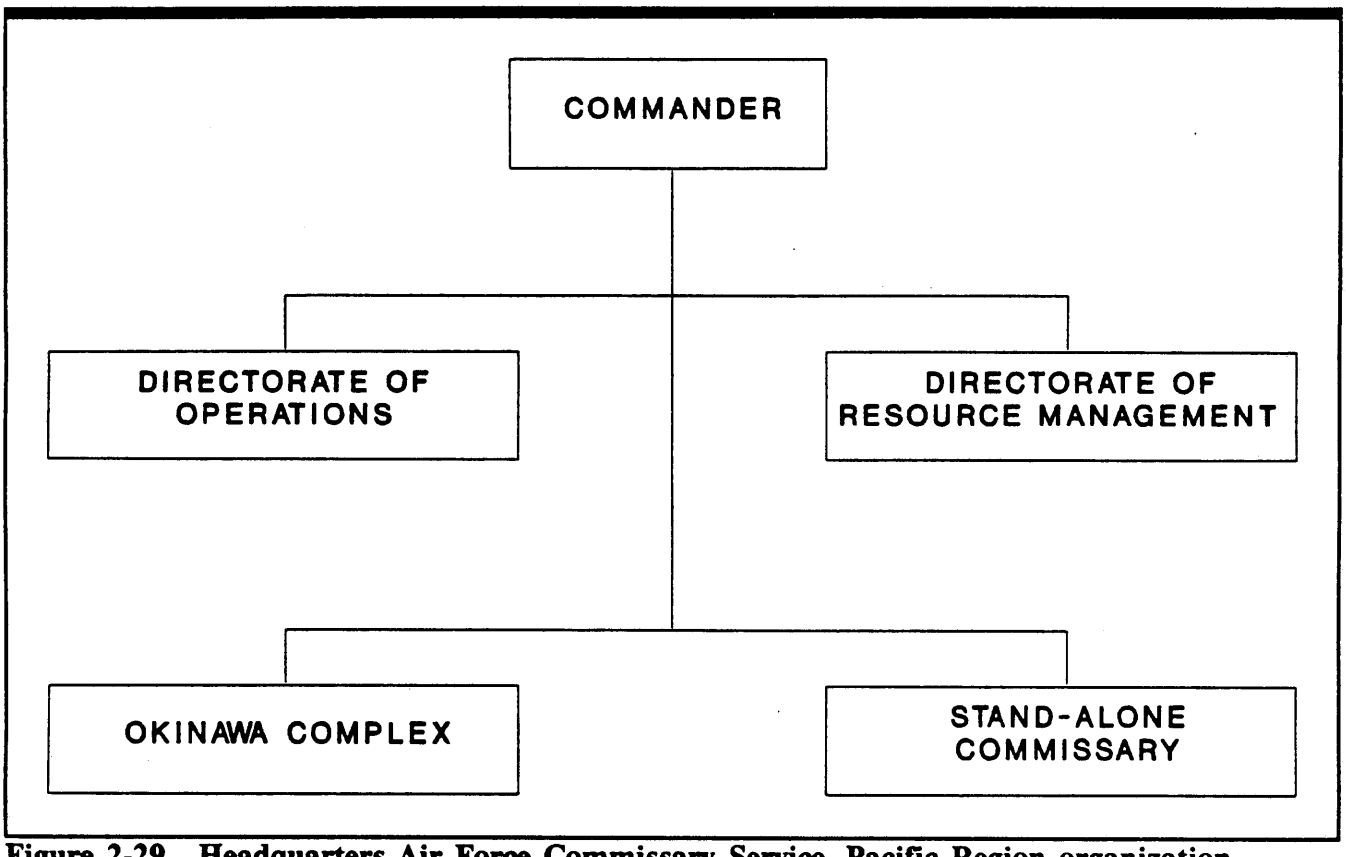


Figure 2-29. Headquarters Air Force Commissary Service--Pacific Region organization

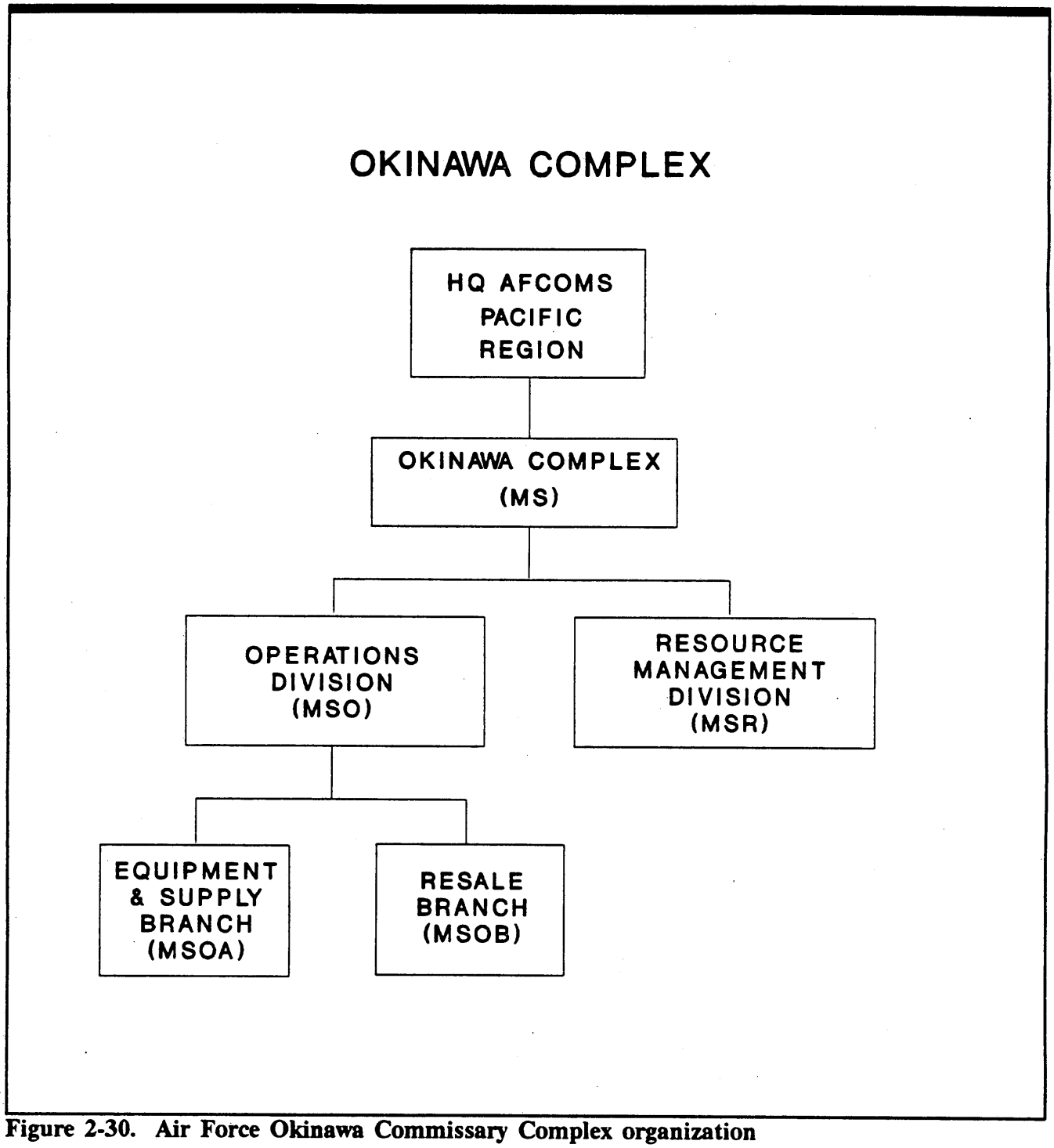


Figure 2-30. Air Force Okinawa Commissary Complex organization

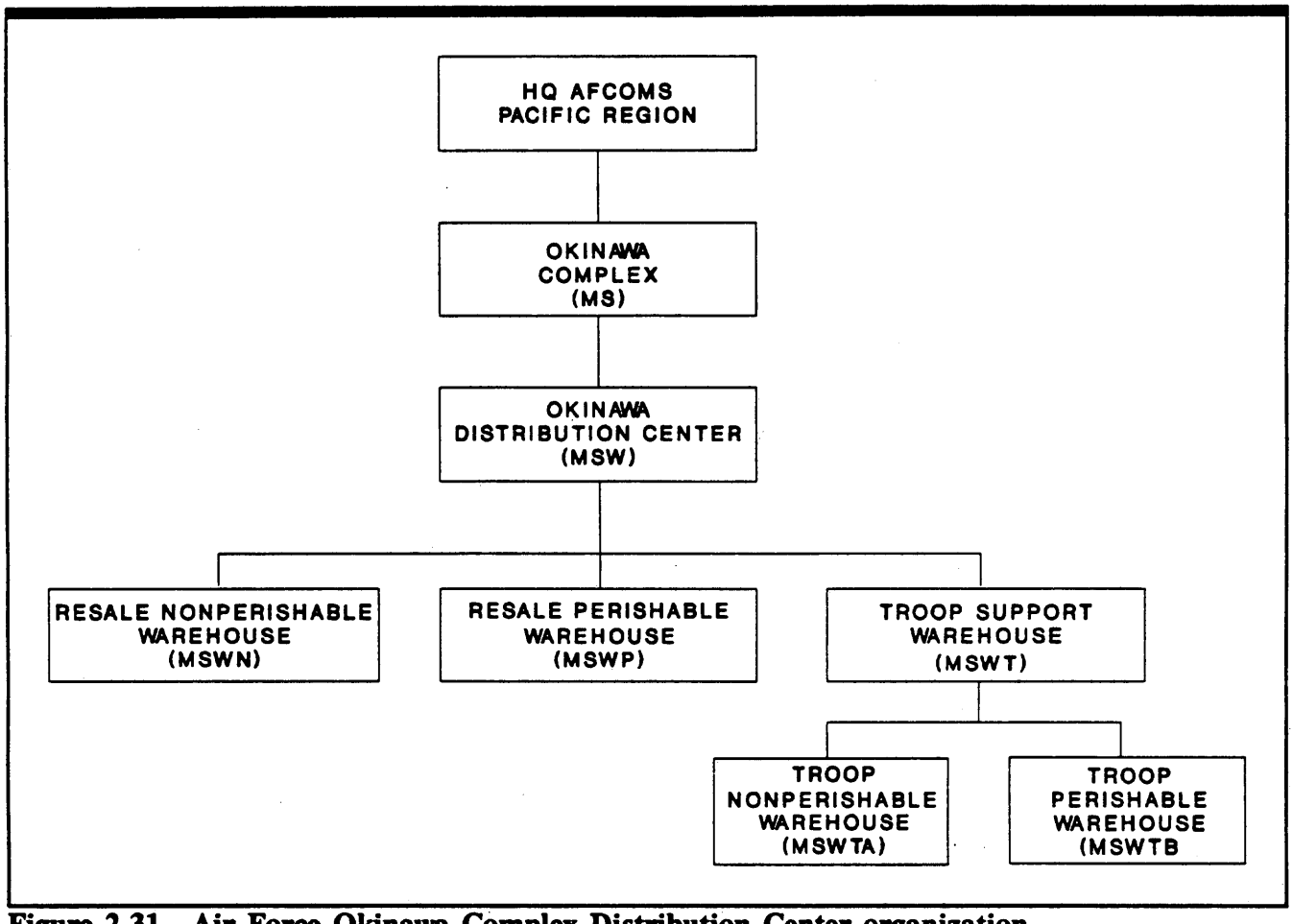


Figure 2-31. Air Force Okinawa Complex Distribution Center organization

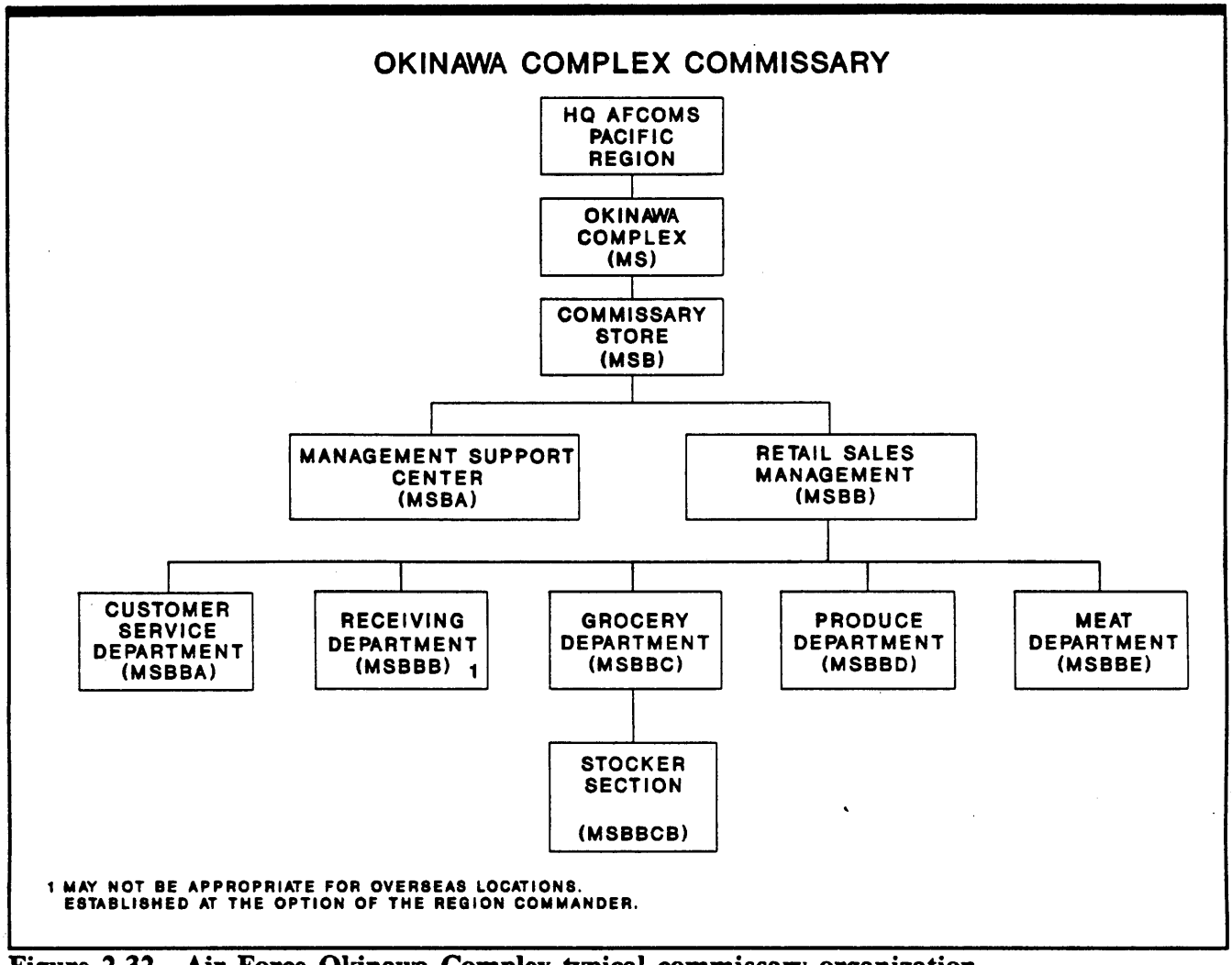


Figure 2-32. Air Force Okinawa Complex typical commissary organization

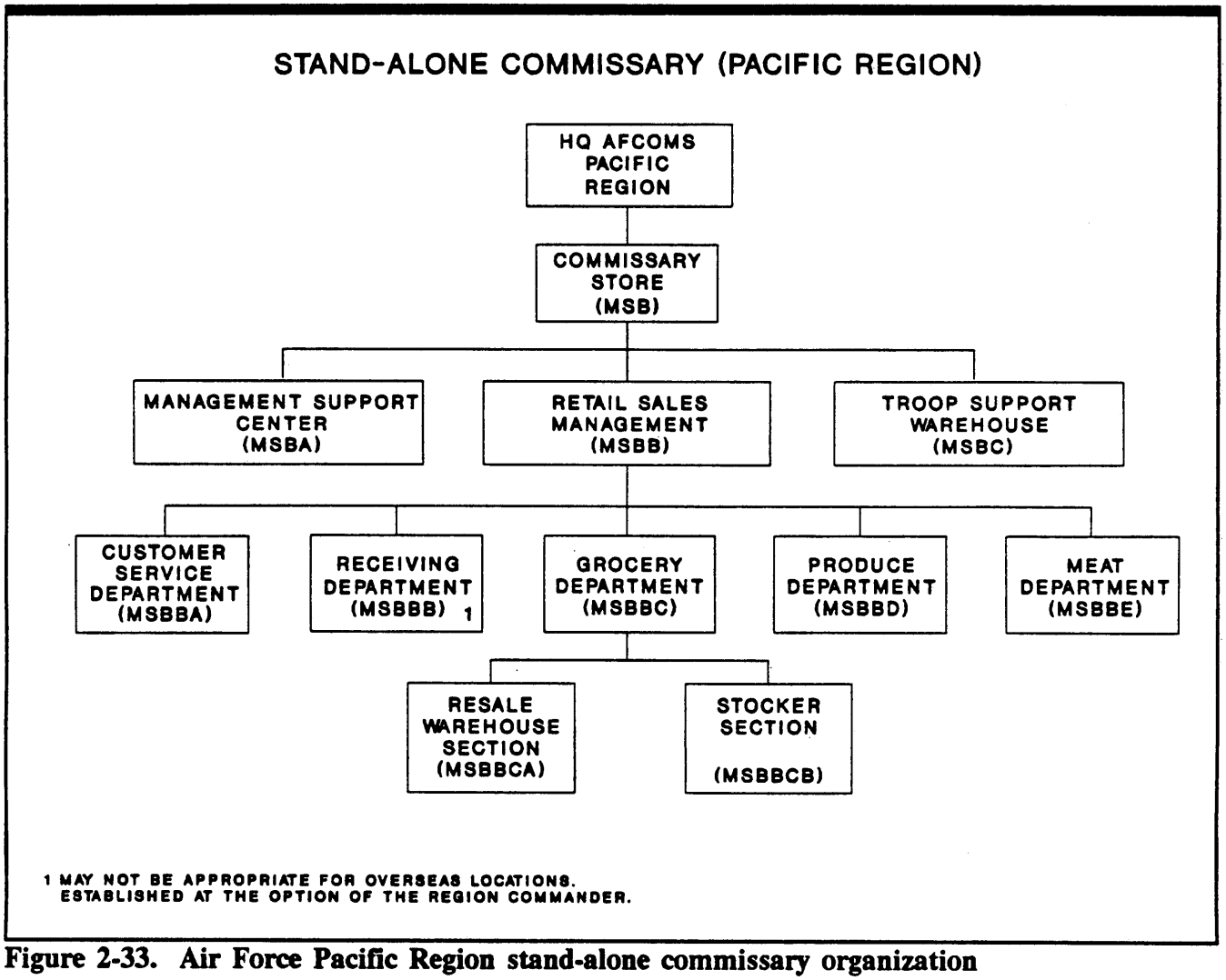


Figure 2-33. Air Force Pacific Region stand-alone commissary organization

DEFENSE LOGISTICS AGENCY
DEFENSE PERSONNEL SUPPORT CENTER (DPSC)
SUBSISTENCE DIRECTORATE

Defense Logistics Agency; DPSC Subsistence Directorate has the responsibility for the worldwide network of wholesale subsistence distribution, procurement, and inventory management for supply support of the military Services as well as domestic support for VA Hospitals, the Federal Prison System and other authorized customers. The additional responsibility for complimentary activities to furnish quality control, cataloging, technical data, and value engineering is also assigned to DPSC.

Within CONUS, DPSC has a distribution network of Defense Subsistence Offices (DSOs)--20 commercial and 2 government warehouses--for issue of hardy chill and frozen subsistence to troop issue activities as well as other authorized customers; V. A. Hospitals for example. Fresh fruits and vegetables for either troop issue or commissary activities are also supplied by these DSOs via field procurements or terminal market acquisitions. For Europe, Kaiserslautern and Bremerhaven warehouses provide perishable subsistence to both troop issue and commissary activities in Central Europe. All food items are the stock of DLA until issue to military services. For overseas customers other than Europe, issue of perishables is accomplished in response to a monthly requisition cycle by the Services. Distribution is made via DSOs Bayonne, N. J., New Orleans, La., and Alameda, Ca. Procurement of practically all hardy chill and frozen perishables is accomplished through indefinite delivery contracts written and executed by DPSC. Individual commissaries, regions, or districts order from vendors under these contracts and included are highly perishable items such as milk, eggs, meats, etc. DPSC's Pacific Region provides the same service for Far East commissaries as well.

Semi-perishable procurement support to commissaries in CONUS is provided via contractual arrangements called supply bulletins (open-end contracts, negotiated and administered at DPSC). Stores or commissary regions order directly from vendors and often better the supply bulletin price since the bulletin is a price quote, not an individually negotiated price based upon a specific order.

Overseas semi-perishable support is provided by the DPSC Direct Commissary Support System (DICOMSS). DPSC publishes and distributes brand name supply bulletins and a master item identification listing for the overseas commissaries. Commissaries in turn submit requisitions monthly which are converted into orders to vendors. If a van-load quantity is ordered by a store from a specific vendor, the shipment goes direct to the store. Less than van-load quantities are consolidated at the Defense Depot Tracy, CA. (DDT) for the Pacific customers, and at Defense Depot Mechanicsburg, PA. (DDMP) for European customers. DDMP and DDT are in essence break-bulk points.

For 9 select small Army stores in Europe, incapable of receiving full SEAVANS from

CONUS, semi-perishables are stored at Defense Subsistence Storage Facility-Germersheim, Germany. Requisitions submitted from TSA for these stores result in Material Release Orders being generated at Germersheim. Also satisfied from Germersheim stocks are high priority orders from TSA or AFCOMS Europe which were cancelled in the DICOMSS system, or for which stores in Europe had no on-hand quantity.

Total wholesale sales to all DPSC customers in FY 1988 was approximately $1.655 billion. Of this amount, approximately $619 million (37 percent) was for military commissary support. Over the past 5 years, sales to commissaries averaged 33.2 percent of total sales. The commissary percentage of total sales went from 29.2 percent in 1985 to 37.4 percent in 1988.

Cost of the total wholesale system related to commissary support is as follows:

- The Defense Personnel Support Center (DPSC) O&M costs not directly reimbursed by the Services for FY 1988 total $35,478,356. Table 2-11 shows a stratification of the cost by Labor/Nonlabor, Overseas/CONUS, and perishables/semiperishables.

- Total overhead costs at Defense Personnel Support Center related to resale subsistence are estimated to be $8.8 million annually.

- Defense Depot Tracy expended $2,305,000 and Defense Depot Mechanicsburg expended $7,226,000 on resale subsistence in FY 1988. No other DLA activities other than DPSC provided O&M resale subsistence support.

Labor	$11,7990,41
Nonlabor	$23,687,945
	$35,478,356
Overseas	$22,428,653
CONUS	$13,049,703
	$35,478,356
Perishable	$30,598,626
Semi-perishable	$ 4,879,730
	$35,478,356

Table 2-11. DPSC O&M costs not directly reimbursed

- PDA [Procurement Defense Agencies (material handling equipment and storage aids)] costs averaged approximately $701,570 per year over the last five years.

- New construction at Subsistence Storage Facilities over the past 5 years (FY 1984-1988) was $7.2 million. The commissary portion of the total averaged $532,800 a year. On the horizon is a $24 million investment in warehouses at Defense Depot Tracey, 20 percent ($4.8 million) of this amount will be used for dry subsistence warehouses for DICOMSS subsistence.

- Total cost for the entire resale support is approximately $55,044,000 annually excluding annual real property maintenance which DLA was unable to provide.

Chapter 3

THE GROCERY INDUSTRY AND ITS MARKET

THE GROCERY INDUSTRY--A MACRO OVERVIEW

The commercial grocery industry is a dynamic, multi-faceted business that changes because of specific ingredients of the industry or because of the economy at large. The 1980s have been generally bullish for the industry with retailers, wholesalers, and manufacturers seeing their prosperity rise rather consistently with the general overall growth seen during this time frame, in the private sector. Growth brings about change, and many changes were seen during the 1980s such as the rise of superstores, hypermarkets, and non-traditional grocery outlets (See Section 3.2) and consolidation throughout the industry due to mergers and acquisitions. If the 1980s were viewed as exciting, the 1990s may unfold as a real thriller with dramatic innovations in systems and equipment as all participants search for ways to overcome the impending labor shortage.

Competition in the industry is an ever-driving force and will remain so for the foreseeable future. However, the face of competition seems to be changing somewhat. Price is still a powerful merchandising weapon, but it's becoming quite obvious that this is no longer the industry's principal strategy. While approaches such as hot specials, cutthroat pricing and double coupons remain as viable

tactics, the degree of emphasis is declining. Industry executives are looking towards more emphasis on perishables, prepared foods and demonstrations/sampling to forge the future. Spending on advertising is increasing with various retailers utilizing mailers and circulars, newspaper inserts, and even radio and TV time. While it is clear that the type of competition may be changing, certainly the degree of competition can only continue to climb with increased efforts from non food retailers, hypermarkets, restaurants and other food-away-from-home outlets.

In-store competition is steadily evolving to improve store profitability with the steady expansion of non-food lines. For example, having a full-line pharmacy increases the store appeal as a one-stop shopping center, and profit margins on drugstore items are typically about twice those of conventional groceries. Including prescriptions in the product mix has a strong impact because profit margins are higher; but, also, the prescription customer increases the potential for repeat business and is likely to shop the whole store while on-site. Clearly the survivors and winners in this ever-changing contest will be those who are captained by visionary leaders capable of developing future approaches to accommodate evolving customer preferences and demographics.

Undoubtedly, the number one challenge ahead is the impending labor shortage brought about by the "Baby Bust", the sharp decline in the teenage population that should continue throughout most of the 1990s. Competition for the available human resources will be exceptionally keen as all industries explore ways to vie for available, qualified workers. This shortage will be greatly multiplied by industry emphasis on labor-intensive service departments. The increased use of part-timers with the younger workers being primary candidates for these jobs will greatly challenge the industry for innovative approaches. (See Figure 3-1)

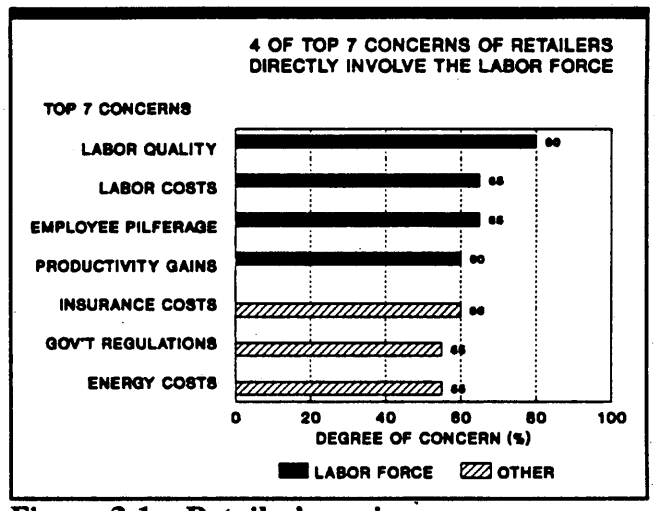


Figure 3-1. Retailer's major concerns

Presently there is much concern about the effect of heightened inflation. Only a few years ago, executives voiced concern over disinflation; but now, after price increases of about 5 percent in 1988, inflation is seen as a growing potential problem. (Figure 3-2) During this same time, "real" expenditures for food consumed in the home decreased by .5 percent showing a direct correlation between rising price levels and lower rates of expenditure. Conversely, expenditures for food eaten away from home paralleled the upward trend of customer's disposable personal income. As the price differential narrows between restaurant meals and food prepared at home, consumers are increasingly less likely to opt for the latter, as long as their disposable personal income is advancing. Essentially, inflation can increase competition for the grocery industry.

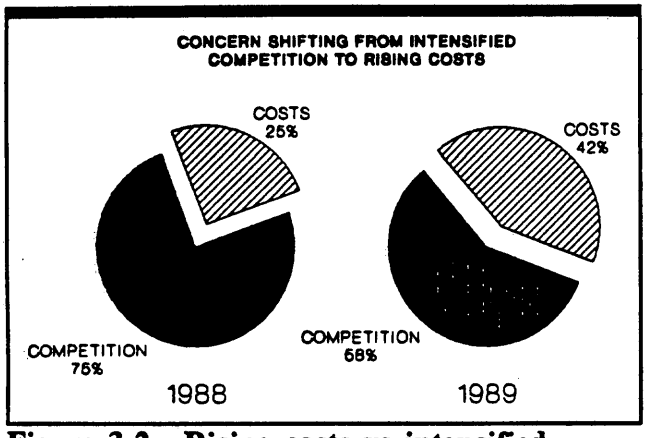


Figure 3-2. Rising costs vs intensified competition

Increasingly, industry participants are realizing that it is important to choose a target population and then market to it. Retailers are spending more time and effort researching the needs of their identified target markets before designing a layout. Stores often realize advantages over competitors by careful research into such factors as the target consumer's tolerance for time spent shopping a large store versus the often competing desire to have multiple product categories under one roof.

The warehouse stores were popular in the early 1980s but more recently appear to be out of step with consumers seeking more service and convenience. Some retailers are using bilingual signs and product lines targeting the Hispanic population. Mean-while, despite the appeal of the food/drug combination formats to consumers seeking one-stop shopping, conventional stores seem to have carved a niche for themselves among shoppers who find the larger stores uncomfortable. The traditional outlets are finding ways to differentiate themselves through unusual services and departments. Marketing surveys repeatedly find that service, rather than price, is the factor most often cited by consumers in determining where they shop for groceries.

NON-TRADITIONAL GROCERY OUTLETS

The entry of discount retailers and mass merchandisers into the food retailing business has the potential of seriously affecting the military resale community as they compete for the Service members' business in common markets. Their strategy depends on being the price leader in a market while offering the convenience of one-stop shopping. This is also the commissaries' appeal, and it will lead to direct confrontation that will result in formidable competition for military business. It is important that commissaries focus on this emerging trend and position themselves to retain their appeal, just as conventional grocery retailers will be doing to maintain their market share.

As shown in Table 3-1, industry executives consider prospects for Superstores, Super Warehouse Stores, Combination Stores, Hypermarkets, and Wholesale Membership Clubs to be much greater than Conventional Supermarkets. The trend is toward larger stores that offer one-stop shopping for groceries as well as general merchandise in all but rural markets where the population is too small to produce the volume larger stores need to survive. A major share of this competition

Prospects for:	Wholesaler executives Excel	Good	Fair/ Poor	Chain executives Excel	Good	Fair/ Poor	Manufacturers Excel	Good	Fair/ Poor
Superstores*	53%	34	13	48%	43	9	49%	40	11
Convenience stores	39%	51	10	22%	53	25	42%	44	14
Super warehouse stores	28%	39	33	16%	47	37	26%	45	29
Combination stores**	26%	52	22	35%	52	13	22%	55	23
Specialty food stores	14%	26	60	10%	31	59	19%	32	49
Hypermarkets	13%	34	53	8%	27	65	24%	47	29
Wholesale membership clubs	10%	39	51	8%	34	58	29%	36	35
Conventional (std.) supers	7%	38	55	8%	32	60	6%	51	43
Warehouse stores	4%	25	71	3%	19	78	12%	35	53
Limited assortment stores	1%	10	89	1%	7	92	3%	21	66

* More than 30,000 square feet. **More than 25% non-foods and pharmacy.
Source: Progressive Grocer

Table 3-1. The future according to executives

in the future will come from discount retailers and mass merchandisers as they expand into full-line groceries with their emphasis on name brand goods at lowest prevailing prices. Grocers in markets which compete with these new format discount stores consider them to be a significant competitive threat.

"The combination of food and general merchandise appears likely to be the most logical evolutionary development to take place in the 1990s," predicts Margaret Gilliam, director of equity research and a senior security analyst for retail trade and soft goods, First Boston Corporation. While there have been combination stores for many years, the difference is that until Wal-Mart put together the Hypermart USA format, according to Bernard Sosnick, senior retail industry analyst with New York City-based Deutsche Bank Group, "No other retailer had tried to operate...with gross margins that average 15 percent to 18 percent."

K-Mart (American Fare) and several other discount retailers have also entered the hypermarket arena, but all are going slowly as they test the concept and redefine their marketing strategies. According to Joseph Ellis, first vice president of Goldman Sachs & Co., New York, "While several of the new hypermarket concepts may be disasters so far when it comes to their profitability, what is clear is that the customers like them and therefore I believe they will do well when they are executed well."

Both Wal-Mart and K-Mart are also testing concepts that offer the same one-stop shopping convenience as the hypermarkets, but on a smaller scale (Wal-Mart's SuperCenter, and K-Mart's Super K-Mart). It is thought that this concept will have the same customer appeal, but at lower operating costs, enabling them to be introduced profitably into smaller markets. "I believe the significance of Hypermarket USA to Wal-Mart will, with hindsight, turn out to have had nothing to do with hypermarkets at all," says Carol Farmer, president of Carol Farmer Associates, a New York City-based marketing consulting firm. "The hypermarket experience has shown Wal-Mart how to build a SuperCenter with a new merchandising, marketing and store design format that has the power to obsolete both conventional supermarkets and discounters, wherever they want to put it. Rumor has it there are at least 300 SuperCenters in Wal-Mart's future."

WAL-MART, HYPERMART USA

Wal-Mart opened three Hypermart USA stores in 1988...Garland, TX; Arlington, TX; and Topeka, KS...another is scheduled to open in Kansas City, MO, in October, 1989. The average size is 220,000 square feet, on a 40-acre site. The merchandise mix is 25 percent grocery and 75 percent general merchandise...there are health and beauty aids with a pharmacy, an expanded electronics department, a deli and bakery, a seafood shop and a full line of produce, frozen foods and dairy departments. They provide a play area for children, and convenient seating throughout the store.

Currently, 77 percent of the merchandise comes through the Wal-Mart distribution system, which is considered essential to volume buying and maintaining high levels of in-stock. The two Texas stores were created as co-ventures with Dallas-based Cullum Cos., a regional supermarket company, but the others and all future stores will have direct food operations. Wal-Mart expects sales in the range of $80-100 million per unit.

As a point of reference, Table 3-2 compares Hypermart USA with the traditional Wal-Mart Discount City.

	Discount City	Hypermart
Square footage	65,000	222,000
Associates	120	600
Truckloads of goods delivered daily	(up to) 3	20
Shopping carts	275	2,000
Parking spaces	390	1,600
Cash registers	14	60

Source: Wal-Mart

Table 3-2. Comparison of two Wal-Mart retail stores

The two Hypermart USA stores in Texas exemplify the threat they pose to existing markets. Each of these stores, on opposite sides of Dallas, are expected to have about $150 million in sales in their first year of operation, and that significant share of the market ($300,000,000) has to come from existing retailers.

Robert Glass, Wal-Mart's president, recently said, "We don't have experience yet to know whether these stores will be successful in the long run. What we have found, though, is that customers like them, that they have the ability to generate tremendous sales, and that the customers will shop the entire store." Pressures are more acute for Hypermart USA since they operate with gross margins of between 13 percent and 14 percent, compared with closer to 18 percent for the SuperCenters.

K-MART, AMERICAN FARE

The K-Mart entry into the hypermarket business is American Fare. Their one store is located in an Atlanta, GA. suburb, and is a joint venture with Bruno's supermarket chain. An analysis by Management Horizons, a Division of Price Waterhouse, indicates that "American Fare has taken hypermarket retailing into a direction that will result in a larger proportion of general merchandise sales, higher margins, bigger tickets, and more impulse purchases than other hypermarket operators have experienced." They also describe the American Fare concept as noted in following paragraphs.

The 244,000 square foot store contains a selling area of 214,000 square feet...35 percent for food, 60 percent for general merchandise, and the balance in the "mall" facing the checkout area. The 40,000 SKU's offer a narrow assortment, but they are deep in selected categories. They expect to sell a larger percentage of higher-margin "trendy" products than the other hypermarkets.

American Fare is equipped with 81 fully-automated POS registers: 61 custom-designed central checkouts for both food and general merchandise (8 express lanes), and 20 registers located in the service departments. More than 600 employees are on the payroll. Sales are expected to split 40-45 percent for general merchandise, and 55-60 percent for food. Sales objectives are in the $100 million range annually ($80-85 million to break even).

WAL-MART, SUPERCENTER

The SuperCenter is a blend of a traditional Wal-Mart store with a supermarket, under one roof. There are currently three stores...Washington, MO. (126,000 square feet); Wagoner, OK. (94,000 square feet); and Farmington, MO. (152,000 square feet). They stock approximately 65,000 items and are designed to replace existing Wal-Mart stores. Glass noted, "So far the customers seem to like these, with their sales as good or better than planned."

The SuperCenter offers an auto center and pharmacy, in addition to a traditional assortment of general merchandise and a full-line food store...the merchandise mix is tailored to meet the specific needs of the smaller Wal-Mart community it serves. The SuperCenter will not offer the specialty shops and services that are in the Hypermart USA, nor the range of high-ticket, name brand or licensed products which are carried to meet the broader needs of a major metropolitan market. It is expected that sales will split 60 percent/40 percent between general merchandise and food, respectively...the goal is a 50 percent/50 percent split.

The Hypermart division will manage the food side of the SuperCenter business, while general merchandise will be managed by the discount store division. There will be a consolidated P & L statement for the entire store, but also separate reports to insure close monitorship of both businesses. There are approximately 300 associates working in the SuperCenter...parking spaces for about 1,100 cars...and 24 checkout registers.

Bill Fields, executive vice president of merchandise and sales for Wal-Mart, commented at the opening of the Washington, MO. store, "We look at the SuperCenters as an extension of our Wal-Mart stores. Our strategy would be to consider any town (for a SuperCenter) where we have a Wal-Mart."

K-MART, SUPER K-MART

The Super K-Mart is designed to compete head-to-head with the Wal-Mart SuperCenter concept. They opened two stores in 1988...in Kankakee, IL., and Clinton, IA. Each has approximately 110,000 square feet, with 23,000 square feet of grocery merchandise. Both stores offer prepackaged meats, dry goods, frozen foods, produce and dairy products. However, neither has a fresh meat counter, bakery, fish or service deli department.

These two stores were remodeled from vacant space adjacent to existing K-Marts (SuperCenters were built new). There is no separate entrance for the food department. There are 20 central checkout registers, all equipped with POS scanners...any merchandise can be purchased at any register. Operating hours are from 8 a.m. to 10 p.m., Monday through Saturday, and 10 a.m. to 7 p.m. on Sunday.

It has been reported that the Super K-Mart concept went from the preliminary discussion phase to opening in a swift six months. It is also noted that there are currently "hundreds" of K-Mart units with adjacent vacant space available. If these two test units are successful, K-Mart has the ability to roll out the new format relatively quickly and painlessly.

CUSTOMER SHOPPING HABITS

In that the military customer is just one segment of the community at large, the community shopping habits, and the industry response to those habits, also reflect trends in how the commissary customer views his food expenditures.

An FMI (Food Marketing Institute) survey of supermarket customers published in Supermarket News (May 15, 1989) identifies what customers consider important in their selection of a supermarket to shop at, and how well their current supermarket fulfilled those expectations. Results for 1989 are shown at Table 3-3.

The Progressive Grocer's 56th Annual Report on the Grocery Industry for 1989 (April 1989) included several surveys that reflect the shopping habits of the supermarket customer.

	Expectations Very/Somewhat Important	Fulfillment Excellent/ Good Rating
Quality Produce (Fruit & Vegetables)	98%	85%
Good Variety or Wide Selection	96	86
Quality Meat	95	84
Courteous, Friendly Employees	94	85
Good/Low Prices	92	71
Readable and Accurate Shelf Tags	92	72
Convenient Location	91	89
Fast Checkout	88	71
Items on Sale/Money-Saving Specials	84	77
Nutrition & Health Info Available	84	55
Convenient Store Layout	76	83
Fresh Food: Deli/Bakery/Fresh Fish	76	81
National Brands	72	88
Express Checkout	71	71
One-Stop Shopping	67	69
Generic or Unbranded Products	44	57

Source: FMI

Table 3-3. Great expectations--how well stores meet them

The competitive tactics used in the supermarket industry to attract a greater share of the local customer mix reflect what they perceive are important to their customers. Those strategies being used by more and more supermarkets are generally the "winners" in effectiveness in giving them the edge over their competitors (or preventing them from losing ground to their competitors). Table 3-4 shows those strategies with increased (decreased) usage today, compared to supermarket chain executives' outlook on the future. Compare this to the FMI survey of customer expectations (Table 3-3).

	Chains' Current Use	Chain Exec Outlook
Emphasis on Perishables	71%	95%
Fresh Prepared Foods Emphasis	62	97
In-Store Demos/Samplings	60	80
Hotter Specials	54	45
Customer Services	51	79
Newspaper Inserts	44	41
TV Advertising	43	50
Hours Open	39	55
Mailers/Circulars	36	47
Newspaper Ads (ROP)	35	(21)
Non-Foods Emphasis	33	59
Store Coupons	31	35
Sunday Openings	31	62
Radio Advertising	30	39
Cutthroat Pricing	21	2
National Brand Emphasis	20	37
Flashy Merchandising Events	9	38
Half-Price Sales	8	17
Continuity Programs	7	(6)
Private Label Emphasis	3	11
Double Coupons	(3)	(17)

Source: Progressive Grocer

Table 3-4. Competitive chain store tactics and plans--percent increase in use

While the greatest share of the consumers' food dollar is spent in supermarkets, there is increasing competition from fast food outlets and non-traditional food retailers, such as drugstores and mass merchandisers. Table 3-5 shows how people at large are spending their food dollar.

Outlet	Percent shopping	Weekly trips	Weekly spending
Supermarket	100%	2.4	$61.51
Convenience store	41	2.4	9.67
Specialty/other food store	18	1.6	17.46
Fast Food restaurant	66	2.4	13.49
Mass merchandiser	63	1.4	19.40
Drugstore	64	1.4	13.59

Source: Progressive Grocer

Table 3-5. Average food expenditures among shoppers

How loyal are customers to their primary grocery store? Table 3-6 shows the average number of supermarkets shopped in each week and the percent of food dollar spent in primary stores. This would indicate that once a preferred store is selected, customers will spend the greatest share of their food dollar there, even though they may shop at other stores as well.

The day of the week, and the time of day, when consumers do their major grocery shopping varied greatly. Employment status (and whether both heads of household worked) was the significant factor...they go when work permits. Customers who were not employed tended to shop earlier in the week and in the mornings. Younger consumers were likely to shop later in the week. Regardless of when they shopped, most consumers spent about 50 minutes in a supermarket for a major shopping trip. Table 3-7 shows the time of day when most consumers were likely to make a major shopping trip...Figure 3-3 shows the day of week most likely for a major shopping trip.

Number of supermarkets shopped in each week:

- One 25%
- Two 47%
- Three 22%
- Four or more 6%

Percent of food dollar spent in:

- Primary store 71%
- Other stores 29%

Source: Progressive Grocer

Table 3-6. Store loyalty prevails

	Morning (8 a.m.-Noon)	Afternoon (Noon-5 p.m.)	Evening (5p.m.-9 p.m.)	Late Night (9p.m.-8 a.m.)
Total	37%	38%	22%	3%
Monday	51	33	16	-
Tuesday	38	38	17	7
Wednesday	26	48	24	2
Thursday	40	40	19	1
Friday	26	25	39	10
Saturday	36	39	22	3
Sunday	52	28	17	3

Source: Progressive Grocer

Table 3-7. Time of day chosen for a major shopping trip (by percent)

1984	7.9%	1987	8.4%
1985	8.0%	1988	9.0%
1986	8.1%	1989	9.5%

1991-93 (estimated) **10.0%**

Gross margins are increasing for food wholesalers.

Table 3-8. Gross margins--food wholesalers industry

on the mid-to-small-size grocery chains. Additionally, the consolidation activity has obviously produced fewer, yet bigger, wholesalers who will be in the enviable position of demanding greater profit margins.

Recent survey data indicates that wholesalers perceive an increase in the number of deals and allowances offered, in the performance requirements on deals and allowances, in the usage of manufacturer's material, and in the number of new item presentations. In 1987, supermarkets supplied by wholesalers accounted for more than 50 percent of the industry's volume for the first time; 1988 saw a slight increase to this figure. Although the number of firms continued to drop because of consolidations, the firms remaining were more productive in 1988. Net sales and tonnage both increased from 1987, while transportation, utilities and insurance costs all fell as a percentage of sales.

1984	7.9%	1987	8.4%
1985	8.0%	1988	9.0%
1986	8.1%	1989	9.5%
1991-93 (estimated)			**10.0%**

Gross margins are increasing for food wholesalers.

Table 3-8. Gross margins--food wholesalers industry

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Chapter 4

COMMISSARY PATRON BASE

OVERVIEW

Authorized commissary patrons are a very diverse segment of the community at large who depend on the commissary as an integral part of their overall compensation package. There is a deep seated feeling that the commissary is an entitlement that "comes with the job" and this fosters "expectations" for levels of service and savings that create the environment in which the commissaries must operate. To better serve the needs of this patron base and to achieve optimum return on appropriated fund investments, it is important to fully understand just who our customers are and what influences their buying decisions.

Commissary privileges are authorized for the classes of individuals, organizations, and activities specified in paragraph 2-101.1 through 2-101.19 of DoD Directive 1330.17-R (Appendix B). "The primary consideration in authorizing commissary privileges to individuals is the compensation status of the member, or in the case of dependents, the sponsor's compensation status. The intent of patronage is to provide an income effect benefit through savings on food and household items necessary to subsist and maintain the household of the military member and family for the inclusive period of compensated duty. The primary consideration in authorizing commissary privileges to organizations or other activities is the compensation status of the beneficiary of the organizational or activity support."

The core of the commissary patron base is active duty Service members and their immediate families, retirees, and selected reserve members. These groups represent about 7 3/4 million authorized commissary customers worldwide. Their composition is described in the following paragraphs.

DEMOGRAPHICS

ACTIVE DUTY

TROOP STRENGTH

There were 2,115,773 Service members on active duty as of 31 March 1989. A break out by Service is shown at Figure 4-1.

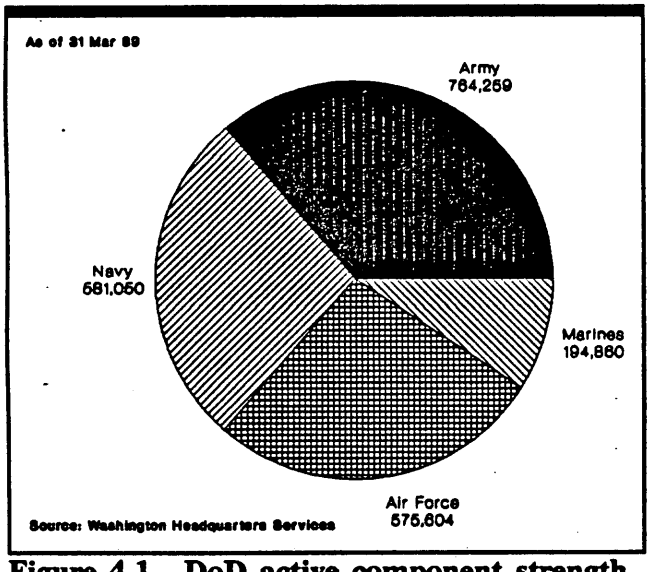


Figure 4-1. DoD active component strength

TRENDS

Troop strength has been relatively stable since the Vietnam Conflict. A historical perspective of Service troop strength levels is shown at Figure 4-2. The FY 1990/1991 DoD Biennial Budget reflects active duty strength going from 2,133,000 in FY 1989 to 2,138,200 in FY 1990 (growth primarily in Navy), to 2,135,000 in FY 1991 (loss primarily in Air Force with planned reductions in GLCM forces associated with the INF Treaty). However, there are indications that a more sizable reduction will occur if more troops in Europe are withdrawn as a result of peace initiatives, and if budget cuts continue at current pace.

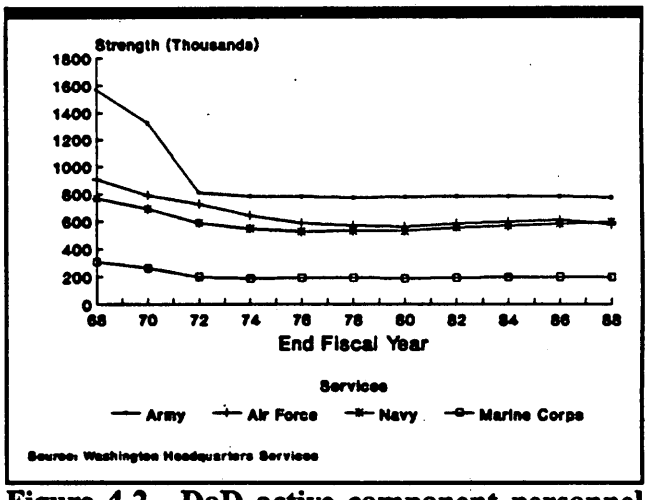


Figure 4-2. DoD active component personnel strength trends

RECRUITMENT

While only 49 percent of those in their first term reenlisted in FY 1988, 85 percent of

those past their initial extension reenlisted (Table 4-1). This compares to rates of 37 percent and 72 percent, respectively, for FY 1978--an increase of 32 percent and 18 percent, respectively in ten years. The cost of training and the dwindling labor pool from which to draw will reduce the success of recruitment efforts and increase the importance of retention in the years ahead. This will accelerate the aging of the Services and the retention of perceptions of commissaries being formed today. The Services will rely increasingly on the Service members' life style as a key inducement to retain qualified people, and the military resale services contribute significantly to a favorable quality of life. Trends in the work force at large that will affect recruitment include:

- Smaller labor supply (1.0 percent growth in 1990s compared to 2.9 percent growth in 1970s).
- Drop in younger age groups (24 percent decline in military aged youth).
- Aging work force (median age of 39 in 2000 compared to 35.5 today).
- More women (60 percent of all labor force additions between 1985-2000 will be women).
- More minorities and immigrants (Blacks, Asians, and Hispanics account for 70 percent of growth in labor force through 2000--white males only 15 percent of growth).
- Shortage of trained or trainable personnel (1/3 of the labor force over 17 cannot adequately read, write or compute--jobs are becoming more technical and require frequent retraining--increases competition for smaller pool of qualified people).

First Term	FY78	FY88	Increase (Decrease)
Army	36%	48%	33%
Navy	40	54	35
Marine Corps	29	26	(10)
Air Force	41	55	34
DoD	37	49	32
Career			
Army	69	98	42
Navy	64	76	19
Marine Corps	69	76	10
Air Force	82	88	7
DoD	72	85	18

Source: Washington Headquarters Services.

Table 4-1. Reenlistment rates

OFFICER/ENLISTED RATIOS

Overall, officers comprise 14.2 percent of the total active duty strength. This is up from 1984 when officers were 14.0 percent of the total (298,829 officers in a total of 2,139,730). Congressional efforts to improve the balance of this ratio appear to have achieved their purpose. The number of officers is one indicator at the local level of the different needs and capabilities of a store's patrons. The break out of officers and enlisted members by Service as of 30 September 1988 is shown at Table 4-2.

	Army	Navy	Marine Corps	Air Force	Totals
Officers	106,963	72,427	20,079	105,126	304,595
Enlisted	660,445	514,244	177,271	466,856	1,818,816
Academy Cadets	4,439	5,899	-	4,464	14,802
Totals	771,847	592,570	197,350	576,446	2,138,213

Note: As of September 30, 1988.
Source: Washington Headquarters Services.

Table 4-2. Officer and enlisted strengths

RANKS

A more detailed break out of officer and enlisted members' ranks in each Service is shown at Table 4-3. Since a member's rank determines salary level, this data is an important indicator to the resale community of spendable income.

Rank/Grade	DoD	Army	Navy	Marine Corps	Air Force
GEN - ADM	36	10	10	3	13
LTG - VADM	123	47	31	8	37
MG - RADM	367	143	83	24	117
BG - RADM(L)	531	197	132	35	167
COL - CAPT	14,400	4,427	3,824	640	5,509
LTC - CDR	32,882	10,860	7,973	1,623	12,426
MAJ - LCDR	53,234	16,791	13,614	3,214	19,615
CPT - LT	105,805	34,007	22,621	6,131	43,046
1LT - LT (JG)	42,408	15,055	8,478	4,274	14,601
2LT - ENS	35,298	10,350	12,705	2,648	9,595
CWO - W-4	3,176	2,126	862	188	-
CWO - W-3	4,829	3,776	774	279	-
CWO - W-2	8,827	6,921	1,320	586	-
WO - W-1	2,679	2,253	-	426	-
Total Officers	304,595	106,963	72,427	20,079	105,126
E-9	15,166	4,256	4,569	1,483	4,858
E-8	38,326	14,708	10,129	3,812	9,677
E-7	132,996	50,873	33,765	9,505	38,853
E-6	244,472	87,146	82,910	15,474	58,942
E-5	360,875	117,695	105,958	25,423	111,799
E-4	458,885	200,171	108,840	32,939	116,935
E-3	304,732	93,272	72,714	53,997	84,749
E-2	145,079	48,944	46,838	21,310	27,987
E-1	118,285	43,380	48,521	13,328	13,056
Total Enlisted	1,818,816	660,445	514,244	177,271	466,856
Cadets & Midshipmen	14,802	4,439	5,899	-	4,464
Grand Total	2,138,213	771,847	592,570	197,350	576,446

Note: As of September 30, 1988
Source: Washington Headquarters Services

Table 4-3. DoD active component military personnel strength by grade

AGE

Generally, the military consumer is younger than the market at large, with 70.5 percent being 30 or younger--16.8 percent are 21 or younger (as of 31 December 1988). A break out of these statistics is shown at Table 4-4. However, as noted above, the average age of troops will likely increase as recruitment becomes more difficult and emphasis is placed on retention.

	ARMY		NAVY		MARINE CORPS		AIR FORCE		TOTAL DOD	
AGE	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL
Under 21	44	135,889	6	107,186	0	52,014	0	59,119	50	354,208
21-25	15,694	231,586	11,831	176,544	3,772	69,563	12,751	156,756	44,048	634,449
26-30	25,230	130,661	17,751	104,567	5,259	28,264	26,648	115,192	74,888	378,684
31-35	24,139	83,919	14,768	61,020	4,502	14,257	23,132	68,454	66,541	227,650
36-40	20,377	50,005	13,173	38,370	3,623	7,811	20,385	50,970	57,558	147,156
41-45	13,534	17,449	9,389	13,966	2,183	2,358	15,310	16,159	40,416	49,932
46-50	5,129	4,075	3,537	3,295	625	571	4,782	2,774	14,073	10,715
Over 50	1,697	437	1,392	531	176	71	1,309	152	4,574	1,191
Unreported	603	307	134	70	1	0	103	1	841	378
Totals	106,447	654,328	71,981	505,549	20,141	174,909	104,420	469,577	302,989	1,804,363

Source: Washington Headquarters Services.
Note: Includes DOD active components only. As of December 31, 1988.

Table 4-4. DoD active component strength by age groupings

EDUCATION

A 100 percent of officers and 97.3 percent of enlisted Service members have graduated from high school (or obtained GED equivalent) in FY 1988, up from 99.8 percent of officers and 87.8 percent of enlisted members in FY 1977 (Table 4-5). The demand for educated and skilled workers will increase, but education is becoming more perishable--the numbers of degrees granted are expected to decline. The academic quality of new recruits is therefore likely to worsen in the years ahead--the smaller size of recruitment pool and an increase in high school dropouts (together with an increase in illiteracy) forces an increase in competition for higher quality youth at a time when recruiting budgets are being reduced. Lifelong training and retraining will become more common in order to cope with the technological improvements anticipated--this will force more in-house training and greater reliance on adoption of easy-to-use-and-maintain systems.

	Officers		Enlisted	
	FY 77	FY 88	FY 77	FY 88
Graduated From College	88.3%	95.0%	2.7%	2.4%
Two or More Years in College	93.7	97.8	9.5	9.1
Completed Some College	96.1	98.5	18.5	22.6
Graduated From High School	99.8	100.0	87.8	97.3
Completed Some High School	N/A	100.0	99.6	99.9

Source: Washington Headquarters Services.

Table 4-5. Estimated education levels of active duty military

MINORITIES IN UNIFORM

The number of "minorities" in uniform continues to grow, as it does in the population at large, and this trend is expected to continue. As of March 1989, "minorities" accounted for 31.3 percent of the enlisted ranks and 11.7 percent of the officer ranks. This varied by Service as shown at Table 4-6. The Army projects that by the year 2009, "minorities" will make up 50 percent of their ranks (compared to 35 percent of U.S. males in 17-21 age range). All Services anticipate similar increases in "minority" populations.

	Blacks		Hispanics		Other		Total	
Officers	No.	%	No.	%	No.	%	No.	%
Army	11,285	10.6	1,739	1.6	3,265	3.1	16,289	15.3
Navy	2,570	3.6	1,456	2.0	2,775	3.9	6,801	9.5
Marines	1,012	5.0	429	2.1	362	1.8	1,803	8.9
Air Force	5,633	5.4	2,110	2.0	2,788	2.7	10,531	10.1
Total DoD	20,500	6.8	5,734	1.9	9,190	3.0	35,424	11.7
Enlisted								
Army	201,660	30.9	27,403	4.2	30,273	4.6	259,336	39.7
Navy	81,809	16.2	26,467	5.3	28,572	5.7	136,848	27.2
Marines	36,479	20.9	11,475	6.6	5,348	3.1	53,302	30.5
Air Force	80,975	17.3	17,514	3.8	15,680	3.4	114,169	24.4
Total DoD	400,923	22.3	82,859	4.6	79,873	4.4	563,655	31.3

Note: As of March 1989.
Source: Defense Manpower Data Center.

Table 4-6. Minorities in uniform

WOMEN IN UNIFORM

Women comprised 10.7 percent of the enlisted ranks and 10.8 percent of the officer ranks as of March 1989 (See Table 4-7). With the continued growth of the percent of women in the labor pool and a general relaxation of combat exclusion laws for women, there will be a general increase in the number of women in all Services. There will be a corresponding movement of women into more senior positions and into career fields previously not open to them.

	Officers		Enlisted	
	No.	%	No.	%
Army	11,851	11.1	72,630	11.1
Navy	7,258	10.1	47,826	9.5
Marines	689	3.4	8,963	5.1
Air Force	13,014	12.5	62,405	13.4
Total DoD	32,812	10.8	191,824	10.7

Note: As of March 1989.
Source: Defense Manpower Data Center.

Table 4-7. Women in uniform

WHERE THEY SERVE

As of 31 March 1989, 75.5 percent of U.S. Service members were assigned in the United States or its territories, 16.3 percent in Western and Southern Europe, and 6.9 percent in East Asia and the Pacific. A further break out of countries/regional areas where Service members are assigned is shown at Table 4-8.

	Total	Army	Navy	Marines	Air Force
United States, U.S. Territories & Special Locations					
Cont. United States	1,282,583	452,468	268,080	144,027	418,008
Alaska	22,789	9,373	2,315	173	10,928
Hawaii	45,348	18,416	12,604	8,565	5,763
Guam	8,224	35	4,405	360	3,424
Puerto Rico	4,089	379	3,511	154	45
Region Total	1,597,516	496,253	493,236	159,757	448,270
Western and Southern Europe					
Belgium	2,368	1,504	133	32	699
Germany	254,702	214,087	339	106	40,170
Greece	3,255	406	550	16	2,283
Iceland	3,308	2	1,823	101	1,382
Italy	15,813	3,860	5,596	305	6,052
Netherlands	2,849	794	17	10	2,028
Portugal	1,658	57	385	11	1,205
Spain	8,281	18	3,676	180	4,407
Turkey	4,877	1,169	109	19	3,580
United Kingdom	27,594	259	2,417	377	24,541
Region Total	344,078	222,243	31,777	3,336	86,722
East Asia and Pacific					
Japan	49,591	2,176	7,196	24,288	15,931
Philippines	15,395	173	5,037	978	9,207
Republic of Korea	46,171	32,052	391	2,233	11,495
Region Total	146,026	34,530	44,744	29,773	36,979
Africa, Near East and South Asia					
Region Total	6,457	1,413	4,047	603	394
Western Hemisphere					
Bermuda	1,861	0	1,787	74	0
Cuba	2,384	10	1,906	466	2
Honduras	2,807	2,628	5	13	161
Panama	10,808	6,953	517	484	2,854
Region Total	21,311	9,749	7,058	1,281	3,223
Other					
Region Total	385	71	188	110	16
Worldwide					
Ashore	1,869,307	764,259	339,912	189,532	575,604
Afloat	246,466	0	241,138	5,328	0
Grand Total	2,115,773	764,259	581,050	194,860	575,604

Note: Individual countries are identified when more than 1,200 military members are assigned there. Transients, members afloat, and those assigned to other countries are included in region totals. As of March 31, 1989.

Source: Washington Headquarters Services.

Table 4-8. DoD active component military strength by region

FAMILY MEMBERS

The extended family members of those serving on active duty are an important segment of the commissary patron base. The Navy projects (as do all Services) that by the year 2000, the typical sailor will be married with a greater number of home commitments--they will expect compensation to allow them to live in conditions equal to the civilian population which they defend--and this will require a service commitment to providing adequate family and personal support.

HOW MANY

As of 30 September 1988, there were 2,910,277 family members--for 2,123,411 active duty sponsors (See Table 4-9).

	Military Members	Spouses	Children	Parents/ Other	Total Dependents
Army					
Officers	106,963	71,924	117,913	10,284	200,121
Enlisted	660,445	330,337	537,162	53,508	921,007
Total	767,408	402,261	655,075	63,792	1,121,128
Navy					
Officers	72,427	50,580	71,441	390	122,411
Enlisted	514,244	255,088	336,008	3,448	594,544
Total	586,671	205,668	407,449	3,838	716,955
Marines					
Officers	20,079	14,489	22,577	54	37,120
Enlisted	177,271	74,722	97,182	408	172,312
Total	197,350	89,211	119,759	462	209,432
Air Force					
Officers	105,126	79,832	115,717	1,043	196,592
Enlisted	466,856	295,757	367,204	3,209	666,170
Total	571,982	375,589	482,921	4,252	862,762
Total DoD					
Officers	304,595	216,825	327,648	11,771	556,244
Enlisted	1,818,816	955,904	1,337,556	60,573	2,354,033
Total	2,123,411	1,172,729	1,665,204	72,344	2,910,277

Note: As of September 30, 1988.
Source: Washington Headquarters Services.

Table 4-9. Active component family members

WHERE THEY LIVE

As would be expected, the families of active duty Service members live predominantly in the United States (82.4 percent), as is shown at Table 4-10.

	Army	Navy	Marines	Air Force	Total
Cont. United States	784,381	646,736	187,856	687,871	2,306,844
Alaska	13,167	1,642	93	14,965	29,867
Hawaii	18,855	20,483	7,578	8,771	55,687
U.S. Territories	922	8,338	293	5,024	14,577
Foreign Locations	197,256	38,500	13,406	143,035	392,197
Total	1,014,581	715,699	209,226	859,666	2,799,172

Note: As of March 31, 1989.
Source: Washington Headquarters Services.

Table 4-10. Family member locations

WHO ARE THEY

An Air Force study estimates that:

- 67 percent of their members have family responsibilities
- 60 percent of the spouses are in the labor force (dual income)
- 75 percent of the families have one to two children in the household
- 50 percent of the families with children have children under the age of five

The Army projects that:

- 86 percent of the Army career force will be married by 2009, compared to 82 percent today.

An Army survey of over 12,500 spouses in 1987 found that:

- A large majority (83 percent) of wives surveyed are in their first marriage--60 percent have one or two children--25 percent have no dependent children
- 63 percent of wives surveyed were in the labor force--those with children under three, 49 percent were in labor force
- Among employed wives, 63 percent work full-time, 32 percent work part time, and 5 percent are self-employed
- Spouse satisfaction with Army as way of life varies--overall, 60 percent say they are satisfied, 25 percent are neutral, and 15 percent are dissatisfied--spouses of officers are more likely to be satisfied (72 percent to 57 percent of enlisted spouses)--also

related to pay grade with higher ranks being more satisfied

- 38 percent live in on-post government housing (45 percent in overseas areas, 34 percent in CONUS)--37 percent live in off post rental housing--15 percent live in off post homes they own or are buying--10 percent live in off post government housing

SELECTED RESERVES

Selected reserves are pre-trained individual members of the Ready Reserve, and they are eligible for commissary privileges if they perform a minimum of 12 days of active duty or active duty for training. If on active duty, they have commissary privileges for the inclusive period of their active duty--if on active duty for training, they receive a Commissary Privilege Card which authorizes the bearer 12 days of discretionary visits during the year in which 12 or more days of training was performed.

HOW MANY

A break out of Selected Reserve members is shown at Table 4-11. Reliance on reserves is expected to continue into the future--they will become an important national pool for critical capabilities, such as medical and linguistic skills.

	Army National Guard	Army Reserve	Naval Reserve	Marine Corps Reserve	Air National Guard	Air Force Reserve	Total DoD
Officers	47,839	58,477	28,257	3,663	13,915	16,658	168,809
Enlisted	403,611	251,980	119,238	40,005	100,672	64,466	979,972
Total	451,450	310,457	147,495	43,668	114,587	81,124	1,148,781

Note: As of March 1989.
Source: Defense Manpower Data Center.

Table 4-11. Strength of the Selected Reserve

AGES

In comparison to active duty Service members, Select Reserve members are somewhat older, with only 52.8 percent being 30 or younger (70.5 percent of active duty were 30 or younger). This is to be expected, but it has a bearing on service needed by this segment of the commissary patron base. A break out by reserve segment is shown at Table 4-12. These members are more geographically disbursed--they do not necessarily live within easy driving distance of a commissary--and they are thus less likely to be regular commissary customers. Since they generally have civilian jobs, their family incomes may also make them less dependent on the savings available from commissaries and they would thus be more apt to use other shopping alternatives if the commissary fails to make shopping convenient.

AGE	ARNG OFF	ARNG ENL	USAR OFF	USAR ENL	USNR OFF	USNR ENL	USMCR OFF	USMCR ENL	ANG OFF	ANG ENL	USAFR OFF	USAFR ENL	TOTAL OFF	TOTAL ENL
Under 21	118	64,487	25	47,552	0	11,018	0	12,128	0	5,266	0	2,644	143	143,095
21-25	6,907	104,826	4,018	72,380	466	32,349	10	18,228	387	18,687	201	11,147	11,984	257,617
26-30	8,148	71,780	7,074	43,216	3,198	20,924	610	4,955	1,725	18,073	1,287	13,221	22,042	172,169
31-35	6,976	46,124	8,524	27,568	7,575	16,479	1,024	1,864	2,606	13,836	3,063	10,701	29,768	116,572
36-40	9,058	46,421	12,746	25,189	7,454	16,128	862	1,317	3,291	16,069	3,312	10,062	36,723	115,186
41-45	9,194	37,203	14,839	20,186	5,934	12,639	754	1,047	3,389	14,156	4,795	8,337	38,905	93,568
46-50	3,840	17,464	6,831	9,106	2,424	5,855	279	360	1,665	7,764	2,341	4,243	17,330	114,792
Over 50	3,595	15,209	3,858	6,111	1,098	3,450	124	106	850	6,820	984	4,111	10,509	35,807
Unknown	3	97	562	672	113	396	0	0	2	1	1	0	681	1,166
Totals	47,839	403,611	58,477	251,980	28,257	119,238	3,663	40,005	13,915	100,672	16,658	64,466	168,809	979,972

Source: OASD(RA). RCS: DD-RA(M)1147/1148, Report A7, March 1989, pp. 110 - 121.
Note: Data includes approximately 70,000 full-time military personnel (AGRs).

Table 4-12. DoD Selected Reserve strength by age groupings.

RETIREES

The retiree and his/her family are authorized commissary patrons and are often regular shoppers. They frequently live within easy driving distance of an installation offering medical support, as well as commissary and exchange outlets. For many, commissary savings are what makes it possible for them to live a healthy and dignified retired life. They strongly believe that the commissary is an entitlement that they earned with personal sacrifices while on active duty serving their country.

HOW MANY

Table 4-13 shows a break out by type of retirement of the 1,566,899 retirees as of 30 September 1988. It reflects only those retirees receiving retirement pay from the Services.

Non-Disability	1,230,599
Disability--	
Temporary	12,297
Permanent	124,839
Fleet Reserve	59,365
Survivor Benefits*	139,799
Total	1,566,899

Notes: * number of families.
As of September 30, 1988.
Source: Washington Headquarters Services.

Table 4-13. Military retiree annuitants

WHERE DO THEY LIVE

Retirees live around the world, but with the preponderance living in the United States. A break out is shown at Table 4-14.

	Army	Navy	Marine Corps	Air Force	Total DoD
Alabama	17,802	5,522	1,235	12,966	37,525
Alaska	1,707	494	102	3,006	5,309
Arizona	10,912	5,615	2,002	18,589	37,118
Arkansas	6,755	4,117	829	9,054	20,775
California	41,604	86,185	18,879	68,206	214,874
Colorado	13,390	3,913	957	17,747	36,007
Connecticut	3,034	5,078	587	2,231	10,930
Delaware	1,183	715	160	2,860	4,918
District of Columbia	2,551	719	171	1,516	4,957
Florida	37,034	45,689	6,200	55,844	144,767
Georgia	29,282	8,213	2,697	16,098	56,290
Guam	280	634	49	295	1,258
Hawaii	4,885	3,325	813	2,959	11,982
Idaho	1,685	1,749	357	3,434	7,225
Illinois	9,851	6,778	1,625	9,719	27,973
Indiana	7,242	3,416	1,064	5,337	17,059
Iowa	2,979	1,994	467	2,432	7,872
Kansas	6,662	2,407	552	5,601	15,222
Kentucky	11,014	2,603	698	3,993	18,308
Louisiana	8,407	4,516	1,125	11,018	25,066
Maine	2,513	3,280	497	3,315	9,605
Maryland	14,418	10,566	1,691	10,184	36,859
Massachusetts	7,674	6,590	1,325	6,764	22,353
Michigan	8,120	4,659	1,357	7,115	21,251
Minnesota	4,301	3,133	696	3,858	11,988
Mississippi	5,524	4,454	735	8,775	19,488
Missouri	10,445	5,520	1,668	9,191	26,824
Montana	1,292	1,008	259	2,321	4,880
Nebraska	1,871	1,411	277	5,821	9,380
Nevada	2,942	3,421	827	8,276	15,466
New Hampshire	2,446	1,943	419	3,645	8,453
New Jersey	11,553	5,873	1,339	5,406	24,171
New Mexico	4,579	2,262	545	8,632	16,018
New York	13,814	8,121	2,206	10,209	34,350
North Carolina	21,791	8,563	6,970	13,163	50,487
North Dakota	638	324	63	1,324	2,349
Ohio	10,671	6,160	1,966	14,485	33,282
Oklahoma	11,707	3,748	977	11,239	27,671
Oregon	4,847	5,833	1,147	5,722	17,549
Pennsylvania	16,592	10,327	2,758	10,626	40,303
Puerto Rico	6,564	307	138	683	7,692
Rhode Island	1,347	3,547	241	893	6,028
South Carolina	13,573	9,720	2,218	13,139	38,650
South Dakota	968	478	95	1,927	3,468
Tennessee	12,932	7,744	1,789	9,790	32,255
Texas	53,270	18,305	4,709	68,022	144,306
Utah	2,428	1,353	326	3,955	8,062
Vermont	1,121	555	113	840	2,629
Virginia	29,836	35,289	5,573	19,042	89,740
Virgin Islands	134	53	10	44	241
Washington	18,313	16,359	1,816	17,109	53,597
West Virginia	3,397	1,930	597	2,539	8,463
Wisconsin	5,048	2,896	767	3,772	12,483
Wyoming	709	503	99	1,634	2,945
Other	9,817	7,654	678	8,289	26,438
TOTAL	535,474	397,571	87,460	554,654	1,575,159

Note: As of September 30, 1988.
Source: Washington Headquarters Services.

Table 4-14. Location of retirees

REMOTE AND ISOLATED INSTALLATIONS

The customers needs are greatest where they have fewer alternatives for obtaining goods and services necessary for an acceptable standard of living. It is also at these locations that the government has the greatest obligation to provide for those goods and services. While this responsibility is widely accepted for Service members and their families assigned overseas, there are also locations in CONUS that are considered "remote and isolated" from adequate shopping alternatives. The military community at these locations deserves continuing full support.

In the Fiscal Year 1989 Defense Authorization Act Conference Report (100-753), Congress recognized a need to provide appropriated fund support to morale, welfare, and recreation business activities (at a level consistent with basic community support activity levels) when the facility was characteristically "remote and isolated." They subsequently approved a criteria for classifying an installation as "remote and isolated," and agreed (with several exceptions) to a list of such locations provided by the Services. This criteria and the resulting list of installations identified as "remote and isolated" are equally applicable in considering appropriated funding support provided to commissary systems at these locations.

The criteria approved by the House Armed Services Committee for classifying "remote and isolated" installations is provided at Table 4-15.

Installations generally meeting one or more of three classification criteria are considered "remote and isolated" for the purpose of MWR appropriated fund support:

1. SHORT TOUR LOCATION

Assignment locations that are less than 36 months accompanied/24 month unaccompanied.

- Short tour locations are established in recognition of community support, family separation, environmental, cultural, mission or other factors. Conditions at short tour locations are judged to create enough of a hardship on the military member that a reduced tour length is appropriate.

2. GEOGRAPHIC SEPARATION

Installations or sites with less than 3,000 active duty assigned that are at least one-hour commuting time (during normal driving conditions) from a community (or other military installation) that has three or more different Category C type activities, with one or more of these activities being a bowling center, golf course, or marina. (Should be modified to require three or more full line grocery stores within a one-hour commute.)

- Geographically separated installations with 3,000 or more active duty personnel assigned should have an adequate patron base to be financially self-sufficient without enhanced levels of APF support.
- Significant cultural differences.

3. SPECIAL CRITERIA

Locations with unique circumstances that do not meet the short tour or geographic separation criterion for special consideration as remote and isolated. Possible examples are:

- Locations operating under special security conditions as a result of a threat of civil disorder, political unrest, criminal activity or terrorist attack which prevents personnel from using available off-base recreational (grocery store) activities.
- Foreign currency fluctuations affect the cost of all goods and services purchased on the local economy, including MWR. Unfavorable exchange rates will invariably cause Service members to avoid commercial facilities and seek out on-post MwR (grocery store) activities. Those fluctuations also can inflate payroll costs for local national civilians.
- Extreme year-round or seasonal environmental conditions. Climatic or environmental conditions that routinely and for extended periods prevent the use of off-base recreational (grocery store) activities.
- Locations where the mission requires a capability to provide MWR (grocery store) support as a result of significant temporary increases in personnel who are not part of the regular manning complement of the base, but are assigned for training, for liberty, or for other temporary purposes.

Source: Office of the Assistant Secretary of Defense (Force Management and Personnel).

Table 4-15. Remote and isolated installation classification criteria

The installations (those having commissaries) approved by the HASC as meeting criteria in Table 4-15 are shown at Table 4-16.

LOCATION	INSTALLATIONS
ALASKA	NAS Adak, Fort Greeley, Eielson AFB
ARIZONA	Gila Bend AF Range, Yuma Proving Ground
CALIFORNIA	Fort Irwin; MC Logistics Base, Barstow; NAF El Centro; Edwards AFB; MC AGCTC, Twentynine Palms
FLORIDA	NAS Key West
IDAHO	Mountain Home AFB
MAINE	NACVOMSTA Cutler, East Machias; Loring AFB; NAVSECGRUACT, Winter Harbor
MICHIGAN	K.I. Sawyer AFB
NEVADA	NAS Fallon
NEW MEXICO	Holloman AFB, White Sands Missile Range
NORTH DAKOTA	Minot AFB, Grand Forks AFB
TEXAS	NAS Chase Field, Beeville; Laughlin AFB
UTAH	Dugway Proving Ground
ATLANTIC	NAS Bermuda; NAVSTA/NAS Guantanamo Bay, Cuba; MC SEC COMP, Guantanamo Bay, Cuba; NAS Keflavik, Iceland; Marine Barracks--Keflavik, Iceland; NAVFAC Argentia, Newfoundland; All Panama
PACIFIC	NAVCOMSTA Harold E. Hold, Exmouth, Australia; all Korea (except Yongsan Garrison, K-16 Airfield, District Engineers-Seoul, & Osan AFB); all Japan; all Guam; all Philippines
EUROPE	Florennes AB, Belgium; Pond Barracks, Amberg, Germany; McPheeters Barracks, Bad Hersfield, Germany; Flint Kaserne, Bad Toelz, Germany; Tempelhof Airport ASN, West Berlin, Germany; Christensen Barracks, Bindlach, Germany; Bad Aibling Station, Germany; Fischbach Ordance Depot, Germany; Fulda, Germany; East Camp Grafenwoehr, Germany; Hessisch-Oldendorf ASN, Germany; Hohenfels Training Area, Germany; Pruem AS, Germany; Rheinberg, Germany; South Camp Vilseck, Germany; Camp Wildflecken/Fulda, Germany; Berlin, West Berlin, Germany; Oslo AB, Norway; Lajes, Azores, Portugal; NAVSECGUACT Edzell, Scotland; NAVSUPPACT Holy Loch, Scotland; RAF Wethersfield, UK; all Spain; all Turkey; all Italy (except Vicenza); all Greece

Source: Office of the Assistant Secretary of Defense (Force Management and Personnel)

Table 4-16. HASC-approved remote and isolated installations with commissaries

PATRON PERCEPTIONS

SATISFACTION LEVELS

"The Annual Survey of Army Families - A Report on Army Spouses and Families in 1987" (a survey of 12,525 Army spouses) reported the following:

- 97 percent of all spouses surveyed have used the commissary at their current location
- Among users of the commissary, 62 percent say they are satisfied, 25 percent say they are dissatisfied--spouses of enlisted soldiers and officers had similar assessments of the commissary--overall, satisfaction is lower overseas (48 percent) and dissatisfaction higher (38 percent), due to possible differences in facilities, stock assortments, staff, and the unavailability of U.S. civilian stores as shopping alternatives

COMMISSARY VALUE

"A Study Among Active Duty Military Personnel Concerning Attitudes Toward Commissaries and Exchanges," conducted by Counsel House Research (commissioned by The American Logistics Association) in 1983 reported the following (based on surveys received from 1,588 authorized customers):

- The importance of the commissary increased after enlistment by 38.2 percent (13.6 percent perceived the commissary as the most important of five listed benefits at the time they joined the service--18.8 percent thought so at time of survey)
- 57.8 percent said that not having a commissary would have an adverse effect on their reenlistment decision--66.5 percent of Air Force respondents, 51.0 percent of Army respondents, 60 percent of married respondents
- 74.2 percent of married respondents spend $151 or more per month (only 10.5 percent of single respondents spend that much)
- 52.1 percent of respondents do 80 percent or more of their grocery shopping in the commissaries (68.6 percent do 60 percent or more of their shopping there)--among married respondents, 58.6 percent do 80 percent or more of their shopping at commissaries (76.4 percent doing 60 percent of their shopping there)--the percentage of total grocery shopping in the commissary is highest among Air Force respondents and lowest among Navy respondents
- 63.9 percent of respondents think they save 10 percent or more in the commissary (18.1 percent say 15-19 percent savings, 15.6 percent say 20-24 percent savings, and 9.5 percent say more than 25 percent savings)--8.4 percent of respondents do not think they save anything by shopping in the commissary
- Reasons cited for not shopping at the commissary include: high prices (40.2 percent mentioned this), inconvenient locations, and crowded facilities

- When asked to rate several elements of service and quality in the commissaries, the following ratings were given (percentage rating it as Good to Excellent):
  - Cleanliness (74.4 percent)
  - Clearly marked prices (72.7 percent)
  - Choice of brands (68.8 percent)
  - Convenient distance from home/barracks (66.7 percent)
  - Convenient shopping hours (62.2 percent)
  - Parking facilities (57.4 percent)
  - Low prices (54.4 percent)
  - Availability of items (50.7 percent)
  - Fast checkouts/short lines (34.8 percent)
- When asked how much additional monthly allowance would compensate them if they had no access to a commissary, 53.7 percent estimated the commissary value at $100 per month or more--9.1 percent estimated value at over $200.

EXTENDED HOURS

Enhanced service is an integral part of protecting the commissary entitlement, and providing longer shopping hours is a critical remedy for some of the inconveniences currently ascribed to the commissary. The commissary at Ramstein AB (West Germany) has recently extended shopping hours from 0900-1900 hours to a 24-hour operation. A survey of customers was taken in June-July 1989 by AFCOMS to determine shopping habit changes and patron attitudes since implementing this enhanced service.

- Respondents to survey indicated that the average distance driven to shop at Ramstein was increased and that more customers assigned to other installations were attracted by the longer store hours. The average miles driven to the Ramstein commissary for customers assigned to Ramstein was 7.04 miles; the average was 17.68 miles for customers assigned to other installations. 37.9 percent of respondents were assigned to bases/posts other than Ramstein AB. Figure 4-3 shows the varying distances driven to Ramstein.

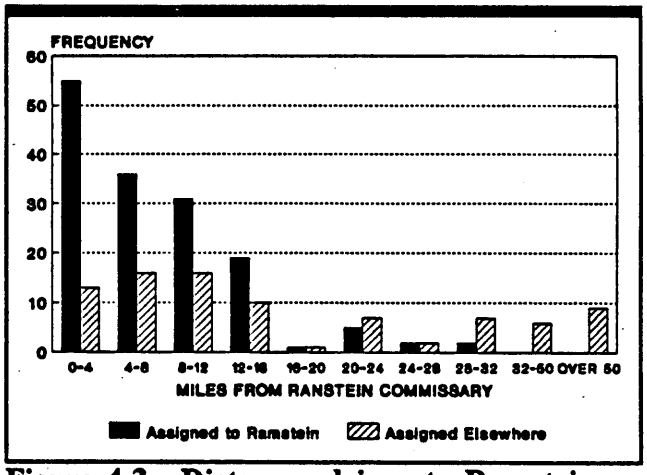


Figure 4-3. Distances driven to Ramstein

- There were also some significant shifts in shopping patterns. Figures 4-4 through 4-6 show the new shopping preferences for survey respondents who previously

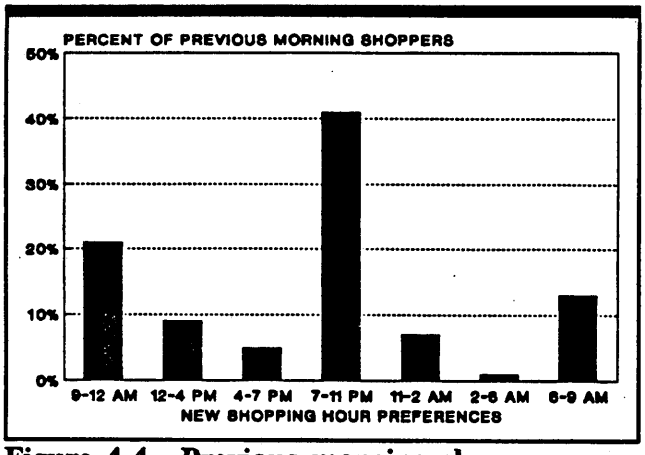


Figure 4-4. Previous morning shoppers

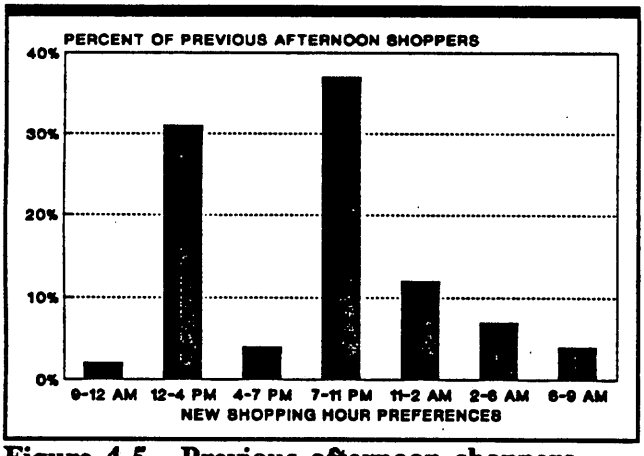


Figure 4-5. Previous afternoon shoppers

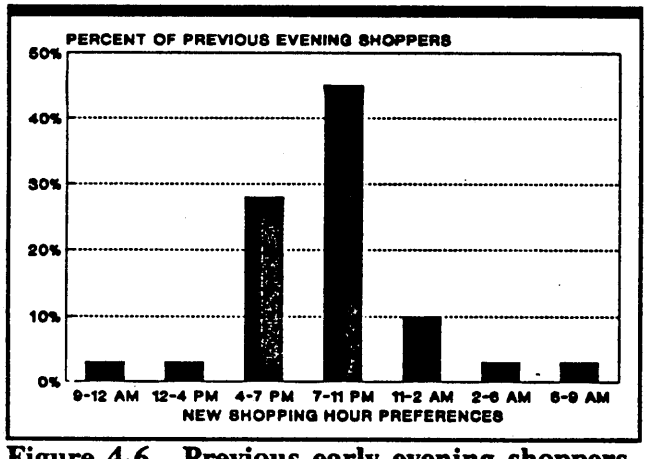


Figure 4-6. Previous early evening shoppers

shopped during morning, afternoon, and early evening hours. The trend was decidedly in favor of the 1900-2300 hours shopping period.

- The frequency of shopping also appears to have increased. Table 4-17 reflects respondents answers to questions on the average number of days between trips to the Ramstein Commissary. The frequency increased from every 10.1 days to every 6.8 days--from three times a month to four and one half times a month.

	Min	Max	Avg
Old Patrons (Before Change)	0	65	10.1
Old Patrons (After Change)	0	30	7.1
New Patrons	1	14	4.7
Old & New Total (After Change)	0	30	6.8

Source: AFCOMS

Table 4-17. Average days between shopping trips to Ramstein

- In terms of sales, survey showed that the average monthly grocery expenditures also increased after shopping at Ramstein was made more convenient. Figure 4-7 shows Ramstein expenditures before and after, as well as the expenditures at other shopping alternatives.

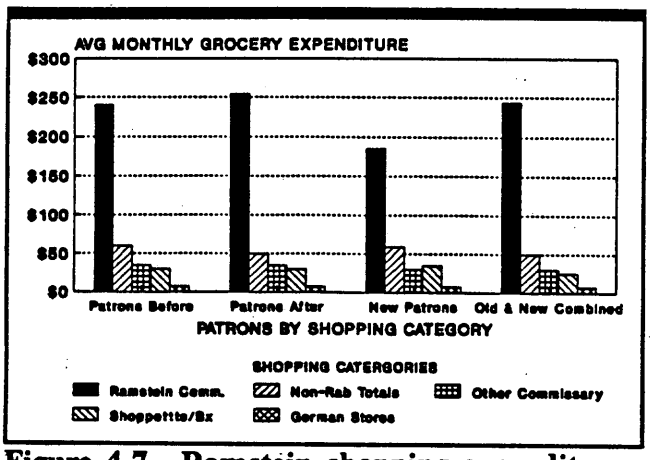


Figure 4-7. Ramstein shopping expenditures

- By extending hours of operation at Ramstein, patron shopping habits were significantly impacted, as were their attitudes regarding the commissary. At Table 4-18, respondents indicated their reaction to the new hours. Based on these changes to shopping habits, it is concluded that patrons find Ramstein more convenient to shop, the hours better related to work hours, and the shopping options better suited to avoiding crowds and long checkout lanes.

	Old Patrons	New Patrons
Shop at your Own Convenience	34.1%	37%
Able to Shop Before/After Work	19.1	18.8
Shop When Crowds Less/Lines Short	12.7	9.4
Take More Time to Shop/Less Rushed	8.6	3.1
Do More Last-Minute/Impulse Buying	8.6	3.1
Use Non-Commissary Stores Less	7.3	6.2
Complaint: Reduced Item Availability	6.4	0.0

Source: Progressive Grocer.

Table 4-18. Impact on patron shopping habits

BENEFIT PROGRAMS

The military compensation package sometimes is inadequate to support a family at minimum acceptable levels. In such situations, Service members qualify for federal/state aid just as do citizens in the community at large. Two such programs involving commissaries are the Food Stamp Program and the Women, Infants, and Children (WIC) Program. To the degree that food stamps and WIC coupons are redeemed by commissary patrons, it indicates the size of that customer segment in dire need that benefit doubly from commissary savings.

In FY 1988, commissaries in the United States and its territories (not available to overseas patrons even though their need may be just as great) redeemed $15,578,013 in food stamps and WIC coupons. While this represents only 0,3 percent of sales, those customers are the desperate ones that benefit the most from commissary savings. The redemptions for FY 1988 broken out by Service are shown at Table 4-19.

	Food Stamps	WIC Coupons	Total
Army	$4,979,995	$2,074,367	$7,054,362
Navy	2,217,061	925,751	3,052,812
Marines	391,578	333,346	724,924
Air Force	3,404,019	1,341,896[1]	4,745,915
Total	10,902,653	4,675,360	15,578,013

[1]AFCOMS had no totals or estimates from 26 of 69 participating stores--this figure is below actual.
Source: Service Commissary Systems

Table 4-19. Food stamp/WIC use--FY 1988

MANUFACTURER'S COUPONS

Manufacturer's coupons are redeemed by all segments of the commissary patron base to gain a little extra value in their grocery purchases. While their usage does not necessarily reflect an inadequate income level, the high levels of redemption is another indication of the value military customers place in savings. A break out by Service of FY 1988 coupon redemptions is shown at Table 4-20.

	CONUS	Overseas	Total
Army	$36,044,970	$3,336,767	$39,381,737
Navy	13,338,547	244,067	13,582,614
Marines	2,097,489	112,746	2,210,235
Air Force	52,414,485	4,192,811	56,607,296
Total	103,895,491	7,886,391	111,781,882

Note: Total number of manufacturer's coupons redeemed was 240,078,914.
Source: Service Commissary Systems.

Table 4-20. Manufacturer's coupon redemptions

FUTURE IMPLICATIONS

Based on the data collected in this analysis of the commissary patron base, there are clearly some implications discernable which will have a significant impact on the commissary of the future. It is incumbent upon commissary management to develop strategies that will focus the commissary strengths on these marketing opportunities if the entitlement is to remain viable into the 21st century. The commissary must have a single minded focus on the customer--it must be opportunistic in satisfying their needs--it must be realistic as to the resources that will be available for that purpose--and it must be aggressive in being the preferred alternative for the military community.

Future chapters in this study will be anchored on data contained in this look at the patron base. Some of the key implications for the future include:

FUNDING SUPPORT

The commissaries are an important ingredient of the military compensation package. As will be discussed below, commissaries will become even more critical in the years ahead as reenlistments constitute an increasingly important factor in maintaining a quality work force. As a tool for increasing retention--as a means to improve a Service member's lifestyle--as an integral part of the compensation package--as a means of insuring the availability of healthful foods--the commissary must be recognized as a government obligation, with the appropriation of sufficient APF support--in the same manner as health care activities, troop feeding activities, and other direct support elements. The levels of APF provided must be consistent with the accepted levels of service being promised to the Service member.

SIZE OF CUSTOMER BASE

With the potential for near term reductions in size of active duty troop strength due to withdrawals from Europe and cutbacks in funding, and the expectation of only limited growth in the ranks of retirees (7 percent growth from 1983 to 1988–up 96,642 retirees), the patron base for commissaries will remain rather static. The potential for increased earnings to support commissary operations (if as is expected, APF support will be reduced) will thus not come from an increasing patron base–it will have to come from improving operational and cash management productivity, increasing margins on products sold, and securing a larger market share from existing customer mix.

WOMEN AND MINORITIES

The changing labor pool from which the Services will recruit in the years ahead will significantly alter the configuration of the military. Women and minorities will become an ever larger percentage of the total, and they will become an increasingly important constituency for commissaries. Their differing needs will require alert adjustments to the product mix and to operational standards. Their sensitivities will have to be addressed to retain their good will and patronage.

EDUCATIONAL QUALITY OF RECRUITS

The greater competition for qualified people in a shrinking labor pool during the recruiting process is expected to result in a lowering of the academic standards for acceptance. This will result in a less educated commissary patron base, reflecting possibly a less sophisticated customer, which may affect stock assortments, promotional activity, and the types of services offered.

EMPHASIS ON RETENTION

Emphasis is expected to focus on retention as a means of insuring a quality work force as recruiting becomes more difficult in the years ahead. This will require greater attention to quality of life and compensation packages being provided to Service members and their families. Such a shift will also result in a gradual aging of the Services as the technically skilled are given incentives to remain in the military beyond when they are leaving today, especially after the first term. A more settled and mature patron base, with somewhat different needs, will have to be catered to by the commissary system. Their perceptions as to how well they live in comparison to their civilian counterparts will be an important determinant in their reenlistment decision–and the commissary is a critical and cost efficient entitlement that can favorably influence their acceptance of the military way of life. The rationale for preserving the commissary entitlement will arguably be even stronger in the years ahead, if the customers' perception of service provided is not weakened. Efforts to improve service, therefore, become even more critical than ever.

CONUS VS OVERSEAS ASSIGNMENTS

If the peace initiatives underway continue and military forces overseas are gradually brought home, the focus of support activities (such as the commissary) will be more and more concentrated in CONUS. This means that a greater share of the commissary business will depend on being more attractive than the other shopping alternatives available to CONUS customers. The choices available, together with the fact that more CONUS Service members live off-post, means that the convenience of commercial stores will capture a greater share of a Service member's subsistence expenditures--the grocery purchases at overseas commissaries will not transfer 100 percent to CONUS commissaries with the troops withdrawn.

CUSTOMER EXPECTATIONS

As a larger percentage of Service members marry, and as two income families become the norm, their expectations and preferences also change. They are certainly more family/home oriented (especially since the average age is also increasing) and the quality of their life style becomes increasingly important. With more expendable income, they become less dependent on "low price shopping alternatives" and they are able to choose their stores of preference based on other factors, such as convenience, service, assortment, etc. Having generally fixed work schedules, time and convenience become increasingly important factors. Successful stores today cater to these needs by selecting assortments accordingly and by making it easy (and quick) to get in-and-out. The commissaries must cater to these same preferences.

PERCEPTIONS

As is said repeatedly of the retail business, it's not the reality of how well a store serves its customers, but the customers' perception of how well a store meets their needs that determines how successful the retailer will be. The commissaries must work both on the reality of their service (better meet the needs of their patron base) and the perception of their value to the military community (even today's strengths are not given the respect they deserve). A 1987 Army survey of spouses indicated that while 97 percent had shopped in the commissary, a relatively low 62 percent said they were satisfied with the service (48 percent overseas). Speed of checkout, crowded shopping conditions, availability of items being looked for, convenience of parking, and low prices are all perceived as commissary weaknesses in customer surveys. And there are mixed perceptions--while only a small percentage of respondents in one survey estimated percentage savings as high as is shown on market-basket price surveys, a relatively high percentage indicated overall monthly dollar savings at $100 or more. As marketing efforts are enhanced, it is vital that an equally strong effort be directed at improving the commissary image, particularly in those areas involving shopping convenience and product value.

Chapter 5

BUSINESS AND FINANCIAL STRATEGY

OVERVIEW

This chapter provides a systems approach to building a successful commissary system. The demographics in the preceding chapter point to ever-increasing demands on commissaries to provide greater convenience to patrons. Simultaneous to this demand for additional service looms possible reductions in the defense budget. Vendors have also complained that commissaries are requiring manufacturers and brokers to incur costs for services not provided to counterparts in the civilian grocery industry such as vendor shelf stocking and vendor order writing. This chapter will address issues that optimize performance through organizational efficiencies and increased service levels by cost avoidance, revenue generation and asset reallocation. It is organized into three distinct sections: the business strategy, the financial strategy and the organizational strategy.

THE BUSINESS STRATEGY

The Department of Defense commissary system is big business currently generating $5.45 billion in sales annually. Each Service operates a part of the business not necessarily synchronized with the commissary operations of the other Services. A successful civilian business has coordinated goals and objectives with a work force dedicated to accomplishing the task at hand. To be successful the Department of Defense commissary system must have a similar corporate culture. The commissary organization must not only look like an efficient business, its employees must feel that they are a part of an efficient business and they must know where that business is directed. This section will discuss a business strategy to focus the commissary system into the next century. Figure 5-1 is a synopsis of the strategy.

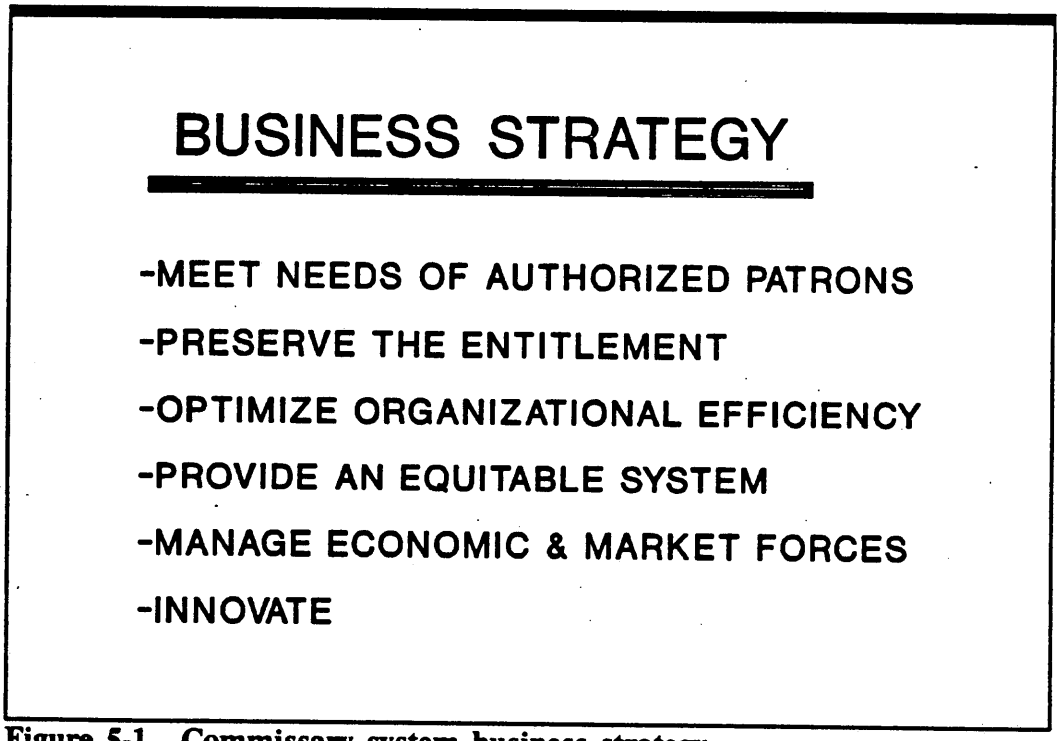


Figure 5-1. Commissary system business strategy

MEET THE NEEDS OF AUTHORIZED PATRONS

The commissary system's primary goal is to meet the needs of its patrons. Chapters 3 and 4 focus on the demographics of both the military and civilian segments of the supermarket industry. Military demographics point to increasing demand for convenience by a force structure that must be retained due to a decreasing labor pool and the increasing training costs of these highly skilled military technicians. Civilian supermarkets also point to convenience as the key factor in the success of a store. The commissary system must key on these signals for greater convenience by finding the means to reduce the lines at the checkout counters and provide late shopping for two-income families by increasing the hours of operation in its stores. Commissaries should be attentive to customer wants and needs and provide an organization that is flexible enough to meet changing demographics during peacetime or, should the nation gear up its military, during war.

PRESERVE THE ENTITLEMENT

The commissary benefit has been repeatedly found to be the most important non-pay benefit next to medical care. Active and retired military families have put up with inconvenient hours, long lines and crowded stores because they believe commissary shopping offers enough of a bargain to make it worth the effort. The congress has been steadfast in its support of the entitlement and recent surveys have found perceptions regarding the commissary benefit actually improve after first term enlistments. If the benefit is as important to the military force structure as indicated, the military leadership needs to insure that this important entitlement is preserved for the next generation of soldiers, sailors, airmen and marines.

OPTIMIZE ORGANIZATIONAL EFFICIENCY

The commissary system is a good system. True, cost savings or revenue generation is needed to provide the extended service levels needed to support the demographic changes envisioned over the next few years. True, the commissary system can not expect to receive a commensurate ramp-up in revenue from the American taxpayer. But false is the concept that the system has to transfer all of the increased revenue requirements to its patrons or that the system has to legislate changes, such as self-sufficiency, that could mean the demise of the system.

The commissary leadership must rekindle the pioneer spirit that has made this country great. While our system is struggling to improve an overseas distribution system with order and ship times of 120 to 150 days, commercial distribution is providing Cub Food stores in the Minneapolis area with a 6-hour order and ship time. In comparison, our system seems grossly inefficient. We must take note and restructure to meet the challenge of the future. If we heed the warnings, the commissary system can continue to provide its patrons with a 25 percent saving and an improved service level in its stores, while simultaneously upgrading its facilities. The key to the effort is organizational efficiency.

PROVIDE AN EQUITABLE SYSTEM

The commissary system must also be equitable. The commission staff members have examined the full range of commissary facilities throughout the world. While the entire force structure is entitled to the commissary benefit, it is quite evident that the level of support provided the commissary benefit varies from Service to Service. The Air Force has newer, more efficient facilities and provides the best overall commissary support. Unfortunately the Navy is at the other end of the spectrum with resource-intensive, inefficient facilities. The Army and Marine Corps provide middle of the road service constrained more by facility limitations than any other factors. The Marine Corps system is the most innovative, particularly in its organization along commercial supermarket lines, and seems to be accomplishing the most with the least resource allocation.

The Department of Defense commissary system must make a concerted effort to upgrade all of its facilities and keep them current. Since Service members from all branches of the military use each other's commissary stores, the surcharge collection belongs to all Service members. A system needs to be developed to channel some of the surcharge collections to the needier systems to build new, more efficient facilities. Only when all commissary facilities are up to the same facility standards should any action be taken to use patron surcharge to cover operational requirements such as labor, travel and transportation.

MANAGE ECONOMIC & MARKET FORCES

The commercial grocery industry is dynamic with survival guaranteed only for those firms that correctly envision the future, chart a course toward predetermined goals, but retain the flexibility to change that course should economic or market forces dictate the change. The commissary system must be equally dynamic. An example is the current warehouse-driven commissary distribution system.

When the current commissary system came into being after World War II, the commercial distribution grid as we know it today did not exist. Commissaries were forced to order and store large quantities of supplies to meet their resale requirements. It was not unusual for a commissary to have 50,000 square feet of warehouse to support a 6,000 square foot retail store. The same mentality continues to be prevalent in the various Service's commissary systems. While commercial distribution firms support upwards of $1 billion in issues to over 300 stores, the Services' distribution grid is to individual warehouses collocated with commissary stores. Where distribution centers exist, they support only 2 to 10 stores. If the commissary system expects to be treated by the manufacturers and brokers as big business, it must think and act like big business.

INNOVATION: The Organization's Future

Commissary systems must be innovative. Commercial grocery chains and distributors must be closely scrutinized and emulated. If the majority of commercial chains use a particular computer software package and the commissary systems do not use the same package, there should be a valid reason. Is the system behind the times or ahead of the times? Are we lulled into a state of complacency by believing our system is truly different? Should we make a conscious decision to scrap systems that are partially fielded to go with less expensive, up to date technology? Commissary leadership may have to go with unpopular decisions to make the system truly responsive to the commissary customer.

THE FINANCIAL STRATEGY

The preceding section outlined a business strategy which if followed could insure the success of the military commissary system into the twenty-first century. To bring this strategy from the conceptual planning stage through an organizational evolution to a successful program implementation, a redirection of resources, particularly financial resources, will be required.

This section will set the stage for the model commissary organization outlined in Chapter 11, Commissaries in the Future, and the transitional organizations required to reach that organizational goal. These organizations will be discussed extensively in the next section.

The financial strategy will compare budgeting techniques used in industry with those used in the military budget system. It will discuss the costs of providing better service to patrons particularly in the popular evening hours and it will identify revenue offsets to pay for these additional service requirements while making the system more efficient. Finally, the strategy will discuss additional sources of revenue which possibly could be used in the future to further increase service levels. The first issue to be discussed is the commissary budget.

5.1 COMMISSARY FUND BUDGETING

BACKGROUND

The grocery industry budgets funds in two general categories; long term and short term. Long term budgeting is used for capital investment and acquisitions. It typically uses owner equity (stocks) or borrowed funds (bonds or equivalents) to meet the long term program budget. Short term budgeting uses daily revenue, generally referred to as cash flow, to meet day-to-day operational requirements including payroll and inventory purchases. Company profits must generate enough revenue to cover repayment of these funds, including the costs associated with borrowing funds, or the firm will quickly find itself insolvent.

The military commissary systems obtain funds in a significantly different manner. Long term capital investments are funded from the trust fund accounts which are obtained from the five percent surcharge collected from customers at the point of sale. Short term funding is obtained from four distinct sources: commissary stock fund, military personnel account appropriated funds, operation and maintenance account appropriated funds and trust fund account funds.

The stock fund is a revolving fund previously capitalized by the Congress and used to order and pay for the merchandise inventory sold in commissary stores. The fund is replenished from the proceeds of the sales. The military Services request obligation authority through the Department of Defense based on the projected sales for the budget year and the authorized level of inventory. Generally, the Services have not had difficulty obtaining the required stock fund authority to meet their inventory requirements. Most problems in stock fund result from excess on hand inventory.

Operation and Maintenance (O&M) funds are appropriated for certain costs associated with the operations of the stores. Further distinction is made between direct O & M and indirect O & M. Direct O & M funds are allocated to the commissary systems to cover personnel costs, TDY, PCS, administrative supplies and equipment above store level. Transportation of merchandise to overseas locations is also paid with direct appropriated funds. Indirect O & M consists of the cost incurred by the installations to support the commissaries: maintenance of the real property, utilities overseas, civilian personnel support, finance and accounting services, veterinary support, etc. Indirect O & M costs that had not been considered in the past are the costs of the Defense Personnel Support Center (DPSC). The O & M costs for FY 1988 are detailed in Chapter 2.

Military personnel used in the commissary system are paid from the military personnel account appropriation. In the past, some Services considered this free labor, but these funds are reported in the Department of Defense commissary report and are considered part of the commissary expense by Congress.

The Commissary Trust Revolving Fund (CTRF) is generated from the 5 percent surcharge applied to commissary goods sold to patrons. Both long term capital projects and day-to-day expenses are funded from this account. CTRF funds short term items such as operating supplies and equipment, maintenance of the equipment, utilities (except overseas) and linen service. CTRF long term capital outlays fund renovation and construction of commissary facilities including equipment. Currently each of the military Services manages its own trust revolving fund account.

DISCUSSION

As previously mentioned, stock fund management is currently meeting its mission of providing merchandise inventory for commissary resale. Management of the military personnel account also generates few problems due to the proportionally small numbers of military working in commissaries in relation to the total force. Changes are not recommended to these systems at this time.

The Operating Account. The Operation and Maintenance account budget process does, however, need revision. Unlike our industry counterparts, funding provided to operate stores is not directly linked to sales volume within the commissary system. While the Jones Commission has been tasked to find ways to minimize the cost to the taxpayers (the appropriated O & M funds), it is important that these cost savings be reinvested into direct store operations. As commissary operators continue to improve sales and service, they need to be provided a measure of certainty that they will have the needed funds to operate in an effective manner. The commissary system should not be penalized for becoming more efficient by not allowing "saved" funds to be used to pay for increased services.

The budget process is the key to this success. The Program Objective Memorandum (POM) is the government's road map for the next five-year period, modified at various intervals of the process. The budget itself covers a two-year period and is submitted along the line of the Program Budget Guidance which imposes funding ceilings for various expense categories. Unfunded requirements may be requested to cover shortfalls during the budget implementation period.

Although Congress provides oversight of commissary expenditures, commissary O & M fund allocations are provided in the general supply account of each Service and not allocated directly to commissary operations. When action is taken to reduce the presidents budget, funding cuts are normally imposed across the board for the Department of Defense and the military Services in each respective budget execution cycle.

This inflexibility is further compounded by other costs such as the overseas transportation segment. Current policy dictates that shipments are to be made on US ocean carriers which have had a history of progressively increasing rates. These direct O&M costs are calculated into the amount of funds attributed to the annual cost of operating commissaries yet the commissary system is unable to exercise any management direction over the function. For FY 1988, that amount was $89.5M of the total $706.5M to operate the entire system, or 12.7 percent. The situation is further compounded by Congress limiting the number of items that can be procured off-shore and further requiring that beef and beef products procured for overseas commissaries be from United States sources. This new program adds an additional $8 million to the commissary outlay. When specific programs such as overseas transportation or "Buy America" are dictated by the legislative or executive branch, the specific costs of these programs should be treated separately from the normal commissary expenses.

The Capital Account. As noted at the beginning of this chapter, the Commissary Trust Revolving Fund (CTRF) account is the revenue source for commissary capital investments. New, modern facilities directly impact service levels provided to patrons due to the productivity efficiencies they achieve. These facilities also provide customers with the ambiance that makes commissary shopping a pleasant experience. On the average, the Air Force operates the newest commissary facilities and its retail stores generally are the

most efficient. Commissary support is a non-pay compensation entitlement provided to all Services and thus it is logical that equality should prevail in providing commissary facilities across the breadth of the force structure.

The surcharge collected from patrons at the point of sale in commissaries belongs to all the patrons who shop in any commissary regardless of the patrons military Service affiliation. In FY 1988 the Services have allocated approximately half of the surcharge to operating costs and half to capital improvements. To promote capital improvement where most needed, a portion of the annual surcharge revenue should be allocated to a special Department of Defense level account with a Board of Directors determining the amount of each Service's contribution to the capital improvement outlay. This board, as outlined in chapter 11, would determine priority across the spectrum of the defense department on a need basis. The program would directly improve the commissary system by providing state of the art facilities and equipment to all patrons regardless of Service affiliation. This issue is further discussed in Chapter 8, Engineering.

RECOMMENDATIONS

5.1a. That to the maximum extent possible, the commissary systems be authorized to retain funds generated from costs savings through organizational or operational efficiencies to improve patron service levels.

5.1b. That costs for special programs not normally associated with CONUS commissaries such as transportation for US goods overseas or the procurement of US beef for sale overseas vice locally procured beef, be reported to Congress and funded as separate line items and not "charged" as a cost against commissaries.

5.1c. That the management of major construction projects (over $500,000) be centralized. Such construction and procurement will be funded with contributions from each Service's surcharge account, as decided by the DOD Board of Directors established to oversee this function. Project prioritization will be based on overall needs of the military community without regard to Service. To meet the FY 1994 program start-up as outlined in Chapter 8, fund contributions will start in FY 1993.

5.2 SERVICE LEVELS-- THE COST OFFSET

BACKGROUND

The overall objective of the commissary system should be to make commissaries the preferred place to shop for subsistence items. This can only be achieved by insuring that customer perceptions of the commissary as a shopping alternative are favorable. Customer perceptions, however are based loosely on observations and experiences during previous visits. A key to influencing customer opinion is to insure that customer service in all facets of the commissary operation meet expectations.

All commissaries should operate in accordance with a common understanding of what level of service is to be provided to authorized customers. Appendix E outlines the minimum standards of service that must be provided. However, the DOD Commissary System will need to provide more than minimum service levels to successfully recruit and retain a competent military force during the demographic changes that are evolving for the 1990s and beyond.

DISCUSSION

In the previous chapter, the changing demographics indicate that the commissary shopper of the future will need longer hours, particularly during evening hours. Adherence to an acceptable level of service, from the customers' perspective, is vital to providing the level of non-pay compensation military families expect, and to realizing the best return in military benefit for appropriated dollars being invested. Less than maximum usage of the entitlement because of inadequate funding directly impacts the local military community's morale and welfare. Improvements to the level of service are needed both because of the commitment the commissaries have to the military community and because they will contribute to increased usage of the entitlement, which directly impacts military retention and thus readiness.

Jones Commission findings indicate there is general agreement as to the basic mission of the commissary system, but there is also disagreement as to the scope of operations and the level of service to be provided with appropriated funds. If there were greater agreement on these commitments at all levels of command and management, and if funding authority was directly tied to those commitments, a higher more consistent and cohesive level of commissary support could be provided to the military community.

The commissary system should not be in competition with itself. It should have clearly defined goals and objectives and a strategy to accomplish these goals. The problem is that expanding service costs money. On the other hand, if the service goals were defined with bench mark levels of service, resources could be applied based on need on a more equitable basis.

As previously mentioned in the customer demographics, the customer's time has become a particularly important commodity. The ability of customers to get in and out of a store, to find what they're looking for and to pay for it without delay, is a major influence on their perception of a store and endorses their preference in a shopping location. The customer must also be able to do this shopping at a time that does not conflict with other issues such as work, particularly since the majority of the force is comprised of two-income households. Two specific areas can meet these requirements and the costs to fund this endeavor could be offset from organizational efficiencies to be discussed in later chapters.

The first initiative should be to increase hours of operation, the key factor in customer service. Demographics indicate that patrons want evening shopping and will drastically alter shopping habits to shop during evening hours when these hours are made available on a routine basis. This requirement will increase in the future. An analysis of system-wide

hours of operation indicates that it would require $26.5 million in funding to expand hours of operation to 68 hours, 6 days per week in medium and large stores and 80 hours, 7 days per week in Super Stores. The additional costs were computed by adding 8 full time equivalents (FTEs) to medium stores, 10 FTEs to large stores and 12 FTEs to Super Stores. Proportional increases can be allocated to perform the mission when the store activity is contracted. Store sizes were determined by the following ranges, based on average monthly sales volume: medium, $.8 million to $1.5 million; large, $1.5 million to $4 million; and super, over $4 million. Table 5-1 outlines these costs.

Store size (Monthly sales)	Hours/ week	Additional costs/year
Medium ($0.8 - $1.5)	68	$14.3
Large ($1.5 - $4.0)	68	$10.0
Super (over $4.0)	80	$2.2
Total costs		$26.5

Note: Additional cost is computed by adding 8 full-time equivalents (FTEs) for medium stores, 10 FTEs for large stores, and 12 FTEs for the super stores.

Table 5-1. Costs for recommended store hours ($millions)

The second initiative should be to make these extended hours available to as many people as possible. To meet this requirement, the Commissary System needs to establish regional "magnet stores", centrally located and within a reasonable (45 minutes) commute of the majority of the patrons in a regional shopping area. At least one (and possibly two in high patron demand areas) of these magnet stores should be open from 10 a.m. to 10 p.m. four days per week and open 10 hours on Saturday and Sunday. These stores would receive priority funding for hours of operation and construction funding and reduce the demand for service on smaller stores. This concept has particular application in West Germany, where many small inefficient stores try to meet the entire shopping needs of commissary patrons. If magnet stores meet the requirement, these smaller stores could be reduced in scope or closed.

While these two initiatives would naturally improve customer service, they are not all-encompassing. Appendix E lists a broad range of items that improve service levels and other procedures that also impact on service. One such procedure is a queuing theory model which could establish cashier work requirements and subsequent schedules that could preclude a wait of more than three patrons per checkout line. A sufficient number of express lanes must also be established to maintain the same wait time in that category.

Additionally, stores need to be modern, well-lighted and equal in scope to an average full-service supermarket. Patrons must feel safe inside and outside the facility at all times. Pleasant atmosphere and decor must make shopping an enjoyable experience. Courteous employees must be available to help provide fast, easy shopping to patrons. Fresh product in adequate supply must be identified by attractive labeling with unit pricing for consumer comparison. All DOD commissaries must stock all authorized categories. Smaller stores should decrease the number of lines and brands within a category in lieu of deleting an authorized category. The commissary entitlement of cost plus 5 percent must be maintained. The system goal should be to

retain the current 25 percent savings enjoyed by the patron.

RECOMMENDATION

5.2a. That hours of operation be extended at commissary stores to improve levels of service to patrons. That the $26.5 million cost required to operate medium and large stores 68 hours, 6 days per week and super stores 80 hours, 7 days per week should be obtained through cost avoidance offsets. Future issues will address these offsets.

5.3 CASH MANAGEMENT

BACKGROUND

As mentioned earlier in this chapter, the commissary system needs to emulate industry to remain a viable entity. The most important commodity required to transact business is money. The civilian industry is very intent on managing money: earn profit, invest, and borrow. If the nature of our existence is to provide non-pay benefit to our customers, obviously we cannot generate profit. On the other hand, we should invest our proceeds and borrow when beneficial to offset the appropriated funds needed to provide the benefit.

In the commissary system, money collected from sales and from surcharge is deposited into the finance and accounting system and eventually to the Treasury. From the point of collection of the patrons' money at the store cash register to disbursement for the cost of goods, commissary money does not earn interest as opposed to money received by civilian counterparts and even the Army-Air Force Exchange System. These organizations have instituted elaborate systems to retain funds as long as possible and earn interest for as short a time as overnight. In FY 1988, the commissary systems collected $5,193.2 million in the stock fund (approximately $14 million a day), and $254.3 million in the trust fund (approximately $0.7 million a day).

DISCUSSION

Trust Fund Investments. The commissary trust revolving fund was established by Congress to pay for specific operating costs and for construction and renovation of facilities. The fund is comprised of collections of the 5 percent surcharge paid by commissary patrons. This fund is thus classified as patrons' money, not the taxpayers' funds. The Comptroller General, however, has previously ruled that the commissary trust fund is to be considered in the same manner as appropriated funds. This ruling should not preclude the investment of the fund. Four of seven Navy trust funds (General Gift Fund, Navy Academy Gift Fund, Navy Museum Gift Fund, and Navy Records and History Fund) have authority to retain income from Treasury investment of cash balances.

As of the end of May 1989, the cash balance of commissary trust funds deposited with Treasury amounted to $ 241.2 million: Army - $127.2, Air Force - $ 56 million, Navy $49.1 million, Marines - $8.9 million. Invested at the rate of 8 percent in treasury instruments, this idle cash would earn

approximately $1.6 million per month or $19.2 million per year, enough to build 2 additional medium size commissaries per year. Of course, the cash balance does not remain constant, but AFCOMS, for instance, reports that the lowest level was $33.9 million in 1987.

Contract Authority. In DOD terminology, borrowing against future earnings is known as contract authority, which is the statutory authority that allows an agency to enter into contracts prior to realization of revenues for payment of such obligations. AFCOMS previously obtained contract authority but it was allowed only for three years: FY 1984, 85, and 86. Using that authority, AFCOMS has been very successful in advancing its construction program which is currently four years ahead of where it would be without contract authority. Modeling upon AFCOMS' success, TSA is now seeking contract authority to advance its construction program. This program has many advantages. Patrons would benefit from better facilities sooner than under the other system. Newer facilities are generally more energy efficient, therefore less costly to operate. The labor saving devices of newer facilities allow for a more efficient and effective use of the work force. Another benefit is that construction costs would be paid out of current funds at current prices as opposed to having to accumulate current funds to pay future prices.

Two obstacles, total obligation authority (TOA) and apportionment, need to be corrected to make the system more effective. Under TOA, an accelerated construction program would be included in the obligation authority of a Service even though the construction program was not funded by appropriated dollars. This would force the Service leaders into deciding between weapons systems and commissary programs, a logically unnecessary decision. The apportionment requirement pegs construction programs to a fiscal year contracting constraint which was not a requirement prior to a Service use of contract authority. Army construction programs are handled by the Corps of Engineers and traditionally have been handled outside the last minute rush of end-of-year construction fund commitments. This has optimized the engineer and commissary work force.

Since no logical management or control function can be associated with either obstacle, the contract authority constraints of total obligation authority (TOA) and apportionment should be removed from the contract authority provisions. 10 U.S.C. 2685 allows the Services to obligate anticipated proceeds from the surcharge for specified use (construction and improvement of commissary facilities) without regard to fiscal year limitation with the approval of the Secretary of Defense and the Director of the Office of Management and Budget. Therefore, including the CRTF in the total obligation authority appears inappropriate.

Bad Check Collection Fees. As in the civilian market place, commissaries accept checks from patrons for payment of purchased goods, with some of these checks returned as dishonored. Like the commissary's civilian counterparts, time and labor are expended to collect the funds for dishonored checks. The administrative fee imposed on the delinquent payer, however, is not returned to the commissary system as is done in the civilian sector to cover the costs incurred in the collection process.

Because collection of bad checks is costly and labor-intensive, industry is forced to impose an administrative fee, generally between $15 and $20 per offense, for returned checks. The Army and Air Force Exchange System (AAFES) and the commissary systems also impose an administrative fee for returned checks: $15 per check. Industry and AAFES use this administrative fee to cover the expenses of collecting dishonored checks and offset the uncollectibles. The commissary systems are not authorized to use the funds to reimburse the labor used for collection and other costs. The administrative fees are deposited in a miscellaneous Treasury account.

In FY 1988, a total of 83,000 checks were returned dishonored for a total value of $5.9 million. Of those checks, the Services collected 92 percent. Uncollectible bad checks amounted to 6,900 checks for a loss of $661,000 which had to be covered by the commissary trust fund. To collect the checks, the commissary system spent approximately $1.1 million in labor, postage and telephone service, yet none of the $1.25 million for administrative fees collected were returned to the commissary system to cover these costs.

On the other hand, the commissary system is able to recoup its cost for coupon handling, which is also labor-intensive, from the coupon handling fee paid by the manufacturer offering the coupon. Since the commissary system incurs a cost to collect the bad checks, and an administrative fee is imposed in the military as well as in the civilian industry to offset this cost, the commissary system should be reimbursed for this extra expense.

Stock Fund Investment. The stock fund is a revolving fund used to purchase inventory for resale to patrons. The funds collected from patrons for the purchase of goods are recycled into the stock fund. From the perspective that authorized customers replenish the stock fund, and that shrinkage and other losses (less acts of God) are reimbursed from the commissary trust fund, it can be inferred that, after initial capitalization, the fund is fueled with patrons money. The proceeds from sales amounted to $5,193.2 million in FY 1988, approximately $14 million a day. For FY 1989 (October 1988 through July 1989), the average cash deposited with Treasury amounted to: Army: $31.6 million, Air Force: $126.4 million, Marines: $16 million, Navy: unable to obtain the data because Navy does not differentiate which cash belongs to the commissary portion of the stock fund. The total average cash with Treasury (less Navy) is $174 million. Invested at the rate of 8 percent, $13.9 million would be generated to augment the appropriated fund. If the commissary systems were allowed to invest these funds and return the proceeds to commissary operating accounts, these funds could be used to increase the level of service offered to the customers. However, the DOD Comptroller has commented that there is no basis to justify treating DOD stock fund cash balances differently from other federal government revolving fund cash balances.

RECOMMENDATIONS

5.3a. That the appropriation act be changed to allow the commissary system to utilize the dishonored check service fee to offset labor and other costs incurred in the collection process.

5.3b. That although it appears advantageous to the commissary system to invest the

CTRF, we conclude that no initiative be undertaken to change the status quo in order to avoid possible loss of the appropriated fund umbrella, and offsetting reductions in O&M.

5.3c. That the commissary system be allowed to implement contracting authority for the commissary trust funded construction program without the current total obligation authority and apportionment constraints, as per 10 U.S.C. 2685.

5.3d. That the issue of investing stock fund in treasury instruments to generate revenue has been investigated and the commission concludes that it is not feasible.

5.4 COST AVOIDANCE ISSUES

BACKGROUND

The commissary system provides the non-pay commissary benefit using a combination of many funding sources but it is primarily funded from appropriated funds. As mentioned throughout this report the future depends on the effective use of these funds. This issue will address areas that can be used to reduce the scope of a particular segment of the appropriation or offset costs.

DISCUSSION

Voluntary Labor. Commissary officers have been approached often by various groups to assist in the day-to-day operation of the commissary store. Certain functions could be easily adopted to a volunteer labor format, particularly the customer service representative at the entrance to the commissary. Other issues will be addressing the elimination of this space as an economy measure, but a volunteer could assist in providing information, flyers, check writing procedures as well as a general orientation to the store. Military hospitals have tapped this valuable source of labor and similar utilization should be available in commissaries. In certain areas of the United States with a high retired military concentration, this labor source is even more available. Many other store functions, including government performed shelf stocking, now that scanning stores do not require item pricing, could be adapted to a volunteer labor format. Under current regulations, the commissary cannot accept voluntary labor. This should be changed to provide this alternative to the local commissary officer.

RECOMMENDATION

5.4 That, notwithstanding commissary system consolidation, the new DOD Board of Directors pursue through appropriate channels legislation to amend 10 U.S.C. 1588(a) to include the words "a commissary".

5.5 BILL PAYING COST AVOIDANCE

BACKGROUND

The current process for ordering, receiving and bill paying in the military commissary

system is lengthy and labor intensive. It is in need of simplification through procedural changes and automation. Although variations exist between the various commissary automated procedures, the processes are generically similar.

The Ordering Process. A contract must be established before the commissary can order product for resale. One source of contracts is the Defense Personnel Support Center (DPSC), which establishes contracting agreements with manufacturers for brand name items. The general terms of the agreements and the items listed can be found in the DPSC supply bulletin. In the Army and Air Force, the contracting officer delegates the authority to issue blanket delivery orders (BDO) against DPSC supply bulletins to the region contracting officer. The BDO authorizes call orders and specifies the terms and conditions under which individual orders will be placed and payment will be made. The Marine Corps and Navy issue direct delivery orders against the supply bulletin. The region contracting officer also has the authority to negotiate blanket purchase agreements and other purchasing instruments with local vendors for items not otherwise available.

Commissary officers place individual orders against the BDOs, BPAs, and other purchasing instruments to the manufacturers through the designated representatives. For the Army, most of the orders are compiled based on the vendors' recommended quantities. The Air Force, Marine Corps and the Navy rely on their respective automated systems to replenish inventory in Central Distribution Centers and warehouses. Ordering and inventory control are more detailed in Chapter 7.

The Receiving Process. After the order is placed with a vendor, a copy of the order form is sent to the warehouse to be held in suspense pending receipt of the product. Upon receipt, warehouse personnel count the product and certify the quantities on the receiving report. At this point the process varies by Service. In the Army the receipt and order form is sent to a clerk in the commissary for manual price extension and processing. In Air Force, Navy and Marine Corps, the extension and processing are performed by their automated systems.

In the Army, control section personnel process the receiving report and send it to the region accounting section where it is simultaneously entered in the inventory accounting system and the automated voucher examination system. The action is then bridged to the Army Standard Financial System (STANFINS) to create an account payable to the vendor.

In the Air Force, the flow of paperwork is directed to the local installation accounting and finance office where the receiving document is matched with the invoice and paid. A separate payment is made for every order to every vendor in the Air Force procedure. Army, Navy and Marine Corps procedures produce fewer documents because payments for all commissaries are consolidated per vendor.

The Payment Process. In all Services, the commercial account technician reviews the invoice from the manufacturer, insures that it is a valid order against a valid contract and then matches the receiving report against the manufacturers invoice. This process is required for each order placed by all

commissary officers in the system. The Army automated voucher examination system assists in the process by automatically comparing the contract file and receipt, suspending and batching all payments due to the same manufacturer, and generating a voucher for payment on a due date. The voucher is then passed to the regional Finance and Accounting Officer who cuts the check and mails it to the manufacturer.

This system requires an extensive work force at commissary stores and regions to order subsistence (prepare document, obtain price from supply bulletin or quotes, price and extend, obtain authorizing signature, make necessary copies, send copy of order to warehouse, place in suspense file); maintain the call order register (assign call order number for BPA/BDO, decrement funds, adjust order value to receipt value, post difference against funds available); and process receiving reports (assemble document, verify, extend and total, record receipt on call order, batch and prepare transmittal letter, make necessary copies, mail, and file commissary copy). Other tasks include maintenance of contract files and control documents as well as data entry, verification and reconciliation. In FY 1988, the following costs as depicted in Table 5-2, were incurred by the Services to perform the extensive bill-paying process.

	Army	Navy	Marines
Orders	1,066,729	Unavailable	Unavailable
Vouchers	383,400	837,996	66,000
Disbursement	$1,393,066,041	$747,250,000	$171,000,000
Work-years	100	49	7
Costs	$1,870,828	$1,132,000	$163,000

Table 5-2. The current bill paying cost

In the Army system, orders from different commissaries to the same vendor are consolidated into one voucher. The Navy and Marines handle overseas orders in-house while the Army orders through DPSC who pays the vendors. This cost detail is not available for the Air Force system.

The Air Force accounting and finance office at each installation pays the invoices for each order to each vendor. It is estimated that 70 percent of the Air Force indirect costs for financial management in CONUS or $6,301,152 (9,001,646 x 70 percent) can be attributable to the bill paying function. In the Air Force environment, the Army would be required to process 1,066,729 vouchers, a threefold increase in the number of vouchers and checks processed. The Navy and Marine systems are similar to the Army procedure; however, the Marine Corps system is more efficient because of the Marines' advanced automation.

DISCUSSION

All the Services have plans to modernize and streamline the bill paying process. The Army plans to further centralize its bill paying function by establishing a Service Center at TSA headquarters where the contract files will be maintained and the payments consolidated by vendors. The Air Force is testing a procedure at several locations to shift the bill paying function from the finance and accounting office to the commissary store. The Navy plan is to implement a system that electronically transmits data for payment of vendors' invoices and thus eliminates the handling of the paper copies at its headquarters. The Marine Corps is currently in the process of moving to a "paperless" system whereby orders, receipts, invoices and payments are electronically transmitted.

As a short range initiative, the Air Force should adopt a centralized bill paying system. Centralizing the function provides the medium to consolidate invoices by vendor, process fewer vouchers, cut fewer checks, as well as stuffing and paying postage on fewer envelopes. Considering a projected threefold decrease in workload, an estimate of savings could amount to $4,200,000 in indirect costs. The Air Force could adopt any consolidated system to achieve these savings.

In the mid-range time frame, a system should be developed to encompass state-of-the art automation such as electronic data interchange (EDI) in placing the orders directly from the stores or Central Distribution Center (CDC), as the case may be, to the vendors. A CDC offers the greatest savings potential due to the reduced number of vouchers requiring payment and is highlighted in Section 5.6. When using EDI, the receiving report is automatically generated and compared to the electronic invoice which greatly decreases the reliance on manual labor. Paying invoices by Electronic Fund Transfer from a DOD or military Service account directly into the vendors' bank account further reduces manual intervention.

The total system should include the following functions: contract file maintenance, cataloging, and inventory control as envisioned in the Army Service Center concept. The Marine Corps is already moving in that direction, with implementation of EDI and EFT scheduled for 4th Quarter FY 1989 at its Eastern Complex. The anticipated savings of this system would be between 50 and 70 percent of costs currently incurred for ordering, receiving, bill paying, contract file maintenance, cataloging, and pricing. This estimate is based on industry actual experience as discussed further.

During a 23-24 August 1989 visit to Super Valu, a large distributor headquartered in Minneapolis, the efficiency of EDI was quite evident. Super Valu's Minneapolis Division buyers place 70 percent of their orders electronically through "Tymeshare", a commercial electronic mailbox polled daily by most of its vendors. The purchase order is simultaneously transmitted to the corporate Central Disbursement Department where the receipts and invoices are matched and processed by computer for payment. This procedure is applied to all invoices for merchandise procured for Super Valu's 20 distribution centers. Approximately 17,000 invoices per week or 884,000 invoices per year are processed by a total work force of 20 employees at the corporate headquarters.

Under these procedures, the workload for the Army could have been handled by 24 FTEs, a 76 percent decrease.

Changes to current audit trail requirements of the Defense Department would be required to achieve similar results. At Super Valu, discrepancies between the invoice, the order and the receipt, are reconciled by the Super Valu buyer. The Federal Acquisition Regulation (FAR) requires separation of duties in the ordering and payment process. This regulation would require reconciliation to be performed at the bill paying level; e.g., the Headquarters or region level. Under current FAR procedures, additional personnel would be needed.

The commissary system currently employs approximately 1,905 full-time equivalent positions (direct costs) engaged in the processing of orders, receipts, and bill paying, (Army: 1,195, Air Force: 592, Navy 111, Marine Corps 7) at an approximate cost of $43,815,000. With conservative reductions of 50 percent, the system could generate a savings of $21,907,500 per year. Central distribution would further enhance this system by reducing the number of vouchers paid by over 75 percent as well as streamlining the entire order and receiving procedure which would result in a total reduction of control section, warehouse and bill paying personnel by 75 percent for a total cost savings of $83.5 million dollars. Chapter 11 has a complete analysis of these costs.

RECOMMENDATIONS

5.5a. That, if consolidation is not approved, the Air Force adopt a centralized bill-paying system. That funds currently expended to perform the mission be transferred from the local installation to AFCOMS.

5.5b. That the DOD Board of Directors appoint a special panel to study EDI, with an objective of implementing the use of EDI in all Services at the earliest possible time. The Marine Corps should be given the lead role on this panel based on their experience with the current implementation of EDI.

5.5c. That the concept of a system with off-the-shelf grocery industry automation, as outlined in Chapter 10, as well as central distribution and electronic data interchange as outlined in the organizational strategies of Chapter 5 or Chapter 11, become the system of record for all future planning.

5.6 THE DISTRIBUTION SYSTEM

BACKGROUND

The Jones Commission has expended considerable time and energy on the system of distributing product to commissary stores. Commissaries currently use large warehouses on the back of commissary stores to meet day-to-day sales. This practice is not used in the commercial sector, where "just-in-time" inventory procedures provide stores with the majority of their products through central distribution centers. This issue will develop a model distribution system using state-of-the-art automation and contract central distribution.

In-house central distribution is an option that was discounted due to the large start-up costs incurred in building a physical plant as well as a desire on the part of the Congress to reduce appropriated fund costs for which manpower encompasses the largest segment. The use of grocery wholesalers in lieu of in-house managed distribution is also an option that was considered. This option, however, precludes offsetting the cost of distribution by forward buys, slotting allowances or distribution allowances, fees generally available in the grocery industry. The government would also lose complete control over the cost of goods purchased under the latter option.

DISCUSSION

The most significant factors in developing a functional distribution system are organization, information management, warehousing, transportation, cost, funding and the concept of operation. The organizational strategy in this chapter extensively discusses various organizations that can accommodate central distribution. Other segments in this chapter point to cost savings in manpower reductions of over $65 million. These reductions do not consider the additional savings in warehouse construction, inventory and redundant systems.

Central distribution offers many additional advantages. It provides a mechanism for centralized pricing and inventory policy, and can accommodate other initiatives, if required, more efficiently than at store level.

Scope of Operation. The model distribution system as proposed would separate management functions from the warehousing and transportation segments of the distribution cycle. The commissary region would be responsible for total system management within its geographical area of operation. The region would also be responsible for specific functions to include forecasting inventory, distribution requirements planning (DRP), inventory management, merchandising, replenishment, and bill paying for product ordered. The government would continue to own the inventory using current stock fund procedures. Pricing and procurement would remain a government function.

A contractor would perform the general warehousing and transportation functions. Specific functions in this arena would include receiving electronic transmission of orders from commissary stores, order scheduling, picking orders, back order processing, shipping orders using in-house or subcontracted transportation and adjusting the inventory based on electronic validation of the delivery instrument (commissary store receipt). The contractor would be responsible for inventory control to include receiving, vendor returns, physical inventory reconciliation and management reporting. The contractors computer will provide automatic interface with the management and purchasing systems used by the commissary region. Figure 5-2 displays the functions by responsible agent.

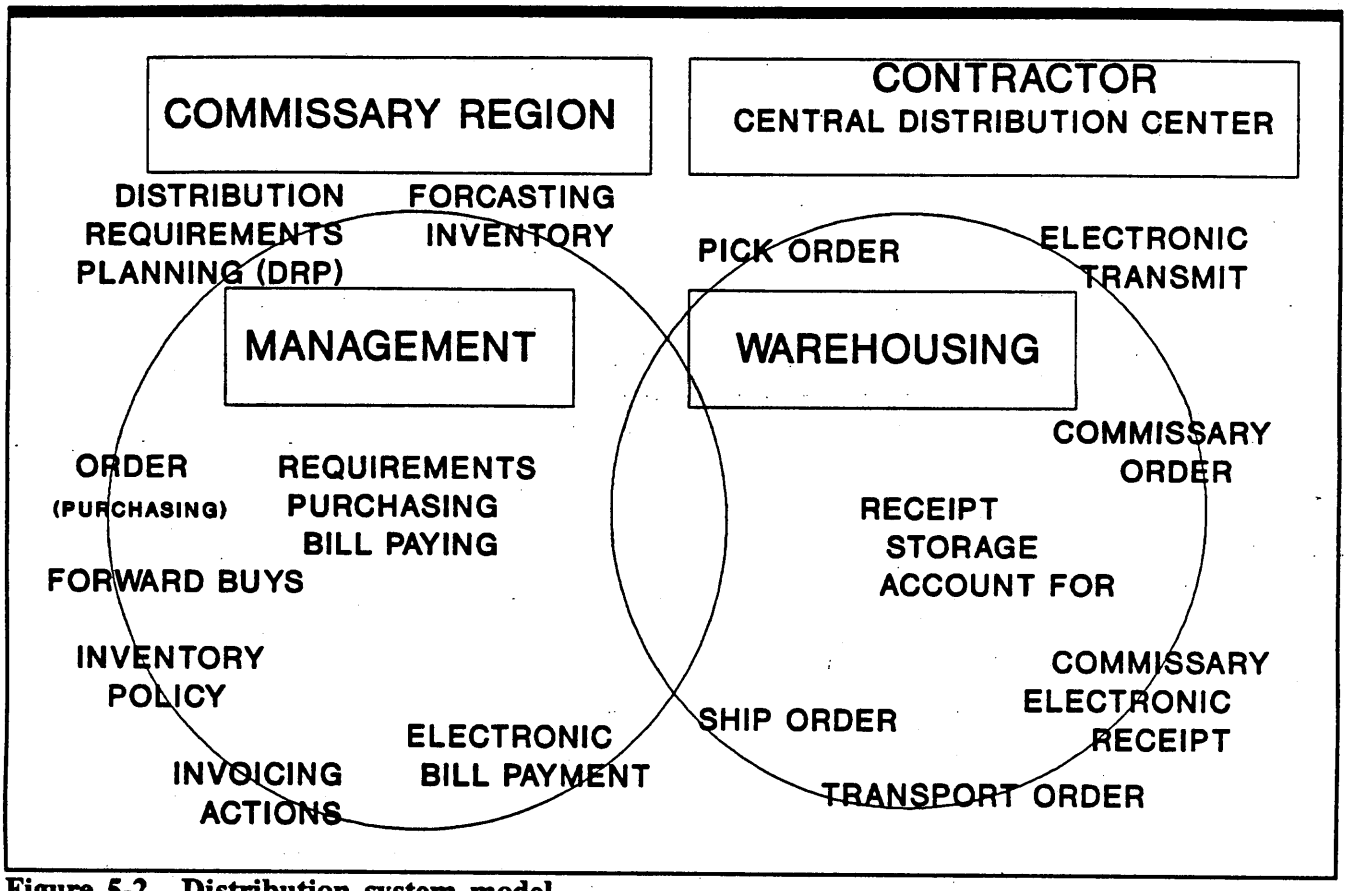


Figure 5-2. Distribution system model

Cost and Funding. Current estimates point to a cost of approximately 1.9 percent of sales to provide the contractor portion of central distribution in the continental United States. This is based on data developed by the Dornbush Group from a model designed to support all DOD commissary stores in the Southeast United States. The Dornbush Group is a bonded warehouse and transportation corporation with 60 years of experience in the Atlanta area. The segmented cost estimate is $.1892 per case for warehouse handling, $.0292 per case for warehouse storage and $.2828 per case for transportation. The total cost estimate is $.5012 case and the analysis uses an average case cost of $26.00.

The vast majority of these costs should be recouped from industry allowances such as slotting and distribution allowances. Receipt of product FOB origin vs FOB destination as well as a reduced dependence on frequent delivery should further decrease product costs. Indications are that vendors pay distributors up to $.65 per case for frequent product delivery to commissaries. A price comparison conducted by the commission on the east coast points to a 1.5 percent price variance between frequently delivered and regularly delivered product. These factors, added to volume purchasing and programmed forward buying programs, should negate any product cost increases and could even decrease prices paid by commissary patrons.

The Marine Corps in-house distribution system validates this offset in cost through vendor allowances. The Marine Corps operates its West Coast Central Distribution Center for a cost of $.38 per case or 1.46 percent of sales. With vendor distribution allowances, they have reduced their cost of operation to $.26 per case, a net 31.6 percent decrease in costs. Since the Marines' West Coast Complex supports a mere 7 stores and achieves these efficiencies, the proposal should equal the cost saving percentages. As mentioned before, forward buying and other initiatives could negate the distribution costs.

A similar distribution scheme is proposed for Europe and the United Kingdom. The same contractor has proposed performance of the mission in Europe from four warehouses in West Germany for $.9355 per case. These costs break out to be $.2884 per case for the warehouse portion and $.6471 per case for second destination transportation. The costs in the United Kingdom are even more reasonable at $.242 per case for warehousing and $.226 per case for transportation. The total cost of $.468 per case for the United Kingdom segment approximates the estimate for the same service in the Southeast United States Region.

These costs could be directly offset from the second destination funds currently spent to support commissaries in Europe plus the offset in funds realized from transferring the DPSC DICOMSS mission to the European Commissary Region. Defense Logistics Agency currently expends $1.10 per case to perform only the warehouse portion of the overseas distribution function, a 73.8 percent greater cost than the proposed system. Chapter 7 includes a further analysis of these costs. Appendix J contains a full analysis of cost estimates for warehousing and transportation provided by the Dornbush Group for the Southeast United States, United Kingdom and Central Europe. Appendix J also contains cost data for the Marine Corps Central Distribution Center.

Contractor Concept of Operations. The contract operation should be in close vicinity to a major food distribution hub. The contractor will receipt for government property in full container shipments, account and store the product, and then issue and distribute the product using its own organic or a contract truck fleet. The contractor will store the commissary stock when required. To reduce storage requirements, large quantity forward buys will be stored in vacant warehouses behind commissary stores. Contractors will be required to backhaul product stored in the commissary warehouse space. This will accommodate forward buying without encumbering excessive warehouse storage costs.

The contractor will pack ocean container shipments for overseas commissaries designated to receive CONUS CDC support and deliver the containers to the applicable port for shipment.

The contractor will guarantee loss of all products (no shrink authorized) except for acts of God, e.g., fire, storm, etc. The concept for support of overseas stores from CONUS CDCs is extensively discussed in chapter 11.

Region Concept of Operations. The commissary region's computer will interface directly with the contract CDC inventory control system. The region will mirror the

CDC inventory using an off-the-shelf inventory control system such as the Worldwide Chain Store Inventory System or the Arthur Anderson Inventory System. The region will also use an inventory forecasting and replenishment system such as IBM Inforum III to assist regional merchandisers in buying product to replenish stock. All ADP will be off-the-shelf, state-of-the-art software and hardware similar to that used in the commercial supermarket industry. Information management will have to accomplish the following functions: Inventory Control, Inventory Forecasting and Replenishment, Purchasing and Bill Paying. All functions will be linked with electronic mailboxes to vendors to facilitate Electronic Data Interchange (EDI).

Paying bills for products received from a Central Distribution Center will eliminate voucher processing transactions by the number of receiving points currently in operation, e.g., for a region, one CDC times 1200 invoices per month in lieu of 50 stores times 1200 invoices per month. This contributes to the cost avoidance identified in the commissary store replenishment procedures.

Integrated Information Management. Computer hardware and software are the system multipliers in any inventory management model. During a meeting on 8 September 1989, representatives from Anderson Consulting of McLean, Va and IBM Federal Products Division in Bethesda, Md, provided computer sizing information to support the development of a prototype computer system to support a regional Central Distribution Concept. The full information data array is at Appendix C. Although specific brand name information was used to develop cost estimates, the commission does not endorse or recommend any specific brand of computer hardware or software.

The data elements used to size the equipment were: 20,000 lines in the Central Distribution Center; 12,000 lines per store; 5,000 vendors providing products; 20 buyers plus 10 contracting representatives to equal 30 on line users per commissary region; 315,000 cases leaving the distribution center daily; and the average purchase order containing 150 lines. This data remained constant during all five sizing models used. The changing variable was number of purchase orders issued daily. To insure the system had the capacity for unforseen growth, 2500 purchase orders daily was the upper limit researched. The lower range was projected at 100 purchase orders daily.

The full range of all purchase orders could be accommodated using the IBM 3090 series or equivalent mainframe computers. The same software used on the IBM 3090-100s can be used on the extremely large IBM 3090-600. Additional memory can be added as needed. Software was configured to perform the full range of tasks outlined in the scope above, as well as bill paying and NCR polling. The latter function is to be used to obtain store management data and down-load prices to front-end scanning computers at the stores. All prices quoted in Appendix C are list prices. Government discounts, multiple site licensing agreements, and volume discounts should obtain at least 35 percent reductions on high end machines and the reduced peripherals requirements should discount the low end quote by 40 percent. Based on this analysis, the high-end fully installed system should run $73.1

million, and the low-end system should run $26.6 million.

Based on this information, an IBM 3090-150 or equivalent was selected as the system of record. System configuration would include one mainframe at each of seven regions, one mainframe at the headquarters, core grocery management software such as Anderson's DCS/ Logistics or Worldwide Chain Store System, INFORUM forecasting software, NCR POS polling software, miscellaneous application software, system software and peripherals. Installation and integration consulting services for the headquarters and 7 regions are also included. The cost estimate for this system is $49.8 million at list price or $29.9 million with anticipated discounts.

Store Concept of Operations. Replenishment will be conducted electronically by store personnel who will scan store shelves using portable data entry devices (PDED) daily to determine appropriate order quantities. Output from point of sale scanning equipment can be used when determined to be more efficient. The order will be electronically transmitted to the Central Distribution Center by dial-up modem.

The electronic order will then be pulled from the Contract Central Distribution Center and shipped to the store the following day. The ordering cycle will be adjusted for smaller stores which can not accommodate daily delivery. Transportation will be optimized by using multistop shipments.

Accountability will be transferred from the CDC to the store by direct communications links between the CDC and region computer. Store receipts will be transmitted to the Region computer by PDED for both CDC and direct vendor deliveries. Price changes will be updated weekly by communications link from the region computer to the individual store. Store labels will be printed at the store on the NCR electronic point of sale equipment (EPOSE) or electronic cash register (ECR) systems and put on the shelf by grocery department personnel.

These organizational changes will eliminate at least 75 percent of Warehouse, Control section and Scanning related personnel. Table 11.8 provides an analysis of the $83.5 million cost savings.

RECOMMENDATIONS

5.6a. That central distribution be approved as the future concept of record for the commissary system.

5.6b. That if consolidation is approved, an implementation team be established to validate the efficiency and effectiveness of the central distribution concept as proposed, compared with other resupply alternatives. This team will prepare an implementation plan based on the analysis, specific responsibilities, milestones, contract specifications, information management requirements, inventory management procedures, and other details needed for planning.

5.6c. That if consolidation is not approved, a follow-on study under the direction of the Board of Directors (chapter 11) be conducted to determine adequate information management, milestones and implementation procedures for central distribution.

5.7 CASH COMPENSATION IN LIEU OF COMMISSARY PRIVILEGES

BACKGROUND

The history of the military commissary system as depicted in Chapter 2 points out how commissary privileges have become institutionalized for members of the military Services to be used on active duty with the right carried into retirement. Recent surveys have found perceptions on this non-pay entitlement actually improve after completion of first term enlistments, one of the few benefits to improve its stature.

The commissary benefit has been repeatedly found to be the most important non-pay benefit next to medical care. Active and retired families have put up with long lines and crowded stores because they remained convinced that the commissary bargain makes the effort worthwhile.

The Congress has been steadfast in its support of this non-pay entitlement. This support is evident in the Fiscal Year 1989 National Defense Authorization Act which strongly endorsed the commissary privilege by prohibiting the privatization of military commissaries and in Chairman Marvin Leath's letter which requested this study. In the latter letter, Chairman Leath directed specifically that study parameters encompass options for ensuring a viable commissary program.

DISCUSSION

While commissary privileges are recognized as a non-pay entitlement, critics have stated from time to time that the benefit could be provided in a more cost effective manner if provided to Servicemen in the form of a cash compensation. They have publicly stated that operating commissaries is too expensive for the benefit provided. The following paragraphs dispel that theory.

As of 31 March 1989, the population eligible to receive commissary privileges is comprised of 2,154,020 active duty personnel, 1,566,899 retirees (including 139,799 families receiving survivor benefits), and 1,170,441 reservists in a paid status. (Source: DOD Directorate for Information, Operations and Reports - DIOR.) In addition, many Department of Defense civilians in overseas areas are also eligible.

In a scenario which would consider "paying" only the married active duty personnel assigned in the US in lieu of operating commissaries for all, cash compensation would exceed the appropriated fund support for US commissaries by 85 percent. This would make it prohibitively expensive to provide the benefit as a direct cash contribution. Table 5-3 portrays this analysis.

Cost Comparison Analysis
Commissary Cost vs Cash Allowance

- **Computation of cash allowance cost--**
  - Active duty military personnel assigned in CONUS 1,335,434
  - Number in force married (54.4%) 726,476
  - Average disposable income per member (FY 1988) $19,492
  - Average amount spent per member on "food consumed at home" (25%) $4,873
  - At 25%, commissary average savings (amount to be paid to married members in CONUS in lieu of non-pay benefit) $1,218
  - Extended annual cost, cash allowance in FY 1988 $(726,476 x $ 1,218) ..... **$884.85 Million**
- **Appropriated fund Support for CONUS commissaries ..... $477.50 Million**
- **Net cost increase--cash in lieu of commissary privilege ... 85% or $407.35 Million**

Source: DOD DIOR

Table 5-3. Cost comparison--cash allowance in lieu of commissary priveliges

Since the analysis was performed only for active duty members, a similar cash compensation package provided to all entitled personnel (single active military, retirees, and reservists) would require considerably greater outlays if the benefit was converted from non-pay to cash compensation.

The net value of the commissary benefit can be arrayed in a slightly different fashion

by calculating the cash value of the benefit as follows:

- Sales in FY 1988 . . . . . $5,447.5M
- Sales indexed at commercial prices (+25 %) $6,809.4M
- Value of savings $1,702.3M

The appropriated fund support to achieve these savings amounted to $724.7 million in FY 1988. Cost avoidance to the tax-payers is just under $1 billion.

RECOMMENDATIONS

5.7a. That the commissary privilege be continued in its present form as non-pay compensation since it is the most economic alternative for the US taxpayer.

5.7b. That the implied contract of providing commissary privileges to the total force, active duty and retired, not be abrogated, but rather that the commissary privileges be recommitted, and Congress express this recommitment through full funding of the commissary system to meet the level of service defined in this report.

THE ORGANIZATIONAL STRATEGY

The financial strategy highlighted a need to relook how the commissary systems do business. Many of the functions currently being performed are labor intensive and are no longer performed in the commercial grocery industry. Some of these functions cannot be eliminated without organizational restructuring. Chapter 11 extensively outlines how a consolidated DOD commissary system could also save over $100 million annually by eliminating redundant intermediate and systems headquarters and creating regions that could assume a central distribution mission. Central distribution is not necessarily dependent on consolidation for implementation; however the current Defense Personnel Support Center structure points to severe inherent organizational difficulties when one agency does not have full authority and responsibility for all actions.

This section will discuss various organizational issues and how they can be used to develop a strategy for the future commissary system. All of these issues will require an extensive internal marketing effort to assure the separate Services that commissary support and responsiveness to the installation commander can be equal to or better than the current systems. The issues are arrayed in a manner that allows them to be combined into various implementation alternatives or used independently. They are explained next.

ALTERNATIVE #1: CENTRAL DISTRIBUTION WITHOUT CONSOLIDATION

Central Distribution is the most cost effective concept available in the industry and

is the primary distribution method used by all major grocery chains. Central distribution can reduce redundant warehousing functions currently performed at military commissaries worldwide and provide a platform for central bill paying and product buying. The current decentralized bill paying and ordering functions require over 1900 manpower authorizations systems-wide. Follow-on automation and electronic data interchange can provide state-of-the-art, labor-efficient operations to minimize the appropriated fund support to commissaries, a critical issue during the current budget crisis.

In theory, a consolidated DOD system is not a requirement to establish central distribution. In practice, without consolidation, it will be extremely difficult to overcome the barriers in supporting four different commissary systems with one central distribution network. Each Service currently has a different accounting system and a different "above-store level" automated system. Bill paying is also different, with the Air Force paying at installation, the Army and Marine Corps paying at region and the Navy paying at its NAVRESSO Headquarters.

If one Service was made executive agent for central distribution CONUS-wide or in a particular region, each Service would have to provide a long term commitment to use the distribution system. Another, probably different, accounting system would have to be set up to manage the change in accountability from the CDC to the store, since two different accountable officers would be involved. The store would have to maintain a large number of receivers to insure merchandise accountability was properly transferred and it would be difficult to automate this cumbersome procedure. "Finger pointing" will surely evolve, particularly since one agency is not clearly in charge.

A fully integrated, consolidated system eliminates this problem. Since the region commander/director is accountable for inventory in the CDC and the store, an elaborate store receiving procedure is not required. This procedure has been pioneered in the private sector and provides a medium for automating the receiving function and thus, eliminating the majority of receiving positions. The region commander/director has geographic responsibility for all distribution, comptroller and retail functions in his region and is the single point of contact for all commissary related issues. Under a consolidated system, the region commander/director has the authority and responsibility to insure success.

The estimated $83.5 million in savings associated with central distribution and bill paying are based on consolidation and most likely will not be fully realized without complete consolidation. Given the increased degree of difficulty in operating central distribution and bill paying without consolidation and the probability that the entire spectrum of savings may not materialize, central distribution without consolidation is not the optimum course of action.

ALTERNATIVE #2: FOUR TIER, PHASED CONSOLIDATION

This alternative uses four distinct implementation phases with a capability to accelerate or halt the process at a particular phase should political or economic factors dictate such a decision. The first

(regionalization) phase would call for separating the Navy commissary system from the Navy exchange system. This interim Navy system would have no more than five command and control regions. During this phase, overseas districts would be organized along Service lines to accommodate the future consolidated region configuration.

During the second (standardization) phase the Army and Air Force would reorganize their respective commissary regions as proposed in the Defense Commissary System configuration and convert its warehouse distribution system to a central distribution concept. The stovepiped Navy and Marine Corps commissary systems would not change their organizations during this phase. The four regions west of the Mississippi would become an Air Force responsibility and the two regions east of the Mississippi plus Europe would become an Army mission. Each Service would be responsible for establishing the central distribution mission within its regions. Select districts would be filled by joint service billets based on the dominate Service. For example, the Korea District commander would be an Army officer reporting to an Air Force region commander and the United Kingdom District commander would be an Air Force officer reporting to an Army region commander.

Phase three would be a two-service consolidation between the Army and Air Force. At this point eighty percent of all commissaries in DOD would be in the Defense Commissary System (DECS) regional configuration and this phase would merely eliminate one service headquarters. Again the Navy and Marine Corps would not change their organization pending the phase four consolidation. Due to geographic dispersion within the regions, CONUS districts may not be required during this phase.

Phase four would be complete Department of Defense commissary consolidation. Navy and Marine Corps intermediate and system headquarters would be disbanded and all commissaries would fall under the DECS region configuration. Districts would be formed to expedite command and control.

However, given the amount of time which would be required to implement this alternative in four phases, as well as the reduced savings which will not be realized without consolidation, this solution is not the optimum course of action.

ALTERNATIVE #3: DIRECT CONSOLIDATION

This alternative proposes a direct approach to the task of moving to a consolidated Department of Defense Commissary System. Generally, the approach is to use a transition team to validate concepts, prepare the cost benefit analyses and develop the implementation plan and procedural instructions to be used by a provisional Defense Commissary System (DECS). DECS provisional would then form the management platform to move directly into the DECS organization. This direct approach will preclude years of frustrating delays and insure the transition is smooth, organized and productive.

Assigning the various "standardization" responsibilities to a lead Service denies the consolidated system the opportunity to develop its own best way to do each function. It also

imposes the historical bias of one Service during the critical period the new system is trying to overcome the barriers presented by unique support structures, financial procedures and information management systems.

A transition team could lay the groundwork for the new organization. The first step would be to establish the DECS Board of Directors to guide the transition team in its development of the new organization. Frequent In-Progress Reviews (IPR) would be used to oversee progress and provide guidance to insure the project remains timely and on track. Within a year the transition team would convert to a DECS provisional configuration to identify and resolve operational constraints and solidify concepts prior to consolidation.

DECS provisional would consist of the General/Flag Officer commander and a small unified staff drawn from existing commissary systems. Although the Service commissary systems would continue to operate autonomously, the commanders of these separate systems would report to the DECS commander with existing reporting, rating and authority channels being severed. The commander of DECS provisional would report to the Board of Directors (as depicted in Chapter 11) and would direct the standardization and unification process allowing for timely development and transition of functional systems, e.g., financial, personnel, logistical, etc.

This approach to full consolidation and DECS implementation would avoid possible reduction-in-force (RIF) actions associated with alternative #2 above. For example, if the decision was made to give the Air Force responsibility for engineering and training, the action would drive a RIF at HQ, Troop Support Agency. Under current RIF regulations, if the function being transferred to the gaining activity is performed at that activity, the employees performing the function at the losing activity are not entitled to transfer with their jobs. These employees would have to be separated or placed in other jobs through RIF procedures, a bad situation since many of these talented employees will be needed in the new organization. On the other hand, establishment of DECS provisional before DECS would allow current system employees to be transferred with their jobs into the new organization, a much better alternative. In summary, a transition team followed by a DECS provisional organization will provide a direct, efficient approach to Defense Commissary System (DECS) implementation and full consolidation. With the exception of the Command and Control issue, the majority of the following organizational issues would be avoided if this alternative was adopted.

SUMMARY OF ALTERNATIVES:

Alternative #3, direct consolidation is the best course of action. It is the most cost effective and efficient proposal but it is not without drawbacks. One major concern is that with commissary sales indexed to industry margins, consolidation would create the sixth largest grocery chain in the United States and thus provide an inviting target for the anti-government lobby. The problem is not insurmountable but needs to be recognized as an issue.

On the other hand, consolidation would create a much more efficient organization by reducing headquarters and region overhead by

approximately 50 percent. The proposed system would save appropriated funds while improving patron support to a level higher than any Service can provide individually. It would standardize the organization, procedures and distribution methods and thus allow commercial industry practices to be integrated directly into commissary operations. Finally, consolidation would provide a platform to evolve the commissary system into the next century and the "direct consolidation" alternative provides the quickest and most efficient path to implementation.

The following issues will address the various organizational issues that impact on these alternatives. These are separate issues in sufficient detail for consideration as stand alone options or as part of an integrated alternative.

5.8 COMMISSARY COMMAND AND CONTROL

BACKGROUND

Essentially all of the military commissary systems are charged with the same mission: Maintain military readiness by providing the non-pay compensation benefit of subsistence and household items for resale to authorized patrons at the lowest practical price. The military commissary systems are dedicated to providing the highest possible service levels while maximizing operational efficiency. Each system is currently organized to fulfill this mission differently. This issue will analyze the variance and propose an optimum command and control system.

DISCUSSION

The Navy System. Headquarters, Navy Resale and Services Support Office (NAVRESSO) in Staten Island, N.Y. provides staff support for Navy commissaries and exchanges worldwide. The Commissary Operations Group of NAVRESSO provides functional support through eight field support offices (FSO) or regions in the areas of operations, data processing, procurement, accounting, administration, and facilities management. The Commissary Operations Group shares priorities with the Exchange Operations Group and FSOs are responsible for both functions. At the commissary level the lines of authority are confusing with technical and operational direction coming from NAVRESSO and command direction provided by the local installation commander. Figure 5-3 depicts the organizational alignment of the Navy commissary system.

The installation resale officer, who manages both the exchange and commissary operations, is put in the position of working for two bosses with differing priorities. The resale officer's loyalties are naturally with the local commander who writes his primary fitness report. That local commander wants to increase commissary service levels while maximizing local Morale, Welfare, and Recreation (MWR) contributions from the exchange operations. On the other hand, management control and accountability for funds, fixed assets, and inventory is a NAVRESSO responsibility delegated to the supporting Field Support Office (FSO). The local retail officer receives a concurrent fitness report from the FSO for this part of his mission.

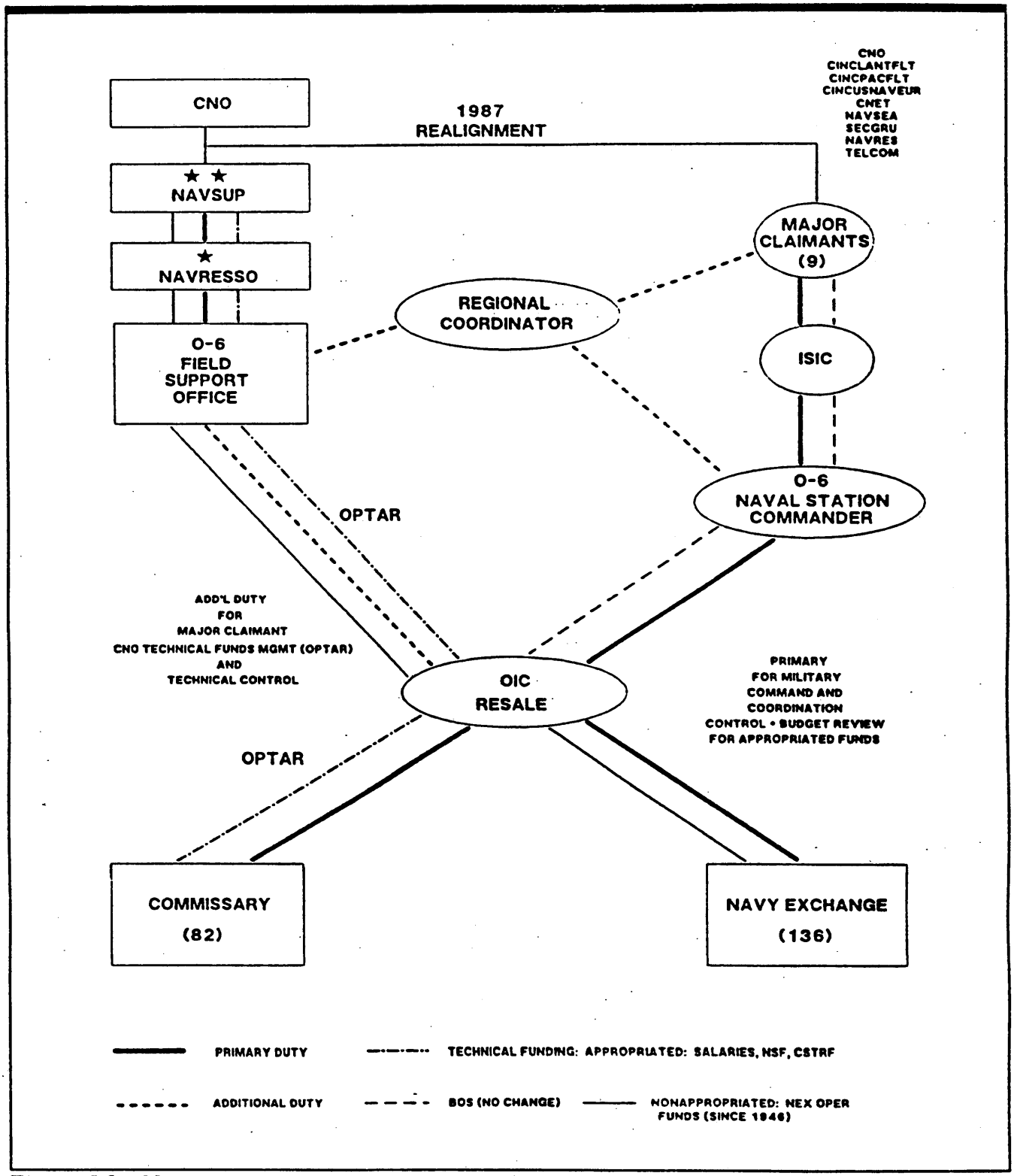


Figure 5-3. Navy commissary system organizational alignment

It is here that the organization develops problems. The local commander is interested in expanding services but does not own the funding or have the technical expertise on his staff to accomplish the task. NAVRESSO on the other hand controls centralized funding for operations and capital improvements, centralized contracting and procurement, and provides policies and procedures for operating all 82 commissary stores and 136 exchanges worldwide. The worldwide priorities virtually always conflict with local priorities. The officer in charge (OIC) of the resale activity and ultimately the sailor are the losers. The OIC must be responsive to the local commander who controls his destiny through a fitness report, but the OIC does not have the resources to meet the wants and needs of the task at hand because those assets are controlled by an unrelated activity.

The Other Services' Systems. The Army Commissary System is operated by the Troop Support Agency (TSA) headquartered at Fort Lee, VA. TSA accomplishes the mission through five commissary regions who are delegated authority to manage retail commissary operations and assigned Troop Issue Subsistence Activities within its geographical area of responsibility.

TSA uses direct line and staff authority to control its operations worldwide. Army Commissary Officers receive official performance evaluations from the Region Deputy Director and Director. These two officials solicit and consider written and oral comments from the respective installation Commander who also submits semi-annual Commissary Efficiency Summaries; however, the line of authority flows directly through the commissary chain of command. Installation Commanders are not directly included in this chain of command.

Similarly, the Air Force Commissary Service (AFCOMS) headquartered in San Antonio, TX operates the Air Force commissary system through seven CONUS and two overseas regions. Regions have direct line authority over subordinate commissary stores and troop support operations. AFCOMS' philosophy of operation is that the stores belong to the respective bases and that the headquarters delegates execution of operations to the lowest possible level. In practice, AFCOMS has a direct chain of command from the headquarters, to the regions, and then to the store level.

As in the Army, an Air Force Commissary Officer receives an official performance rating from the Region Deputy Director and Director. Comments from Base Commanders are solicited annually by letter and during the year when Region personnel perform Staff Assistance Visits. During these visits, a meeting is usually held with the Base Commander to determine how well the commissary is meeting local command expectations.

The Marine Corps operates similarly to the Air Force in that the philosophy of base ownership of commissaries is stressed but in reality a true line and staff organization exists. Headquarters, Marine Corps in Washington D.C. prescribes policy through its Services Branch and Commissary Section for its commissary program. The Operations function is performed through both the East Coast Complex with seven stores and the West Coast Complex with eight stores. Each complex office has its own administrative, financial,

operations, purchasing, and systems support. Commissary officers receive performance appraisals from complex directors who in turn receive ratings from Headquarters, Marine Corps.

In reality, the Army, Air Force and Marine Corps commissary systems are organized in a direct line and staff configuration beginning with a system-wide headquarters, progressing down through an intermediate echelon of management, and finally reaching the actual operational level. In the Navy the commissary stores are really controlled by the individual installation Commanders. The intermediate field support and headquarters offices provide technical and operational support only. They actually have no direct management authority over the stores due to that being a responsibility of the local base commander. The Navy system is the most awkward to manage due to the lack of a clean line of authority.

The Army and Air Force Commissary systems have a vertical chain of command. Real authority flows from the Agency Headquarters down to the intermediate headquarters levels and, in turn, to the store and troop issue operational levels. Each level is held accountable for successful performance of its functional responsibilities and has proper authority to carry out these chartered responsibilities.

A Comparison of the Systems. The Army, Air Force and Marine Corps systems have a clearly established system of operational control to insure that commissary business is carried out effectively, according to the well-defined procedures and rules derived from commissary management. Commissary managers directly interact with one another and are the focal points in management control. Staff people collect, summarize, and present information that is useful in the management process, however, all significant decisions are made by commissary line management.

In the Navy system, commissary officers do not receive direct management control from commissary management. The goals of the entire commissary system, previously established in the strategic planning process, are not necessarily the goals emphasized and used in rating the Navy's commissary officers. Likewise, a commissary officer's rating does not necessarily reflect how efficiently and effectively the job was done nor how well the commissary officer utilized corporate resources. In other words, the chain of command cannot really assure that commissary officers manage in a way that insures the goals of the organization are being attained efficiently.

Command & Control Under Consolidation. The role of the installation commander need not change under consolidation. Paralleling current policy in AFCOMS, TSA and the Marine Corps, the proposed Defense Commissary System (DECS) will continue the important role of support to the base commander, who is the senior representative of the community which the commissary serves and therefore responsible for the quality of life of his constituents. The installation commander will articulate the needs of the community, communicate them to the commissary system and evaluate the effectiveness of the commissary in meeting those needs.

As in the current system, under DECS, the installation commander will evaluate the commissary system and its support by:

- Providing input (oral/written) on the performance evaluation of commissary officers.
- Meeting regularly with members of the community on commissary matters and providing their concerns to DECS commanders or directors as appropriate.
- Providing periodic reports on the effectiveness of commissary resale operations through his major command to Headquarters, DECS.
- Meeting with DECS management during staff assistance visits and providing input on current operations.

Under a consolidated system as proposed, the installation commander will have the same clout he possesses under the current separate commissary systems. The patron should notice little difference outside improved level of support driven by a more efficient distribution system and longer hours of operation. The local commissary will still be "the commissary" in the eyes of the patrons.

RECOMMENDATION

5.8a. That the Navy change its current commissary command and control policy to mirror the direct line and staff policy of the other three commissary systems. That the Navy provide its commissary management with the true authority to insure successful accomplishment of the organizational mission. That non-commissary missions be separated from the commissary portion of headquarters and regions to ensure that the commissary entities have authority to conduct commissary business.

5.9 REGIONALIZATION

BACKGROUND

The operation of a successful grocery store or military commissary is very fundamental: provide what the customer wants (variety, quality, etc.); when he wants it (in-stock efficiency, hours of operation, etc.); where he wants it (store location, convenience, etc.); how he wants it (pleasant environment, speed of checkout, etc.); and at an acceptable price. The functional differences between the Services' current commissary systems have resulted from evolving management tactics to meet these "what, when, where, how and price" fundamentals and are not necessarily related to the mission at hand. Few if any reasons exist for the differences in the various commissary systems since their goals and objectives are inherently the same.

A similar tone was echoed by Chairman Marvin Leath of the Morale, Welfare and Recreation Panel of the House Armed Services Committee in his letter of 2 March 1989. In that letter he stated, "each branch of the Armed Services is taking a different approach to enhance system resources" and that "significantly disparate policies designed to address similar problems cause considerable

disruption over the long term... and sends mixed signals to Congress, Federal budget managers, industry and the patrons."

DISCUSSION

The Jones Commission tasking includes recommending efficiencies that can be adopted to preserve the commissary entitlement for military families into the Twenty First century. Efficiencies naturally include planning for greater commonality of operating practices between the commissary systems. Although differences in approach may not necessarily add to the costs of doing business, duplicative functions do.

With each Service maintaining separate fully staffed headquarters and regional offices, each performing basically the same tasks, the commissary systems are not capitalizing on economies of scale through consolidation. Efficiencies can be achieved by combining responsibilities under a central command. In the long term, the historical and traditional responsibility of each Service towards supporting "HIS" troops becomes less important than the reality of losing the entitlement. With the continuing decline of appropriated fund (APF) support for commissaries, it is imperative that the commissary systems optimize organizational efficiency to meet the challenges of the Twenty First Century.

During this phase, centralized functions are established with a single Service assigned total responsibility for that function. Recognizing that standardization and thus regionalization is dependent on systems, policies, and operating procedures of the various commissary systems, the easiest method of overcoming the obstacle is to put one service system in charge of the function. It's not a question of being able to do it, or even whether it is logically the right thing to do from an organizational viewpoint, but rather when should it be done based on the dollars and cents cost analysis.

Two functions are logical candidates at this time: bill paying and construction management. Issue 5.5 discusses a consolidated system to pay bills with action directed toward electronic data interchange. The Army currently has a regional bill paying system with a plan to move to a centralized system. It would seem logical, that the Air Force consolidate the mission with the Troop Support Agency (TSA) performing the mission for both Services. In Chapter 8, centralized construction management is discussed and it is logical that the Air Force Commissary Service (AFCOMS) could perform this function for both Army and Air Force commissaries similarly to bill paying in the previous discussion. Navy and Marine Corps construction programs could also be integrated into this concept at this point. A memorandum of understanding could be the contract outlining the specifics of the endeavor.

Geographic regionalization could be undertaken simultaneously by centralizing tasks and functions. It is recognized that transferring responsibility for a limited number of stores particularly in CONUS would have minimal operational cost payback. Such an action also seems to have a minimal impact on current organizational alignment and would not justify closure of regional offices based on a similar cost analysis.

The action, however, could be justified as part of an overall strategy to move toward consolidation, particularly in regards to AFCOMS and TSA. Both commissary systems have complex or district headquarters where large geographical concentrations of commissaries exist. The consolidation proposal addresses the issue by assigning district commanders and managers to provide command and control at these locations. The overseas districts could be formed immediately and given the regional responsibilities they will have at complete consolidation. The United Kingdom, Korea, and Japan Districts could be formed immediately. The six remaining overseas districts in Central Europe, the Mediterranean and Hawaii could be formed at the outset of central distribution implementation.

RECOMMENDATIONS

5.9a. That, if consolidation is approved as the course of action, commissary districts be established by Defense Commissary System (DECS) provisional to provide command and control for all commissaries in the United Kingdom, Korea, and Japan. That DECS provisional establish a similar grouping in Central Europe, Hawaii and the Mediterranean upon implementation of central distribution.

5.9b. That the mission of centrally paying AFCOMS bills currently paid locally by installation, be deferred until DECS implementation or if consolidation is not approved, at a point in time determined by the results of a study directed by the Board of Directors (as outlined in Chapter 11).

5.9c. That a joint services engineering function be established by the DECS provisional or if consolidation is not approved, the function be studied under the direction of the Board of Directors (as outlined in Chapter 11).

5.10 EXECUTIVE AGENCY SYSTEM

BACKGROUND

Service parochialism is a strong factor that must be considered during the development of any new system. Each Service normally feels they can influence actions to better serve the needs of their respective force. A consolidation of commissary systems cannot be taken lightly. As discussed in chapter 2, the system has evolved over time into what commissaries are known to be today. Whatever course of action taken, it must be weighted against the best interests of the force and should improve not degrade service levels.

DISCUSSION

Issue 5.11 extensively discusses a consolidated Army and Air Force Commissary system. This system is designed to provide a platform for systems automation through regional central distribution. The costs savings through reductions in headquarters overhead and reduced bill paying functions are extensively discussed. It is possible to operate an interim system that would provide a similar organizational platform while maintaining Service integrity.

The system is based on reorganizing the Army and Air Force commissary systems into regions as outlined in issue 5.11. This yields seven regions--six in the United States and one in Europe. The Air Force would be responsibile for the four regions west of the Mississippi River, and the Army would be responsible for the two regions east of the Mississippi plus the European Region. A board of directors would be formed with a mission of overseeing the system and its transition during consolidation. Contract central distribution would be established as planned in each region with the responsible Service tasked with implementation.

The other two Services would be required to use the consolidated central distribution centers once activated and made operational by the responsible Service. They would gain membership to the board of directors once the commissary system started using the central distribution centers.

This procedure could provide an operational transition or, if effective, could become the system of record. Figure 5.4 is a graphic portrait of the geographic responsibility. However, given the amount of time which would be required to implement this alternative in four phases, as well as the reduced savings, which will not be realized without consolidation, this solution is not the optimum course of action.

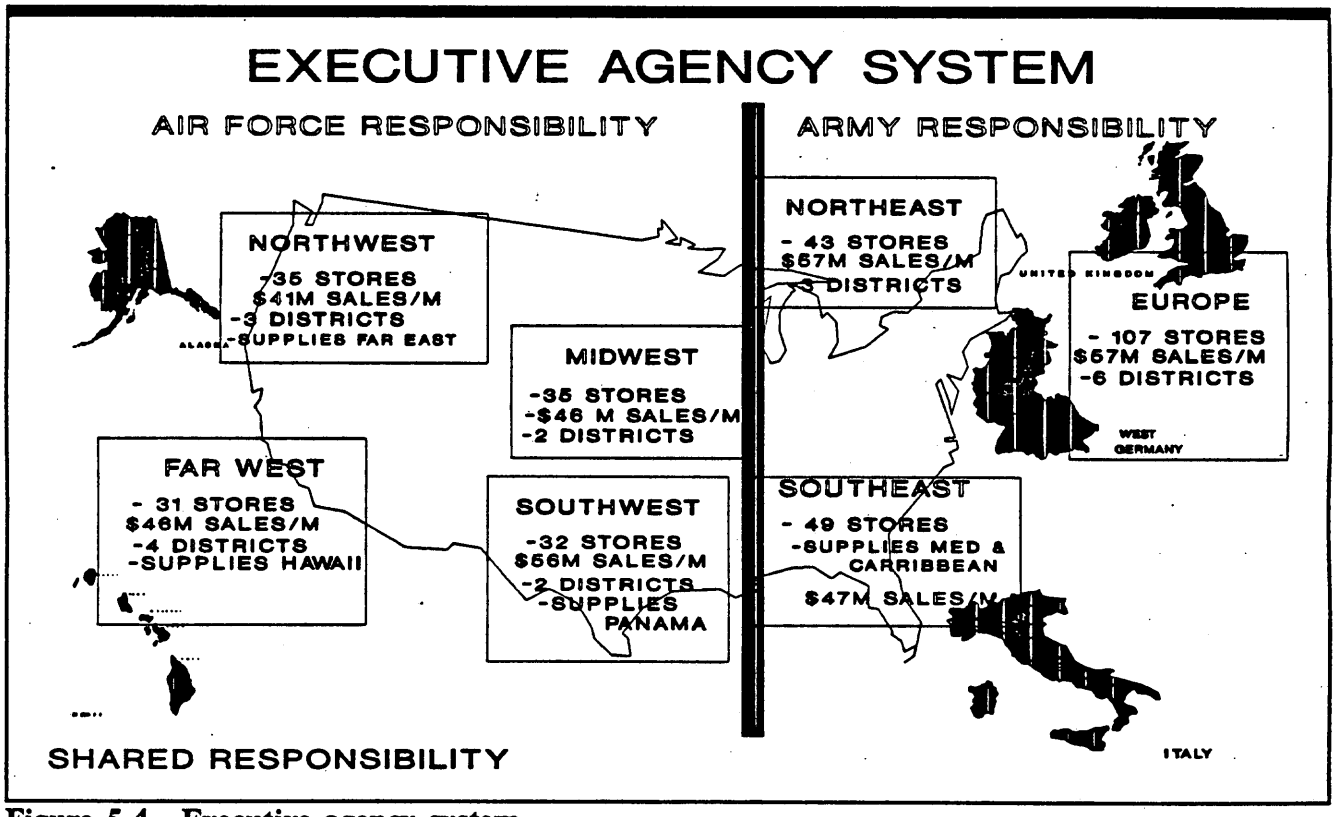


Figure 5-4. Executive agency system

RECOMMENDATION

5.10a That Executive Responsibility not be considered and if consolidation is chosen as the course of action, the Defense Commissary System (DECS) provisional organization be implemented to manage the future commissary system.

5.11 TWO SERVICE CONSOLIDATED ARMY AND AIR FORCE COMMISSARY SYSTEM (AAFCOMS)

BACKGROUND

Chapter 11 of this report discusses a Department of Defense Commissary System and the benefits of such a consolidation. Consolidation is not new, having been studied on two separate occasions: the Bowers study in 1975 and a follow-on study in 1979. The Bowers study had the greatest impact in that it centralized the Services' commissary systems and provided a springboard for the explosive growth of the commissary system during the past decade.

This issue will discuss a two-service consolidation and identify how this system could be used as an intermediate stepping stone to a full DOD commissary system consolidation. The two-service system could also be used as a final system should economic or political issues preclude complete consolidation.

DISCUSSION

Most Army and Air Force stores are modern and remarkably almost 100 percent have point of sale scanning equipment. The healthy budget years of the early 1980s provided the funds to increase services which generated greater surcharge revenue. This revenue built new stores which brought the cycle full circle.

The current state of detente in world politics has closed the door on big future budgets. On the other hand, commissary patrons have come to expect ever-increasing levels of service-funded by increased appropriations from Congress. The outlook for an increase in appropriations to fuel needed growth is bleak. The commissary system must look to generating revenue or maximizing efficiencies if it is to survive.

Building a Better System. The Jones Commission has devoted much time and energy to examining the current system while simultaneously reviewing the operations of commercial grocery distributors and chains. Generally speaking we have found the system to be driven by reams of paper, many varied procedures and warehouses tacked on to our stores. Our automation does not meet the requirements of the times and we do not trust computers to do the work they are capable of doing. The commissary system, as currently organized, cannot optimize the automated systems, transportation grid or distribution techniques available in the private sector.

It is not too late. With a streamlined functional organization, the commissary system can use private industry to centrally distribute product. If the system continues to own its

inventory and use the same off-the-shelf computer hardware and software used by its civilian industry counterparts, most distribution costs can be offset by forward buys, distribution allowances and reduced inventory levels without increasing prices to the patron.

Organizing for the Future. The revamped organization would reduce administrative overhead in commissary warehouses and control sections by 75 percent immediately and it is conceivable that they could be totally eliminated at some point in the future. If receipts were centralized at the central distribution center, administrative bill paying functions at regions could also be reduced by over 75 percent or a total of $76.8 million. Organizational changes could reduce an additional 828 spaces (753 by discounting spaces previously recognized in the bill paying issue) generating $25.6 million in appropriated fund offsets or a total of over $102.4 million in savings. These savings could be directly applied to the customer service issues to cover the $30.5 million TSA and AFCOMS shortfall in that category of support and still provide a net taxpayer saving of $71.9 million. That category includes vendor shelf stocking and commissary employees to provide increased levels of service, primarily cashiers but includes other service departments as well.

The model Army and Air Force Commissary System headquarters would have 300 personnel. Figure 11.1 outlines the functional divisions in that headquarters. This headquarters, as proposed, would replace two headquarters currently staffed with 629 personnel.

The separate Army and Air Force commissary systems currently utilize 2048 personnel at various intermediate headquarters performing area command, control and operational functions. Many of these functions particularly in the finance and accounting arena could be consolidated, redefined or eliminated if the system was organized in line with a commercial grocery chain. The system as envisioned would have 1 headquarters, 7 regions and 22 districts requiring 1220 positions worldwide. This proposal would offset 828 positions. Figure 11.2 outlines the proposed commissary region with a staffing of 100 spaces and figure 11.3 similarly outlines the proposed commissary district with a staffing of 10 spaces.

The proposed organization would report to a board of directors. The board, as envisioned, will establish commissary system policy within the authority and guidance provided by the Chiefs of Staffs of the Army and Air Force. The board will review financial status of the commissary system and provide direct guidance on plans and programs. The objective is to enhance patron service and insure that a financially solvent, responsive system is maintained for the benefit of the authorized patron.

The board would need to be established immediately, meet quarterly and guide the Service's commissary system transition to the new system. Table 5-4 outlines the actual composition of the Army and Air Force Commissary System Board of Directors.

Command and Control. The Army and Air Force Commissary System (AAFCOMS) will have command, control and direction over the worldwide system of commissary stores. In addition to the headquarters, the organization shall consist of seven regional offices, 22

districts, and stores worldwide. AAFCOMS would be established as a joint service command under the jurisdiction of the Chiefs of Staff, Army and Air Force. A board of directors, representing the Departments of the Army and Air Force would be responsible for directing the operations of AAFCOMS. AAFCOMS would provide policy guidance and direct the plans and programs of the worldwide commissary store system. In addition, the board of directors would review the financial status of the system and assure that it is responsive to the needs of the authorized patrons.

Chairman (rotated)	General Officer appointed by the Deputy Chief of Staff, Logistics; Army -or- General Officer appointed by the Deputy Chief of Staff, Logistics and Engineering; Air Force
Members	Comptroller of the Army Comptroller of the Air Force General Officer appointed by the Deputy Chief of Staff, Personnel; Army General Officer appointed by the Air Force Auditor General Sergeant Major of the Army Chief Master Sergeant of the Air Force Commander, Army and Air Force Commissary System

Table 5-4. Army and Air Force Commissary System Board of Directors

Executive direction of AAFCOMS would be provided by a Major General (0-8) Commander to be rotated between Army and Air Force general officers. Technical executive direction would be provided by two Senior Executive Service officers serving as the Deputy Commander for US Operations and the Deputy Commander for Overseas Operations. Figure 5-5 depicts the proposed organizational configuration for AAFCOMS.

The Commissary Region. Regions would provide command, control and direction through districts to the commissary stores within each region. Regions would also perform operations functions such as procurement, accounting, information management and administrative support for the commissary stores. Executive direction of the European region would be provided by a Brigadier General (07) Commander rotated between Army and Air Force assets. The remaining six CONUS regions would receive executive direction from Colonel (0-6) equivalent commanders or Civil Service GM-15 managers. Figure 5-6 outlines the proposed region configuration.

Regions would direct operations through retail counselors located in each district. These individuals would assist commissary officers by coordinating merchandising programs, product movement and overall commissary store operations. Central distribution is an integral part of the region mission. Buying product to replenish storage, negotiating price, and vendor bill paying are also included in the mission.

Each Region would have its own contract Central Distribution Center and would be responsible for supplying all commissaries within its subordinate districts. An exception would be the Mediterranean District which would be under the command and control of the European Region but would receive its product from the Southeast US Region CDC. Ship sailings from Charleston make this an economically favorable alternative. The

operating cost of the contract central distribution center would be paid by stock fund surcharges, distribution allowances or forward buys. Volume purchases should provide the commissary patron with prices equal to or better than current commissary prices.

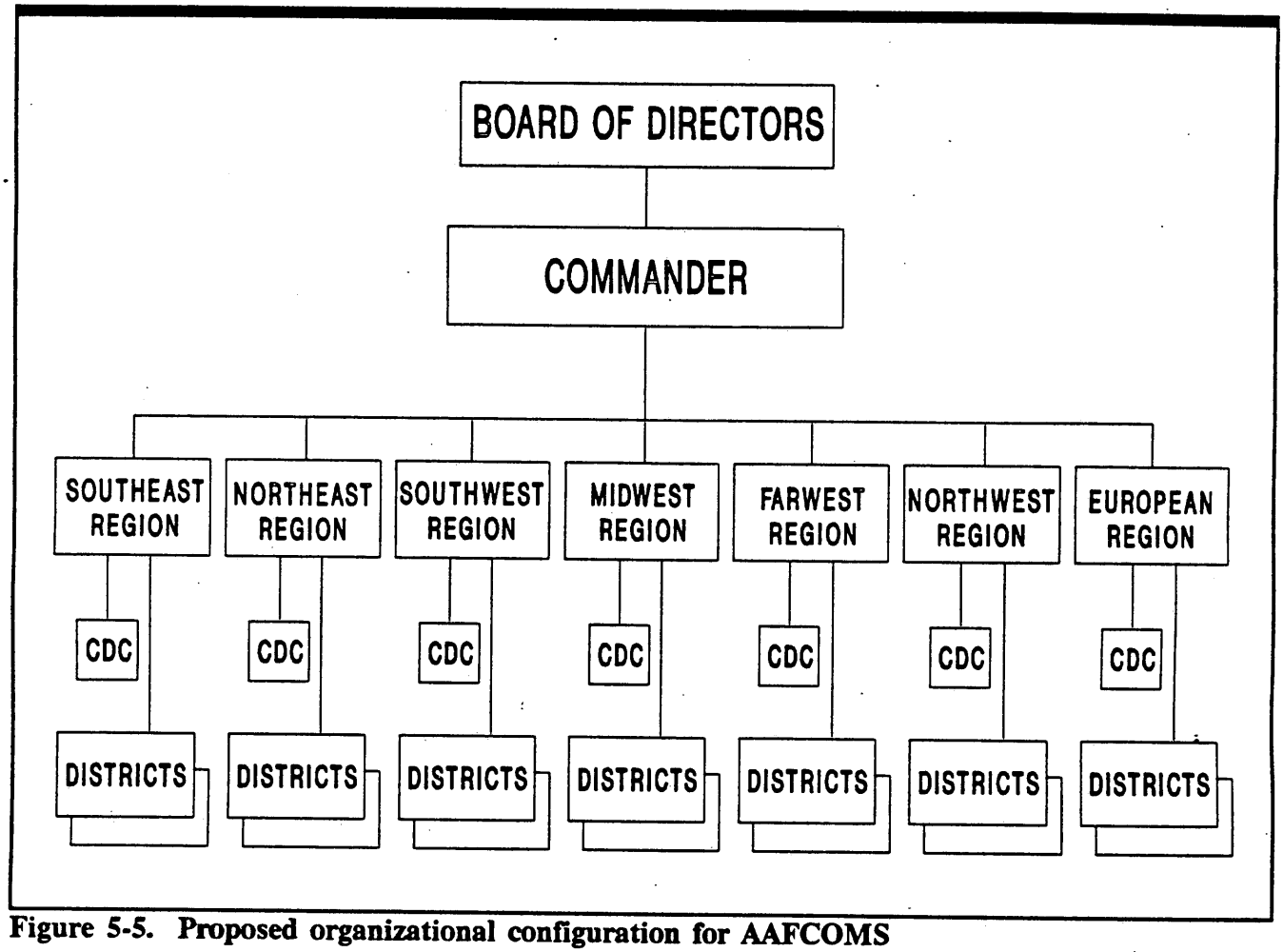


Figure 5-5. Proposed organizational configuration for AAFCOMS

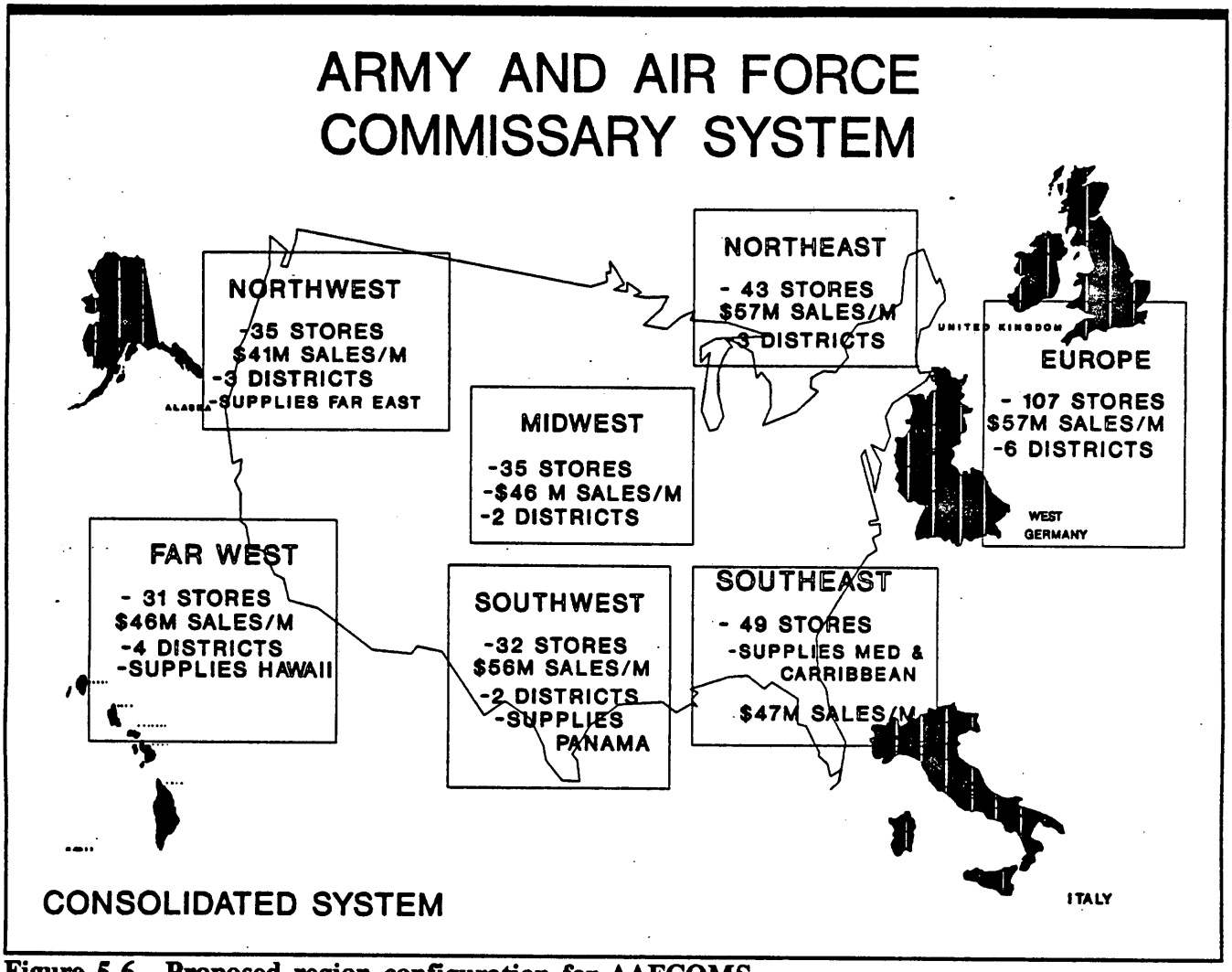


Figure 5-6. Proposed region configuration for AAFCOMS

The seven proposed commissary regions are dispersed around the world. The Southeast Region, as proposed, would have two districts, 29 stores, and support the Caribbean as well as stores in the southeastern United States. It's central distribution center would support 20 stores in the Mediterranean District. Its center of mass is located in Atlanta and its contract central distribution center will probably be located in that city. Atlanta is currently a commercial distribution hub and one local warehousing corporation has indicated a strong interest in providing contract central distribution service to our proposed system. It is also envisioned that the region headquarters will be located at one of the military facilities in the city. Southeast Region stores are depicted at Table 5-5.

The European Region would be the most difficult to support. It would have six districts, 107 stores and provide commissary support in Central Europe, the United Kingdom and the Mediterranean area to include Southern Europe, the Middle East and North Africa. Contract central distribution could be provided from multiple sites in contrast to the CONUS concept of using one CDC per region. One potential contractor has the capability to provide support from four contract warehouses in West Germany and one in the United Kingdom. As per the business strategy, cost avoidance from missions being transferred from the Defense Logistics Agency to AAFCOMS could be used to cover most of the costs of this contract central distribution mission. The European Region allocation of stores and districts is arrayed at Tables 5-6a/b/c.

The Northeast Region would encompass an area from North Carolina to New England. Center of Mass is the Baltimore area and a military installation in that vicinity may be the logical choice for the region headquarters. Central distribution could be provided from any number of locations from Tidewater Virginia to the Philadelphia area. The region, as proposed, has three districts, 43 stores, and supports commissaries in the northeastern and mid-atlantic states. Northeast Region districts and stores are arrayed at Table 5-7.

The Southwestern Region would have 32 stores, two districts and provide support to Panama. Panama shipments could be weekly, combining monthly and weekly sailings from New Orleans and Lake Charles, La. Although the majority of stores are in Texas and Oklahoma, commissaries on the fringes of New Mexico, Arkansas and Louisiana are included in the region. Center of mass is between Dallas and San Antonio. One of the military installations in San Antonio would be the logical headquarters site while contract central distribution could be accomplished from either Dallas or San Antonio. Table 5-8 outlines the region stores allocated by district.

The Midwest Region covers the largest geographical area with stores from Ohio to Colorado. Kansas City is the center of mass. While the distances will require extensive transportation resources, various companies in the industry have exploited economies of scale by minimizing the number of central distribution centers. Proctor and Gamble, one of the largest commissary vendors, currently uses only four distribution centers to support all commissaries in the entire United States. They are located in Atlanta, Cincinnati, Kansas City, and Oakland. Under the Proctor and Gamble scenario, a contract central distribution center in Kansas City could

distribute to all commissaries in the Mid-America segment. The Midwest Region has two districts, 35 commissaries and supports no overseas stores. The region headquarters should be centrally located at a military installation in Kansas or Nebraska. The districts and stores of the Midwest Region are at Table 5-9.

The Northwest Region, as proposed, would support the Far East, Alaska and the northwest United States. Traditionally, the Far East has received shipments through the Port of Oakland, however, the two United States ocean flag carriers, Sea Land and American President Lines, both sail from Seattle and Tacoma to the transit point in Japan in the same number of days as the Oakland sail. The Far West Region is the largest volume region and this proposal would equalize the workload of the two west coast CDCs. The headquarters should be on a military installation in the Seattle or Tacoma area. The Army Western Commissary Region is located at Ft. Lewis and provides command and control to Asia from that location. The contract central distribution center should be within the drayage range, normally 50 miles, of the Ports of Seattle and Tacoma. This would provide the mechanism for weekly shipments to commissary stores in the Far East and Alaska and could cut order ship time by 80 percent. Using Sagamihara, Japan as an example, the current 120 days order ship time could be cut to 25 days. Equal results are attainable to all Far East stores. Table 5-10 provides an outline of the stores and districts in the Northwest Region.

The Far West Region is the largest region in sales volume due to the large concentration of military installations in Southern California. The Region, as proposed, covers California, Arizona, Nevada, Utah and Hawaii. Center of mass is between Los Angeles and San Francisco, so either city could be used for central distribution. A military installation in California near a major airport would be the best choice for the region headquarters. Hawaii was added to this region because the United States flag ocean carriers have weekly sails to Guam via Hawaii. The contract central distribution center should be in a close proximity to the Ports of Oakland or Long Beach to provide the best support to the Hawaii District. The Far West stores and districts are outlined in Table 5-11.

SOUTHEAST REGION
ARMY AND AIR FORCE COMMISSARY SYSTEM
DISTRICT STORES AND FY88 MONTHLY SALES

COMMISSARY	LOCATION	SALES	COMMISSARY	LOCATION	SALES
SOUTHWEST DISTRICT #1					
AVON PARK	FL	117651	MACDILL	FL	4862769
PATRICK	FL	3048201	MOODY	GA	921124
CHARLESTON AFB	SC	2347436	MYRTLE BEACH AFB	SC	910604
SHAW AFB	SC	1319398	HOMESTEAD	FL	2372190
JACKSON	SC	2434788	STEWART	GA	1409332
GORDON	GA	2112970	HUNTER	GA	1021651
BUCHANAN	PR	2031435			
SOUTHEAST DISTRICT #2					
MAXWELL	AL	2007815	COLUMBUS AFB	MS	820007
EGLIN	FL	2884335	GUNTER	AL	904951
ARNOLD AFB	TN	338016	KESSLER AFB	MS	2767980
ROBINS	GA	1545994	TYNDALL	FL	1763567
HURLBURT FIELD	FL	1063755	REDSTONE	AL	2038298
FORT BENNING	GA	3429698	RUCKER	AL	1893702
GILLEM	GA	2010296	MCPHERSON	GA	427593
MCCLELLAN	AL	1486508	MERRILL	GA	25918

Table 5-5. Southeast Region stores

EUROPEAN DISTRICT
ARMY AND AIR FORCE COMMISSARY SYSTEM
DISTRICT STORES AND FY88 MONTHLY SALES

COMMISSARY	LOCATION	SALES	COMMISSARY	LOCATION	SALES
GEISSEN DISTRICT					
SOESTERBERG	NE	431554	OSLO	NW	108348
Hessisch-Oldendorf	WG	116909	FLIEGERHORST	WG	82615
GIESSEN	WG	1031800	BERLIN	WG	1186125
MUENSTER	WG	49477	GIEBELSTADT	WG	79556
SCHINNEN	NE	475100	HELMSTEDT	WG	14254
WILDFLECKEN	WG	262739	KIRCHGOENS	WG	99412
HANAU	WG	1567237	OSTERHOLZ-SCHAM	WG	341882
BADNAUHEIM	WG	314565	RHEINBERG	WG	122158
FULDA	WG	434430	FLENSBURG	WG	34599
BUEREN	WG	40424	GELNHAUSEN	WG	260090
Wildflecken Sub-Fac	WG	48206	SOEGEL	WG	35058
BUEDINGEN	WG	10834	BADHERSFELD	WG	116976
BREMERHAVEN	WG	619783			
FRANKFURT DISTRICT					
FLORENNES	BE	83033	PRUEM	WG	44162
SPANGDAHLEM AB	WG	790874	RHEIN-MAINAB	WG	1486937
TRIER	WG	12877	HAHNAB	WG	1076596
BITBURG AB	WG	822082	BABENHAUSEN	WG	158857
BAUMHOLDER	WG	832287	DARMSTADT	WG	550946
MAINZ	WG	428340	CHIEVRES	BE	719541
WIESBADEN	WG	1686031	NEUBRECKE	WG	58517
KING	WG	85060	MCCULLY	WG	32242
IDAR OBERSTEIN	WG	56127	FRANKFURT	WG	1618717
BAD KRUEZNACH	WG	428340	DEXHEIM	WG	83101

Table 5-6a. European District stores

COMMISSARY	LOCATION	SALES	COMMISSARY	LOCATION	SALES
			STUTTGART DISTRICT		
RAMSTEIN AB	WG	2490337	VOGELWEH	WG	1483003
SEMBACH AB	WG	597985	PANZER	WG	2651
AUGSBURG	WG	980817G	OEPPINGEN	WG	221229
LUDWIGSBURG	WG	190666	ZWEIBRUECKEN	WG	537808
MANNHEIM	WG	1259450	KELLY	WG	335116
HEIDELBERG	WG	1514875	GERMERSHEIM	WG	41808
FISCHBACH	WG	19458	NEWULM	WG	399597
NECKARSULM	WG	20655	PATCH	WG	666439
WORMS	WG	296670	PIRMASENS	WG	451836
HEILBRONN	WG	450121	KARLSCRUBE	WG	603424
ROBINSON	WG	978896	SCHWAEBISCH G	WG	221507
			BAMBERG DISTRICT		
HOHENFELS	WG	113733	BAD AIBLING	WG	116909
VILSECK	WG	194092	BERCHTESGADEN	WG	99806
GARMISCH	WG	117633	MUNICH	WG	571618
KITZINGIN	WG	580280	SCHWEINFURT	WG	826010
ASCHAFFENBURG	WG	493738	AMBERG	WG	112163
FUERTH	WG	1592510	WERTHEIM	WG	148060
BAMBERG	WG	669206	BINDLACH	WG	130109
BAD KISSIGEN	WG	146484	ILLESHEIM	WG	229983
BAD TOELZ	WG	125453	SCHWAEBISCH H	WG	110525
GRAFENWOEHR	WG	400334	ANSBACH	WG	654646
ERLANGEN	WG	201013	HERZO	WG	83490
CRAILSHEIM	WG	97595	WUERZBURG	WG	762020
REGENSBURG	WG	11905	SCHWABACH	WG	97229

Table 5-6b. European District Stores (Continued)

COMMISSARY	LOCATION	SALES	COMMISSARY	LOCATION	SALES
MEDITERANEAN DISTRICT					
AVIARO	IT	422154	ROYAL OAKS	SP	67632
COMISO	IT	238236	IZMIR	TU	219404
DECIMOMANNU	IT	4119	INCIRLIK	TU	471404
LAJES, AZORES	PO	455587	IRAKLION	GR	164912
TORREJON	SP	883637	HELLENIKON BRANCH	GR	323239
NEA MAKRI	GR	63864	SAN VITO	IT	299855
ANKARA	TU	249966	ATHENS	GR	176934
ZARAGOZA	SP	246602	DHAHRAN	SA	84649
CAIRO	EG	153644	RIYADH	SA	214902
LIVORNO	IT	319605	VICENZE	IT	599135
UNITED KINGDOM DISTRICT					
RAF SCULTHORPE	UK	43375	RAF Greenham Common	UK	380789
RAF MILDENHALL	UK	147108	RAF LAKENHEATH	UK	1495246
RAF FAIRFORD	UK	269530	RAF WETHERSFIELD	UK	95108
MENDITH HILL STN	UK	180002	RAF UPPER HAYFORD	UK	990305
BURTONWOOD	UK	20050	RAF ALCONBURY	UK	711387
RAF CHICKSANDS	UK	261192	RAF BENTWATERS	UK	799292

Table 5-6c. European District Stores (Continued)

NORTHEAST REGION
ARMY AND AIR FORCE COMMISSARY SYSTEM
DISTRICT STORES AND FY88 MONTHLY SALES

COMMISSARY	LOCATION	SALES	COMMISSARY	LOCATION	SALES
NORTHEAST DISTRICT # 3					
LANGLEY AFB	VA	3301847	FORT FISHER AFS	NC	26031
Seymour-Johnson AFB	NC	1274991	STORY	VA	255203
MONROE	VA	654067	FT LEE	VA	1754457
FORT EUSTIS	VA	1460125	DEF GEN SUPPLY	VA	441961
Malonee Vil Sub-Fac	NC	63301	BRAGG	NC	3865240
POPE AFB SUB-FAC	NC	96146	DOVER	DE	1652711
NORTHEAST DISTRICT # 4					
BOLLING	DC	1751684	ANDREWS	MD	2836107
MYER	VA	1760359	VINT HILL	VA	653272
KELLY	PA	595732	CAMERON	VA	2573841
NEW CUMBERLAND	PA	532505	ABERDEEN	MD	963602
EDGEWOOD	MD	530549	ARDEC	NJ	238216
RITCHIE	MD	558401	CARLISLE	PA	872516
WALTER REED	DC	1815513	MCNAIR	DC	349701
BELVOIR	VA	5360454	MEADE	MD	3889360
NORTHEAST DISTRICT # 5					
PEASE AFB	NH	1675880	MCGUIRE AFB	NJ	4317364
HANSCOM	MA	1538513	GRIFFISS AFB	NY	1259381
BANGOR	ME	201977	PLATTSBURGH AFB	NY	993414
LORING	ME	783251	DEVENS	MA	1395098
DRUM	NY	1056405	TOBYHANNA	PA	466636
WEST POINT	NY	726425	MONMOUTH	NJ	1517845
SENECA	NY	214897	STEWART	NY	347875
HAMILTON	NY	783893			

Table 5-7. Northeast Region stores

SOUTHWEST REGION
ARMY AND AIR FORCE COMMISSARY SYSTEM
DISTRICT STORES AND FY88 MONTHLY SALES

COMMISSARY	LOCATION	SALES	COMMISSARY	LOCATION	SALES
SOUTHWEST DISTRICT #8					
SHEPPARD AFB	TX	1570513	VANCE AFB	OK	396152
TINKER AFB	OK	3179275	ALTUS AFB	OK	845867
BARKSDALE	LA	2972924	ENGLAND	LA	1052651
CARSWELL AFB	TX	4021377	EAKER	AR	679186
LITTLE ROCK	AR	2385119	POLK	LA	1769552
SILL	OK	2613188	CANNON AFB	NM	723682
ESPINAR	CZ	310125	COROZAL	CZ	1901337
HOWARD	CZ	627584			
SOUTHWEST DISTRICT #9					
KIRTLAND AFB	NM	2775724	BROOKS AFB	TX	530931
BERGSTROM AFB	TX	2848371	GOODFELLOW AFB	TX	724329
RANDOPLH AFB	TX	3463624	REESE AFB	TX	585319
HOLLOMAN AFB	NM	1170697	LACKLAND AFB	TX	627075
DYESS AFB	TX	1356775	KELLY AFB	TX	636636
LAUGHLIN AFB	TX	435730	SAM HOUSTON SUB-FAC	TX	367183
HOOD SUB-FAC	TX	408414	BLISS	TX	4424149
HOOD	TX	4765482	WHITE SANDS	NM	320140
SAM HOUSTON	TX	2687875			

Table 5-8. Southwest Region stores

MIDWEST REGION
ARMY AND AIR FORCE COMMISSARY SYSTEM
DISTRICT STORES AND FY88 MONTHLY SALES

COMMISSARY	LOCATION	SALES	COMMISSARY	LOCATION	SALES
MIDWEST COMMISSARY DISTRICT #6					
K.I. SAWYER	MI	757895	WURTSMITH AFB	MI	735867
Wright-Patterson AFB	OH	3689956	GRISSOM	IN	798553
CALUMET	MI	25022	SCOTT	IL	2575880
PORT AUSTIN	MI	21372	CHANUTE	IL	1164838
BEN HARRISON	IN	1546434	CAMPBELL	KY	3315741
Lexington-Bluegrass	KY	294723	SHERIDAN	IL	689009
GRANITE CITY	IL	1201668	ROCK ISLAND	IL	366850
KNOX	KY	2859046	SELFRIDGE	MI	1113665
MIDWEST COMMISSARY DISTRICT #7					
DICKINSON AFS	ND	36247	ELSSWORTH AFB	SD	1220018
Air Force Academy	CO	1273781	GRAND FORKS AFB	ND	875553
LOWRY	CO	2973792	MINOT AFB	ND	795750
POWELL AFS	WY	30821	OFFUTT AFB	NB	2736131
F.E. WARREN AFB	WY	990326	PETERSON	CO	2644797
Belle Fourche AFS	SD	7937	WHITEMAN AFB	MO	838408
MCDONNELL	KS	1377940	RILEY	KS	1821048
CARSON	CO	2710806	LEAVENWORTH	KS	1865471
FITZSIMMONS	CO	857248	LEONARD WOOD	MO	1697248

Table 5-9. Midwest Region stores

NORTHWEST REGION
ARMY AND AIR FORCE COMMISSARY SYSTEM
DISTRICT STORES AND FY88 MONTHLY SALES

COMMISSARY	LOCATION	SALES	COMMISSARY	LOCATION	SALES
JAPAN DISTRICT					
CAMP FOSTER	JA	1787114	KADENA AFB	JA	2218495
MISAWA	JA	1095530	CAMP COURTNEY	JA	110831
YOKOTA	JA	1287123	OKINAWA WAREHOUSE	JA	514677
SAGAMI	JA	23602	KURE	JA	3602
SAGAMIHARA	JA	567286	ZAMA	JA	114456
KOREA DISTRICT					
KUNSAN	KR	264737	OSAN	KR	1796669
CLARK	PI	2515326	HUMPHREYS	KR	81978
CARROLL	KR	134584	STANLEY	KR	185368
EDWARDS	KR	91347	PUSAN	KR	249762
YONGSAN	KR	2861812	PAGE	KR	40737
TAEGU	KR	576671	CASEY	KR	356582
NORTHWEST DISTRICT # 13					
EIELSON AFB	AK	710338	HAYRE AFS	MT	15832
ELMENDORF AFB	AK	2181264	MOUNTAIN HOME	ID	941756
MAKAH AFS	WA	15913	CONRAD AFS	MT	7950
FAIRCHILD AFB	WA	2025346	MCCHORD AFB	WA	4330642
MALMSTROM AFB	MT	1024897	FORSYTHE AFB	MT	15899
LEWIS	WA	4147183	WAINWRIGHT	AK	848148
RICHARDSON	AK	1093678	GREELY	AK	189269

Table 5-10. Northwest Region stores

FARWEST REGION
ARMY AND AIR FORCE COMMISSARY SYSTEM
DISTRICT STORES AND FY 88 MONTHLY SALES

COMMISSARY	LOCATION	SALES	COMMISSARY	LOCATION	SALES
FARWEST DISTRICT # 10					
NELLIS AFB	NV	3236671	HOLBROOK	AZ	22228
GILA BEND	AZ	32958	WILLIAMS	AZ	1572798
INDIAN SPRINGS AF	NV	1703	DAVIS-MONTHAN	AZ	2670192
LUKE	AZ	2444965	YUMA	AZ	166987
HUACHUCA	AZ	1482115	LOS ANGELES	CA	959094
MARCH	CA	2381529	VANDENBERG	CA	1539998
NORTON	CA	2477334	EDWARDS	CA	1214351
GEORGE	CA	1332038	FORT IRWIN	CA	434161
FARWEST DISTRICT # 11					
MCCLELLAN	CA	2569133	HILLAFB	UT	2006610
BEALE	CA	1214267	CASTLE	CA	1620372
MATHER	CA	2705190	TRAVIS	CA	3011349
DUGWAY	UT	130340	OAKLAND	CA	492863
SIERRA	CA	165583	ORD	CA	3106480
PRESIDIO	CA	1424813			
HAWAII DISTRICT					
ANDERSEN	GU	1559063	HICKAM AFB	HI	3526140
SHAFTER	HI	425726	SCHOFIELD	HI	2394239

Table 5-11. Farwest Region stores

Commissary Store Level of Service. To meet the changing demographics of the target population, stores with average monthly sales of over $800,000 would be open 6 days and at least 68 hours per week and closed one day midweek for stocking and general maintenance. Super Stores, with sales over $4 million monthly, would be open 7 days, 80 hours per week. Stores would be open until 10 PM during the week to accommodate the tremendous increase in single parents and two-income households in the military force structure. Vendor stocking not normally provided in the civilian market will be transferred to in-house or contract operations. These and other increased levels of service will be paid for with savings generated from organizational efficiencies.

Magnet stores will be used to provide the same level of service to smaller communities. A magnet store is a centrally located commissary with extended service hours. It can be a medium, large or super store but once labeled a magnet store it would receive priority for funding hours of operation and construction. These stores will be available within a reasonable commute (45 minutes) to provide a full level of support not available in the local community. As magnet stores gain in popularity, hopefully, the need for a full-service local community commissary will be diminished and at some time in the future, the local commissary could be reduced in scope or closed.

Commissary Store Replenishment. Replenishment will be conducted electronically by store personnel who will scan store shelves using PDEDs daily to determine appropriate order quantities. Output from point of sale scanning equipment will also be used when determined to be more efficient. The order will be electronically transmitted to the Central Distribution Center by dial-up modem.

The electronic order will then be pulled from the Contract Central Distribution Center and shipped to the store the following day. The ordering cycle will be adjusted for smaller stores which can not accommodate daily delivery. Transportation will be optimized by using multistop shipments.

Accountability will be transferred from the CDC to the store by direct communications links between the CDC and region computer. Store receipts will be transmitted to the Region computer by PDED for both CDC and direct vendor deliveries. Price changes will be updated weekly by communications link from the region computer to the individual store. Store labels will be printed at the store on the EPOSE or ECR systems and put on the shelf by grocery department personnel.

These organizational changes will eliminate at least 75 percent of Warehouse, Control section and Scanning related personnel. Table 5-12 provides an analysis of the $76.8 million cost savings.

Central Distribution. Central distribution to commissary stores will be a contract operation in close vicinity to a major food distribution hub. The contractor will receipt for government property in full container shipments, account for and store the product, and then issue and distribute the product using its own organic or a contract truck fleet. The Contractor will store the commissary stock when required. The goal will be to schedule shipments to arrive within the two to five day cross-dock storage time frames. Super Valu

ARMY AND AIR FORCE COMMISSARY SYSTEM
COST AVOIDANCE POTENTIAL
THROUGH ORGANIZATIONAL CHANGES
DRIVEN BY CENTRAL DISTRIBUTION PROCEDURES

UTILIZATION BY FUNCTION
(IN FTE)

LOCATION OF SPACES	ARMY	AIR FORCE	TOTAL
CONTROL	1095	592	1687
REGION VOUCHER EXAM	100	0*	100
WAREHOUSE/RECEIVING	1218	1172	2390
TOTAL			4177

ANALYSIS

TOTAL SPACES USED	4177
MANNING RETAINED (25% OF TOTAL SPACES)	1044
COST AVOIDANCE IN SPACES (75% OF TOTAL SPACES)	3133
COST AVOIDANCE IN $ (@ $23,000 = 1 FTE)	$72,059,000
* AIR FORCE INDIRECT COST FOR BILL PAYING $6,301,152	
AIR FORCE AVOIDANCE (REDUCED BY 75%)	4,725,864
TOTAL COST AVOIDANCE	**$76,784,864**

Table 5-12. AAFCOMS cost avoidance potential through organizational change

normally buys product with morning vendor delivery for afternoon shipments to its Cub Food stores.

To further reduce storage requirements, large quantity forward buys will be stored in vacant warehouses behind commissary stores. Contractors will be required to backhaul product stored in the commissary warehouse space. This will accommodate forward buying without encumbering excessive warehouse storage costs.

The contractor will pack ocean container shipments for overseas commissaries designated to receive CONUS CDC support and deliver the containers to the applicable port for shipment. The contractor will

guarantee loss of all product (no shrink authorized) except for acts of God, e.g., fire, storm, etc.

The commissary region's computer will interface directly with the contract CDC inventory control system. The region will mirror the CDC inventory using an off-the- shelf inventory control system such as the Worldwide Chain Store Inventory System or the Arthur Anderson Inventory System or equivalent. The region will also use an inventory forecasting and replenishment system such as IBM Inforum III or equivalent to assist regional merchandisers in buying product to replenish stock. All ADP will be off-the-shelf, state-of-the-art software and hardware similar to that used in the commercial supermarket industry. Information management will have to accomplish the following functions: Inventory Control, Inventory Forecasting and Replenishment, Purchasing and Bill Paying. All functions will be linked with electronic mailboxes to vendors to facilitate Electronic Data Interchange (EDI).

Paying bills for product received from a Central Distribution Center will eliminate voucher processing transactions by the number of receiving points currently in operation, e.g., for a region, one CDC times 1200 invoices per month in lieu of 35 stores times 1200 invoices per month. This contributes to the cost avoidance identified in the commissary store replenishment procedures. Region buyers will also use forward buying techniques to negotiate price with a goal of saving the patron money and reducing the amount of stock fund surcharge needed to cover distribution costs.

Region procedures to support overseas operations in central Europe and United Kingdom Districts will be identical to procedures in CONUS regions. In all other overseas districts such as Korea, commissary stores will order product from CONUS CDCs. The scenario will be for a store to cut off its front end scanning movement accumulation on Monday and run a replenishment cycle on its EPOSE or ECR system (PDEDs could be used to perform the same mission). The order would be reviewed by a manager and then transmitted by dial-up modem to the supporting CONUS CDC on Tuesday. The CDC will pull the order and stuff a container for a ship sailing on Sunday.

Using inventory-in-motion techniques, the store would have one week of requirement being processed at the CDC, one week of product per sailing week in transit (Korea is an 18 day sail, thus 3 weeks in transit), and 4 weeks in the warehouse as a safety level. Inordinate demand could be adjusted by a phone call to the CONUS CDC. The stock fund inventory could be reduced from 180 days to 45 days per site, a tremendous saving to the government. This could also reduce the order-ship time from 150 days to 35 days, using the Korea scenario, a tremendous asset in adjusting to demand patterns as well as increasing product freshness. The European region would order product directly from CONUS manufacturers using the same techniques as in CONUS CDCs.

Summary. This issue provides an interim solution to a full consolidation program discussed in chapter 11 of this report. This plan will also improve support to commissary patrons through increased hours of operation while modernizing the entire commissary system. The $30.5 million cost to improve service in the Army and Air Force commissaries can easily be offset by the

estimated $102.4 million in savings proposed by consolidation and contract central distribution providing a net taxpayer savings of $71.9M. Even the estimated $30 million, for an integrated information management system needed to manage this organization, and approximately $4 million start-up personnel cost with offsets, could be offset with the first year savings. These costs could also be offset within the computer acquisition programs planned by the Service commissary systems in the next five years. With state of the art computer systems adaptable from the grocery industry, this system can look, feel, and act like the big business enterprise that it is. Commissary customers as well as the taxpayers deserve no less.

However, given the amount of time which would be required to implement this alternative in four phases, as well as the reduced savings which will not be realized without consolidation, this solution is not the optimum course of action.

RECOMMENDATIONS

5.11a. That, although the Army and Air Force Commissary System (AAFCOMS) can be used as an interim system, the best course of action is to proceed with consolidation of all separate military commissary systems under the auspices of Defense Commissary System (DECS) by using the assets of the Services' commissary systems.

5.11b. That if establishment of AAFCOMS is chosen as a course of action, Defense Logistics Agency and Defense Personnel Support Center expenses currently used to support the commissary program be used to offset operating costs of AAFCOMS. That an independent audit by Defense Audit Agency be used to isolate those assets used to perform the DICOMSS mission and determine the commensurate availability of these assets. That the assets be transferred to AAFCOMS to perform the new mission.

11.1 DEFENSE COMMISSARY SYSTEM (DECS)

The consolidated commissary system is extensively discussed in Chapter 11, Commissaries in the Future--A Model for Success. The organizational strategy in this chapter includes various organizational structures that lead to this configuration. A consolidated Department of Defense Commissary system provides the most efficient organization for providing support to commissary patrons of all Services. It is therefore recommended as the ultimate course of action.

SUMMARY

In this chapter, the future strategy of the commissary system was developed. This "Business Strategy" focuses efforts to meet the needs of authorized patrons by preserving the commissary entitlement, optimizing organizational efficiencies, providing an equitable commissary system and managing economic and market forces. Forward thinking and innovation are the keys to making this strategy a reality.

The second segment was the financial strategy needed to fund the plan. The key element is using state-of-the-grocery industry automation and distribution techniques. A plan to use a commercial warehousing company to perform the physical distribution and a commissary region to perform the inventory and financial management functions was extensively discussed. The benefit of this system is the $83.45 million savings realized by consolidating the bill paying function. Other revenue options include obtaining the bad check processing fee. Other cost avoidance issues realized savings from the use of voluntary labor.

All of the revenue associated with cost avoidance or revenue generation should be retained for improving commissaries. One specific area proposes that commissaries assume the portion of the vendor stocking mission not performed in the civilian grocery market segment. This $13 million cost of doing business is typically rolled into the cost of commissary goods. Reducing this burden will provide greater leverage during price negotiations for the commissary product buyers. The second initiative is to earmark $26.5 million to improve hours of operation in commissaries, particularly during evening hours. The demographic analysis in chapter four identified a need for this increased level of service.

The final segment discussed an organizational strategy to meet the objectives of the system and save additional revenue. This four step strategy provides a platform for a DOD consolidated commissary system. An additional $49.3 million can be realized from this consolidation.

Chapter 6

COMMISSARY OPERATIONS

6.1 INTRODUCTION

The Operations Committee was tasked with recommending efficiencies in store operations that can be adopted to enhance and preserve the commissary entitlement for military families into the 21st century. The principal concern is the continuing decline of service to the patron vice the acceptable level of service desired.

The chapter goal is to effect operational savings that can be transferred to other functions to meet existing needs and improve service or reduce cost. Many of the initiatives in this chapter overlap initiatives in other chapters. Where this occurs, reference will be made to the chapter that contains further clarification.

The functional differences in each Service's commissary system have resulted from evolving differences in mission priorities: "what, when, where, and how" fundamentals. There are no reasons for the differences that are inherent to the communities being served. Likewise, functional differences in and of themselves are not indicative of inefficiency or inadequacy of service, but on the ability to obtain resources. Too often, funding drives requirements.

Although differences in approach are not necessarily adding to the costs of doing business, it is prudent to look at the differences and to adopt those strategies and procedures that are most efficient and that will position the commissaries of all Services to

better serve the military community in the decades ahead. As discussed in Chapter 5, standardization among the commissary systems, as a strategy, is in the long-term best interests of the Department of Defense. It will enable the commissaries not only to operate more efficiently and to be mutually supportive in the near term, but it gives the commissaries the option of consolidated operations in order to remain effective providers of an important military entitlement.

The Bowers Study in 1975 defined the best way of operating commissaries in the 1970s and 1980s. The Jones Commission will attempt to define the best way to operate commissaries in the 1990s and beyond.

The Operations Committee drives the train when it comes to defining the best operational methods, and the most cost-effective operation. However, because of varying Service missions, differing operational philosophies, and restraining budgets, each Service has differing priorities. Due to the differing priorities, operations vary from Service to Service. Because of the differing degrees of development in the areas of automation, construction, distribution, handling, frequent delivery, bill paying, contracting, and even civilian personnel policies from one Service to another, as well as within each of the Services, cost savings have been difficult to define. However, this doesn't prohibit the knowledge that savings can be generated by the elimination or reduction of certain functions. Many of the recommendations in this chapter will not have a cost benefit analysis attached for the above reasons.

6.2 PRICING

BACKGROUND

As an element of compensation to the Service member, Congress has agreed to provide the commissary benefit to authorized patrons and their dependents. The Service member helps to defray the cost of operating the commissary by contributing five percent of each purchase to a Commissary Trust Revolving Fund (CTRF). The CTRF pays for operating costs such as expendable supplies, utilities in CONUS, construction of new stores, and some maintenance and repair costs. The commissary entitlement provides basic subsistence and household goods at cost.

Pricing is the process of determining the cost of the goods received, and passing that cost to the customer. The mechanism used for buying these goods is the stock fund. The stock fund is a revolving account, that is, the stock fund buys goods for resale, then as each dollar is recouped at the cash register, it is returned to the stock fund, which can then buy more goods for resale. This revolving account was originally funded with appropriated funds.

Pricing is done both centrally and locally. All four commissary systems use scanning as their repository for prices. Prices are input manually into a computer system which registers the price every time a Universal Product Code (UPC) is scanned by a laser

built into the front end check out system. The Marine Corps and AFCOMS price everything (with a few exceptions) centrally from their complexes and regions. TSA prices everything at the store level. The Navy prices at the Region and the store using a combination method of hard copy and tape.

DISCUSSION

REGIONAL CENTRAL PRICING

The pricing function is most ideally performed centrally. Central pricing is standard procedure in the retail industry and reduces staffing by the number of stores supported. For example, if twenty stores each priced locally using one work year each, pricing centrally and electronically downloading could save 16-18 work years. The cost of the equipment to communicate with the store-level scanning is minimal and would be more than offset by the labor savings. AFCOMS and the Marine Corps are already performing regional central pricing. TSA and NAVRESSO need to buy the communication link and implement automated regional central pricing as soon as possible. System-wide savings for all Services converting this function to central operation would be approximately 60 work years in CONUS as currently configured.

Eventually, central pricing may be performed at the highest headquarters level, and downloaded electronically to a time share type computer system, and the stores could pull the price file updates anytime to load into their scanning system. Equipment cost equates to $20,000 per program to translate NCR data to the HQ computer. The net savings make this a very attractive initiative for the commissary systems.

RECOMMENDATION

6.2 All Services should centrally price electronically at the regional level to the maximum extent possible. Cost savings should be used to increase the level of service at the commissary.

6.3 COMMISSARY - EXCHANGE RELATIONSHIP

BACKGROUND

Commissaries and exchanges each have particular missions to perform in meeting the needs of the Service member. The commissary mission is to provide basic subsistence and household goods to authorized customers at cost. The exchange mission is to sell product at competitive prices to maximize profits in order to contribute monies to the Morale, Welfare, and Recreation (MWR) funds. These missions should not be conflicting, but are sometimes construed as such.

Walter F. Loeb, a principal at Morgan Stanley, claims "there are only two kinds of retail stores--destination stores and convenience stores. Destination stores attract

customers from great distances because they offer something unique--in value. On the other hand, convenience stores are those that are conveniently located for shopping. These stores generate sales because of good locations, not because of any uniqueness they possess." The commissary fits the definition of a destination store and the exchange could be defined as a convenience store. Historically, according to experts at AAFES HQ, where an exchange is collocated with a well-managed commissary, the sales of the exchange are 20% higher than if the exchange is not located near the commissary.

The commissary system and the exchange system both benefit from nearby locations (in a mall has proven best) where both are sized adequately to suit the needs of the patron, and where both are well managed. NAVRESSO has taken the concept one step further and has established joint commissary/exchange operations to provide the commissary benefit and to save construction and labor costs.

DISCUSSION

Under the joint operations concept, the Navy manages 13 combined commissary/exchange operations at small and isolated overseas locations; no joint facilities are operated in CONUS. These operations are described generally in Chapter 2 under "Present Navy Commissary System." Employees in a combined operation are non-appropriated fund (NAF) Navy exchange (NEX) civilian employees and some enlisted military personnel. The Navy exchange is reimbursed with appropriated funds for all payroll costs expended in support of commissary operations. Where specific hours worked include both operations (e.g. cashiers), payroll costs are apportioned between exchange and commissary on the basis of percentage of sales. Separate accountability is maintained for the "commissary" portion of the operation for all funds. Merchandise is owned by the Navy Stock Fund and sold to the customer at cost plus the 5% surcharge. Sales are credited to the commissary stock account and the surcharge is credited to the commissary trust revolving fund. For the "exchange" portion, all items are sold at the exchange retail markup and treated in accordance with Navy exchange policies and procedures.

The Navy initiated joint operations for its commissaries and exchanges in 1977. For the Navy, this concept was adaptable because NAVRESSO has responsibility for the Navy exchange and commissary programs under one command. Because of the duplication of some commodity groups between the commissary and exchange programs, these commodities must be designated as either "commissary" items or "exchange" items. All items authorized by DoD 1330.17-R as commissary items are stocked in the "commissary" portion of a combined operation (they may not be stocked by the "exchange" portion), except the following categories which are stocked as exchange items:

- Picnic supplies
- Health and Beauty Aids
- Candy
- Cigarettes
- Soda
- Emergency candles
- Light bulbs
- Batteries
- Canning & Freezing Supplies

- Deodorizers, household
- Fabric finish
- Insecticides
- Charcoal
- Plants

The concept of joint operations raises some issues. There is some administrative overhead incurred to ensure the appropriate separation of accountability between the two programs under one roof. Additionally, the customer must pay more for those items offered with the exchange retail markup, which would be commissary items if it were not a joint commissary/exchange operation. This lowers the commissary 25 percent savings by 5 to 10 percent.

As a future strategy for the Commissary Program as a whole, particularly under the consolidation and centralization concepts discussed in chapter 5, the mall concept would be more appropriate for the commissary program, with separate operations.

RECOMMENDATION

6.3.a. Do not proceed with any more Joint Commissary-Exchange operations. Existing operations may continue under the current system, but must be addressed under a consolidation concept.

6.3.b. As long as the military Services continue to operate their respective commissary systems, the determination of which product categories authorized by DoD 1330.17R are to be sold will be the purview of the Services' commissary systems.

6.4 MERCHANDISING

BACKGROUND

Merchandising is the proper display and use of goods and services to promote the image desired and to generate the maximum sales consistent with that image. AFCOMS and TSA have professional merchandising divisions which train commissary officers and department managers in proper display techniques. NAVRESSO has a merchandising staff, but the bulk of work is done at the region level. The Marine Corps performs merchandising functions as other duties of the Commissary Operation Division. The Merchandising Divisions spend the majority of their time establishing policy and reviewing vendor performance.

DISCUSSION

STOCK ASSORTMENT

The purpose of a stock assortment program is to better serve patrons' needs by developing and maintaining a commonality in

the overall product mix in each store and simplifying management of the stock assortment at headquarters, region and store levels. In AFCOMS and TSA, this three-tier stock assortment program consists of the Master Stock List (MSL) or core list, Region Stock List (RSL), and Store Stock List (SSL), which collectively provide commissary patrons a wide selection of national, regional, local and ethnic brand name products. Only brand name products which have national distribution and are considered essential to support patron demand are added to the MSL/Core list. Establishing and maintaining a manageable stock assortment with the correct product mix involves an extensive, in-depth review of all product categories. The MSL/Core list review process begins with industry representatives providing category and market share information, sales ranking, and category trends from several market reports. For instance, market share reports include Selling Areas of Marketing Information (SAMI), Nielson Scantrak, and Towne-Oller. In addition, the MSL review committees use commissary specific market data to include Commissary Analysis of Management Information (CAMI). TSA uses Military Audits of Marketing Information (MAMI). Since the MSL/Core List consists of only national brand name items, the next step for obtaining an optimal stock assortment is to identify regional items.

In addition to establishing and maintaining a manageable stock assortment from the headquarters, the regions and commissaries supplement the MSL/Core with regional items, local products and ethnic items. Items selected for the RSL are unique to specific geographical areas. Region Commanders/ Directors determine the number of RSL items, and the selected items are stocked only in stores assigned to that region. The process for evaluating and selecting RSL items is similar to the MSL review process previously discussed. Once the regions complete their RSL, the Region Commander/Director authorizes each Commissary Officer, in their region, authority to supplement the Region Stock List with a Store Stock List (SSL). At store level, the Commissary Officer provides input into the overall stock assortment. The prime source for selecting SSL items comes from the in-store patron suggestion program and from introductory offers by manufacturers and brokers. The Commissary Officer also evaluates and selects items from patron requests and other sources, such as the commissary advisory council, commander's action line, enlisted and officers wives clubs. Unlike the HQ and Region Stock List, the commissary officer continuously reviews all requests for SSL item additions or deletions.

In Navy commissaries, Field Support Office (FSO) commanders control stock assortments. The Marine Corps uses a committee of commissary officers at the complex to determine its stock assortment. This three-tier approach is the best way to ensure the proper commodity mix is carried, i.e., national name brands, strong regional brands, and popular local selections.

In Europe, AFCOMS and TSA have agreed to limit their perishable item selection to the capacity of perishable storage at Kaiserslautern and Bremerhaven, which is currently 840. The newer designed stores can handle more items, but the constrained warehouse space at cold storage depots limits the selection. A joint Army and Air Force committee determines stock selection for both.

PLAN-O-GRAMS

A Plan-O-Gram is a detailed schematic of item locations on a shelf. Plan-O-Grams are set to expedite traffic flow, reduce out of stocks and

excess inventory, and provide optimum use of shelf space. The computer hardware used for Plan-O-Grams is a desk top personal computer, the power and size of which may vary depending on the requirements of the software. The software program is called "SPACEMAN." Spaceman uses a data base to generate suggested Plan-O-Grams.

The data used to develop Plan-O-Grams are store reports listing all products sold and consumption data within selected stores. These reports are summarized into a summary report which is analyzed at Service Headquarters by personnel in the Merchandising Division. (Within the next few months, AFCOMS will change from using this representative cross-section of stores to a master summary report which will summarize all stores within a region and all CONUS regions within AFCOMS. The Merchandising Division will then have a complete picture of sales data rather than a sample.) Another crucial part of the data base is the actual dimensions of each product. This becomes very important because the Spaceman program uses the size of the product to allocate the proper space.

Once all the data from a particular commodity group is loaded into the program and the shelving size is selected, Spaceman will produce random placement for all items. It is then the job of the merchandiser to rearrange products within the category. Plan-O-Grams are designed to expedite traffic flow, reduce out of stocks and excess inventory, and provide optimum use of shelf space. In developing Plan-O-Grams, the merchandiser places Master Stock List (MSL) items in the prime location within the category. Shelf position is based on share of market and product volume. Input is also sought from all manufacturers' representatives within a commodity group to ensure fairness and a workable Plan-O-Gram design. Finished Plan-O-Grams are distributed to the regions and stores.

Plan-O-Grams are not going to work exactly as shown for every store. Their primary purpose is to set the placement of items within the commodity group. Commissary officers may change the number of facings based on sales history in individual stores. If a Region Commander/Director decides that a certain Plan-O-Gram will not work for a particular store, he has the authority to waive the use of the Plan-O-Gram for that store.

Plan-O-Grams have proven to be a useful tool in merchandising. The computer software is continually being updated and the Services expect to have the capability to tailor individual Plan-O-Grams to individual stores in the very near future. Industry has also taken a keen interest in Plan-O-Grams thus, enabling the Services to work closely with supplier representatives in order to improve service to commissary patrons.

The Navy is just starting to develop automated Plan-O-Grams and the Marine Corps isn't planning to automate this function. AFCOMS has provided each Service a copy of their Plan-O-Grams.

RECOMMENDATION

6.4 That the commissary systems standardize commodity groupings so that references and movement data will be consistent.

6.5 VENDOR STOCKING

BACKGROUND

Manufacturers and brokers have, for many years, provided vendor stocker personnel to ensure that certain items are stocked on commissary shelves. The American Logistics Association (ALA) asked for support in developing ideas to replace vendor stocking as it currently exists. The request was a result of the ever-mounting pressure manufacturers and brokers are receiving from state, local, and federal taxing authorities concerning the employee status of vendor stockers.

A Joint Service Task Force was established to work with an industry task force to study the vendor stocking issue. The use of a third party agency to provide vendor stocking services was recommended. A 6-month test of this concept began in August 1987 utilizing Kelly Services as the third party agency; however, the test was terminated by Kelly Services 1 December 1987. They advised that continuance of the test created too much of a drain on regular business and the stocking allowance was insufficient to run such a program profitably. Even though Kelly withdrew from the test, a third party agent was still considered a viable alternative. Since termination of the test, MARC Systems, INC. was formed for the sole purpose of providing vendor stocking services for military commissaries. Subsequently, MARC Systems has been replaced by three third party firms: Prime Team, Powerforce and Milstock. Various requirements and procedural modifications are being implemented to correct the deficiencies discovered during this ongoing test.

DISCUSSION

Stocking shelves in military commissaries regardless of commodity is a governmental function. However, different vendors over the years have voluntarily offered to shelf-stock selected categories of items. As a result, the commissary systems have lost the authorizations and spaces which previously stocked those categories. Given the current austere budgets and projected future budgets, the commissary systems are not going to be able to stock those selected categories in-house.

For the present, industry needs to develop a method of stocking those items that are authorized for vendor stocking. The commissary systems will be looking for new ideas in this area to perform shelf stocking as a governmental function, once funds can be generated to support the workload.

RECOMMENDATION

6.5 That vendors continue to stock items which are authorized for vendor stockage, until funds can be generated to pay for shelf-stocking internally.

6.6 MANAGEMENT OF STORE HOURS

BACKGROUND

Store hours at individual stores are a function of appropriated fund availability. When there is more than one commissary (a cluster) in a limited geographical area (within a 45-minute driving radius), there are options for coordinating operating hours to provide improved service. However, store hours are almost always developed independently, without coordination with other commissaries. This results in gaps and overlap in operating times when either all stores are open or other times when no commissary service is available in the area. This can generally be avoided by coordinating store hours with other commissaries in the area to ensure that a full range of hours options are available throughout the week within an easy commute of most patrons.

DISCUSSION

There are several clusters of stores, mostly in the United States and West Germany. Some examples include the extended areas around: Washington, DC; Norfolk, VA; San Antonio, TX; San Diego, CA; San Francisco, CA; and Hawaii. Looking at the Norfolk, VA area, the stores shown at Table 6-1 are open at various times for that major military population center. However, the hours of operation at these stores overlap such that there are no stores (other than the Langley Wee Serv) open past 1900 hours on Monday through Wednesday or Saturday, and none open past 1700 hours on Sunday. Although Norfolk and Langley are open seven days a week, the seven other stores are closed on Monday (some also on Sunday) and open on Tuesday. Industry statistics indicate Tuesday is generally a slower day than Monday.

	Days/Week	Hrs/Wk	FY 88 Sales	Sls/Hr
NAVSTA Norfolk	Mon - Sun	55.0	$20,436,457	$7,146
NAB Little Creek	Tue - Sun	57.5	39,906,277	13,347
NAS Oceana	Tue - Sun	60.0	28,740,237	9,212
NNSY Portsmouth	Tue - Sat	41.0	13,755,239	6,452
NWS Yorktown	Tue - Sat	32.5	3,100,481	1,835
Fort Eustis	Tue - Sun	44.0	17,777,514	7,770
Fort Monroe	Tue - Sat	41.0	7,848,737	3,681
Fort Story	Tue - Sat	30.0	3,028,580	1,941
Langley AFB	Mon - Sun	65.0	39,622,164	11,723

Table 6-1. Norfolk area store cluster

As indicated in Chapter 4, two-income families are becoming more prevalent in the military, and their personal time is becoming more valuable. This, together with the

prevalence in the military of one-car families and the incidence of field training and TDY, constrains the amount of time and the ability of families to use the commissary. To meet their needs, it is becoming more critical than ever that commissaries remain open in the evening and on week-ends. (See Chapter 5)

Each of the Services has responded to pressures for improved service in different ways, but extending hours has generally had to come from existing budgets since there is no mechanism to link improved service with operational revenues. Alternatives being used include:

- The "Wee Serv," which is open seven days a week, usually in the evenings, to supplement service provided by the commissary in which the Wee Serv is located or attached. It is a separate activity, with one to three cash registers and its own entrance/exit. It duplicates an assortment of 700-1200 basic items carried in the main commissary. The sales area is in the range of 2500-3500 square feet (with an office nearby) and costs range from $350,000 to $450,000 depending on size. Two and one half to four Full Time Equivalents (FTEs) are required to operate the Wee Serv, and usually come from existing main commissary resources.

- TSA created the "Mini Mart," which offers extended hours in the main commissary without some of the services available during the day and fewer cash registers open (one to four). The perishable departments do not restock during this period, and the selection is limited to what is already on display. This concept gives the customer a larger selection to choose from and costs are minimized by reducing staff on duty and closing some of the high cost services. Trust Revolving Fund (TRF) expenditures are less than under the Wee Serv concept because a separate facility does not have to be constructed. The average transaction in the Mini Mart is $30 vs. $10 in the Wee Serv. Labor costs are about the same: 2-4 FTEs.

- A third concept, being successfully used by TSA, is an "Extended Hours Concept." It provides full-service in the main commissary for extended hours six days a week (till 2100 hours Tuesday - Friday, to 2000 hours on Saturday, and to 1800 hours on Sunday). By closing one day a week (could be Monday, Tuesday or whatever day is slowest in that area) and allocating those hours for evening service on six days, the store is able to increase total shopping hours available and offer full-service during the more popular evening hours. Closing one day has the added advantage of generating time for weekly upkeep chores: sanitation, maintenance, displays, resets, etc., when labor is less expensive and more reliable. Contract stocking is reduced from seven days a week to six days a week, also reducing operational costs. This results in better service to the patron, reducing costs and increasing sales. As shown in Table 6-2, sales per operating hour are four times as high as the Mini Mart.

	Mini-Mart	Extended Hours
Sales/op hour	$3,161.00	$12,836.00
Sales/transaction	$30.00	$49.00
Avg trans/hour	93	260

Table 6-2. Comparison of Mini-mart and extended hours sales results

AFCOMS has instituted a 24-hour-a-day operation at Ramstein Air Base in Europe. Preliminary results indicate that operation from midnight to 0600 is of questionable value due to lack of sales and high cost of operation. The 24-hour policy should be discussed and approved by the DOD Resale Executive Board (DODREB), or by the Board of Directors outlined in Chapter 11, prior to any further proliferation.

RECOMMENDATIONS

6.6.a. That operating hours be coordinated by all Services so that optimum service to the community at large is assured.

6.6.b. That each Service determine the form of alternative shopping that best suits its needs.

6.6.c. That the DODREB or the Board of Directors outlined in Chapter 11 review costs and sales of the 24-hour operations prior to expanding the concept.

6.7 COMMERCIAL ACTIVITIES

BACKGROUND

In 1981 a DOD Task Force developed a performance work statement (PWS) for the operation of all commissary departments except store management and the administrative/control section. The Army performed a commercial activities (CA) study of the Fort Leonard Wood and Yuma Proving Ground commissaries. These stores were selected to test the concept of contracting out the entire store because one was medium-sized with a large troop population and one was small with a retiree orientation. As a result of the study, the Fort Leonard Wood Commissary remained in-house and operated for five years under the most efficient organization. The Yuma Commissary was contracted out in December 1983. While the store was run reasonably well and patrons were happy, the contractor experienced difficulty in maintaining the meat, produce, and grocery inventories within acceptable tolerance levels. The contractor also experienced difficulties in meeting administrative requirements set forth in the contract. In September 1986, the contract was terminated, and TSA resumed operation of the Yuma Commissary. TSA and the contractor

agreed that the concept would not work. No further CA studies were conducted at the Yuma Commissary pending the construction of a new facility. It was concluded from the Yuma contract experience that contracting out all store operations is not a viable alternative.

The Marines have elected not to conduct CA studies of the shelf stocking or warehouse functions because they determined no resultant savings from this approach.

The spaces generated from CA studies that are not returned to the Services are being used by the commissary systems for various critical requirements such as providing additional staffing support for scanning implementation, contract performance evaluation requirements, new and renovated stores, and stores with expanded operating hours. Spaces generated from CA should continue to be returned to the commissary systems.

DISCUSSION

Contract operations must represent at least a 10 percent savings over the government's in-house bid. In many cases the savings were more. However, some of the competitive contracts have failed due to under-capitalization of the contractor or because the initial bid was too low. AFCOMS has solved their problem of contract failure by increasingly relying on NISH for contract functions. AFCOMS has also reduced failures by; (1) more involvement in the pre-award process; (2) using more contracts with small disadvantaged business firms; (3) using negotiated proposals in lieu of sealed bidding; and (4) pursuing source selection procedures for those locations where contractor performance has been poor and contracts have failed. The Army is also beginning to move toward more NISH contracts. While operating costs are higher for NISH contracts than for competed contracts, NISH seems to provide excellent service, contract renewals are simpler, and national standards have been established which simplify proposal evaluations. Also, contracts with NISH can be renegotiated at the end of the 3-5 year study period without competition.

HQ AFCOMS has worked with the national NISH organization to control commissary contract prices. As a result, a national standard on shelf-stocking has been established, and negotiations are underway to establish a national standard for custodial work. The simple fact that national costing standards have been established significantly simplifies the negotiations at the 28 Air Force bases with NISH contracts. The results of these negotiations are as follows:

- In 1980, the initial AFCOMS shelf-stocking contract with NISH was based on stocking 20 cases per person per hour. Today the productivity rate is 32 cases per person per hour.

- Warehousing was initially based on using 100 percent warehouse workers for the direct labor function and a productivity rate of 35 cases per person per hour. Today, for costing purposes, the standard uses approximately 60 percent store workers (lower paid) and 40 percent warehouse workers and a productivity rate of approximately 37 cases per person per hour.

- In the custodial area, task frequencies have been decreased.

- Costing standards for the custodial area are currently under review. The number of square feet to be maintained per employee has been increased from 11,000 to 12,000 for the store and administrative areas and from 33,000 to 36,000 for the warehouse area.

Some of the disadvantages associated with contracting with NISH are as follows:

- Initial contracts require 9 to 12 months to obtain.

- The prices for NISH contracts are typically higher than for competitive contract. The following factors contribute to the higher costs for NISH contracts:

  - Once a Service is placed on the Procurement List, NISH becomes a mandatory source and competition is eliminated.

  - Under the Services Contract Act the Department of Labor (DOL) dictates minimum wage rates and fringe benefits for direct labor positions used in service contracts. NISH must comply with this public law. NISH may use two handicapped workers to perform the equivalent work of one non-handicapped worker and pay each worker half of the DOL wage rate. However, NISH must pay full fringe benefits to each handicapped worker thereby causing higher contractor costs.

There are a number of disadvantages associated with contracting out commissary functions, as discussed below:

- The Government is always responsible for the work of the contractor but has no authority to supervise contract workers or their methods. The Government's only recourse is to document the contractor's poor performance until enough data is available for the contracting officer to take appropriate action. This can cause real problems in commissary operations in areas such as sanitation, security, customer service, and safety. For example, if the contractor is not cleaning the floors properly, an unsanitary condition exists. The Government can document the failure to clean the floor and take payment deductions from the contractor. In the meantime the floor is still unsanitary, and the Government is responsible for the overall conditions in the commissary.

- Unlike Government workers, contractor personnel can strike or abandon the contract. The Government must then use Government employees to perform the contractor's job on a temporary, no-notice basis until the problem is resolved or another contractor is found. When the contractor walks off the job, the commissary is hard-pressed to provide quality commissary service, especially if the contractor was furnishing equipment and supplies. Since most commissaries operate six or seven days per week, there is little or no time to bring in and train a new

work force and round up equipment and supplies without seriously impacting the level of service.

- The Government tends to tolerate shortcomings on the contractor's part because of the problems involved in removing one contractor and obtaining another. When a contractor is removed, there is a "break-in" or training period for the new contractor during which time commissary service levels suffer. Moreover, there is no guarantee the new contractor will be any better than the one that was terminated.

- The Government loses flexibility when a function is contracted because contractor personnel cannot perform tasks not included in the work statement. Any change in operations leads to a contract modification, which usually increases costs to the Government. In addition, it takes time to negotiate a contract modification. With in-house operations, the Government tends to restructure and reassign personnel to allow for the changes.

- The process of documenting poor contractor performance is lengthy, and the commissary officer must live with the substandard performance until he can provide the contracting officer enough evidence to take some kind of corrective action. As discussed previously, these delays can be disastrous for customer service levels as well as in matters of sanitation, safety, and security.

- It is difficult to write surveillance plans that ensure quality of service and allow equitable contract payment deductions when contract standards are not met, particularly for service/quality levels. For example, the amount of a contract deduction must be representative of the cost to the contractor for performing a particular function. The cost to the contractor for establishing correct prices in the meat department may be minimal; however, failure to properly perform this function may cause customers to pay exorbitant prices. Patrons may refuse to shop a store where prices are out of line. Therefore, the payment deduction does not compensate for the harm done by the contractor's failure to perform. If a surveillance plan is not properly written, the contractor may choose not to perform a certain task and take the contract payment deduction. In addition, it is extremely difficult to write surveillances for quality/service levels that can be performed and sufficiently documented to stand up in a court of law.

- Because the commissary systems permanently lose many of the spaces saved as a result of contracting out to their respective Service Headquarters, the odds are the contracted functions will never return to an in-house operation because of a lack of resources. Because the contractors know this, they often underbid and then cut corners or overcharge on contract modifications to regain their profits. This process has led to several defaults in both AFCOMS and TSA.

The Services have taken two different approaches to contracting out commissary functions. AFCOMS uses installation

contracting personnel to perform the contracting function, whereas TSA performs this function centrally from the Headquarters. As a result, TSA has developed in-house expertise which has led to a high degree of standardization in performance work statements and overall contract specifications and policies.

RECOMMENDATIONS

6.7. Regularly conduct cost comparison analyses to determine if continuation of CA is in the best interest of the Government. Secure authority and resources to revert to in-house when required.

6.8 INVENTORY REVALUATION

BACKGROUND

Inventory revaluation is a method of adjusting the value of the on-hand inventory upon receipt of price changes. All the Services performed inventory adjustments in the seventies, but during the eighties, TSA and AFCOMS terminated the policy. The Marines revalue the inventory in their CDC via their computer. Under normal operations no manual count is performed. Only NAVRESSO performs a manual physical count when changing prices. TSA and AFCOMS have determined that physically counting inventory every time the price changes is too labor intensive, very inefficient, and provides very little value in return.

DISCUSSION

The NAVRESSO system of inventory revaluation is complex and labor intensive. Everything in the CDC is physically counted. All displays and back stock in the commissaries are counted. Depending on the previous accountable inventory, the commissary may or may not count the shelf stock. Cost prices are effective on different days than selling prices. The different physical counts in the warehouse and store are posted and the book value of the inventory adjusted.

The intended purpose of this system is to generate debits to the stock fund that can later be transferred to TRF. The transfer of TRF to offset stock fund losses is an established practice. The reverse, i.e. stock fund gains to TRF has been allowed at Service discretion. These gains should be transferred to TRF, by all Services to benefit the Service member. However, NAVRESSO's current price revaluation is an accounting entry, and not cash and as such cannot be transferred.

RECOMMENDATIONS

6.8.a. Taking a physical inventory solely for the purpose of inventory revaluation should be discontinued.

6.8.b. That stock fund gains be transferred to the CTRF.

6.9 FILE MAINTENANCE

BACKGROUND

All the Services utilize the front end scanning systems developed by NCR. All of the systems currently operational in commissaries have the capability to communicate with host units and transmit and receive information. The large stores equipped with a Dual 9150 processing system or equivalent can receive and store file maintenance and pricing information while performing the normal day's operations. Smaller stores may require the support of a PC and modem to buffer information until processed. Support systems whether located at the region/complex level or at a store vary based on the Service. Currently, the Marine Corps utilizes "mirror" systems consisting of the 9150 Dual processing system as well as the 2126 PC6 system to perform central file maintenance at its complexes for the supported stores. The Air Force uses the 9300 system which utilizes a different operating system and communication package than the one originally developed for the scanning setup. The Navy currently works on a shared time basis with the exchange using the same support system which could lead to prioritization problems, system development conflicts, or operational overloads.

DISCUSSION

In the case where file maintenance is centralized, or at least performed by a support system, the following scenarios generally apply:

- New item add maintenance is entered into the host system. A support program (usually a custom program) processes the item information by batching the data to the applicable store file. The files are transmitted to the individual stores. The stores then apply the maintenance in the normal course of file update.

- Shelf label maintenance is entered on the host system. The maintenance file is then transmitted to the stores. This transmission will overlay the stores' shelf label maintenance file until applied locally. This application is performed during the normal course of file update.

- Price changes are entered via a custom software package, usually Service-developed and operated on the host system. The changes are entered for the impacted stores and the system creates a file for each store that has a price change. The files are transmitted to the stores, who then apply this maintenance to update the item file.

Standard industry practice is to perform regional centralized file maintenance. All retail chains and all wholesalers provide regional central file maintenance for their stores. It is by far the most effective and efficient process, providing substantial work year savings (See Chapter 5).

RECOMMENDATION

6.9. All Services automate and centralize file maintenance to the maximum degree possible. (See Chapter 5)

6.10 STORE FLEXIBILITY

BACKGROUND

Store flexibility, for purposes of this discussion, is defined as the use of wage grade (WG) for the traditional general schedule (GS) clerical position descriptions for Cashiers.

The Services have contended for years that the GS classification for sales store checkers systematically results in the commissary being non-competitive in the job market for cashiers. Additionally, the sales store checker classification has recently ended the requirements of a year of general clerical experience and a written test in order for an applicant to be considered for the position. The combination of these two factors above made the sales store checker position a continual revolving door to federal employment except in those fortuitous circumstances where the commissary had no competition.

Civilian operations, limited to a degree by union classifications, enjoy a great deal of flexibility in assigning work during peak periods to meet changing needs. In addition, a retail operation will meet prevailing market salary rates in order to employ a competitive work force. Efforts to hire qualified cashiers in commissaries at the GS-3 level in high cost areas result in long lines due to vacancies and hiring lag, or higher costs of operating due to marginal or undependable employees requiring closer supervision.

DISCUSSION

The Commissary Systems need the flexibility to compete in their local job markets. The option of using WG or GS cashiers should be given to the Services. The commissary needs the staffing flexibility to effectively meet local work situations. Another factor is the need to have cashiers perform other duties such as receiving, stocking, salvage, price checks, sanitation, etc, when needed to make the organization more effective. Being able to convert from GS to WG would also provide an incentive for cashiers to stay with the commissary longer knowing a pay increase is possible in the future.

This change would result in the flexibility to have ex-cashiers in other positions in the commissary able to run registers during peak periods, and would also enable the commissaries to compete for a shrinking labor force.

RECOMMENDATION

6.10. All Services be permitted to convert GS to WG to meet local work situations.

6.11 ID REQUIREMENT AND VERIFICATION

BACKGROUND

Currently, DoD 1330.17-R requires positive identification in the United States by either an official Armed Services Identification Card or an official Uniform Services Identification and Privilege Card prior to entry to a commissary. Provisions of the Directive grant the Secretary of the Military Department concerned the discretion to prescribe the uniform as a means of identifying authorized patrons outside the United States, its territories, and possessions. The Secretaries of the Military Departments have approved checking identification at the cash register, on a case-by-case basis but this is usually limited to operations with four or less check stands. The requirement to check identification prior to entering the commissary currently costs approximately $7.8 million in appropriated funds.

DISCUSSION

The DOD Resale Executive Board has discussed the appropriateness of establishing the uniform as a means of identification. The strict adherence to the current requirement for identification is based on the potential adverse impact any change would have on the entitlement. Clearly, the commissary benefit is of such importance, every effort should be made to protect and safeguard the entitlement. However, acceptance of the official military uniform as a means of proper identification may not pose a serious challenge to the commissary benefit. Conversely, the requirement for military members in uniform to show an identification card irritates the active force, particularly at secure installations. A change in the current policy would free people for work elsewhere in the commissary.

The DOD 1330.17-R requires identification to be checked prior to entering the commissary. This requirement has been modified for smaller stores, usually those with four check stands or less, where identification is checked at the cash register. The obvious benefit is the maximum use of limited personnel in smaller commissaries. However, large stores are operating under the same, if not greater, labor constraints than the small stores. In addition, this approach would seem to indicate that honesty is less of a problem in smaller stores.

While it is important to safeguard against abuse of the commissary entitlement, any proposed change must consider the uniqueness of each Service and the particular requirements of each installation. The requirements of the Military District of Washington are clearly different than at the Marine Corps Air Ground Combat Center, Twentynine Palms, California. Therefore, these factors should be considered before making a decision to change the current identification requirements.

RECOMMENDATIONS

6.11.a. The requirement to perform a positive identification prior to entry be changed to allow identification at the

check stand subject to the requirements of each installation.

6.11.b. The requirements of DOD 1330.17-R be changed to allow the Service Commanders to permit the uniform as an acceptable form of identification in the United States. This determination will be on a case-by-case basis considering Service and installation requirements.

6.12 CASH AND COUPON HANDLING PROCEDURES

BACKGROUND

Each Commissary System has developed their own system of cash handling and coupon handling.

DISCUSSION

The most efficient cash handling procedure currently in use by several of the Services eliminates the sales checker from having to count the till twice, once when coming on duty and again at the end of the shift. One Service requires sales checkers to count their tills. All cash tills are routinely counted by a designated individual in the cash cage. Therefore, only in those instances where there are discrepancies should the sales checker also be required to count the till.

Within the commissary store a coupon handling procedure, similar to the one used by AFCOMS, should be used. This procedure audits the coupons using the transaction tape from the NCR scanning system instead of counting them by hand. However, the coupons should be mailed directly to the clearing house instead of routing them through a headquarters first. The staff at headquarters that weigh and sample coupons should be released to other duties, saving approximately $160,000 in salaries and mailing costs.

RECOMMENDATIONS

6.12.a. That all Services use cash handling procedures similar to AFCOMS.

6.12.b. That common coupon handling procedures be developed jointly by the Services.

6.13 SELF-SCANNING EQUIPMENT

BACKGROUND

All Services have been using scanning equipment in the majority of their stores which has improved overall operations from a managerial as well as a patron standpoint. Recently, advances have been made in the industry which allow patrons to scan their own items reducing the need for checker personnel to be on duty.

DISCUSSION

Self-scanning equipment, if used in varying degrees, could have an impact on reducing O&M funds while at the same time permitting extension of services. For example, six lanes of self-scanning equipment can be purchased for $160,000 in surcharge funds and can be managed by two personnel. Assuming a decrease of four personnel at 40 hours each per week with an hourly salary of $6.00, approximately $48,000 per year could be saved. The pay-off period for the equipment would be in approximately 34 months. Assuming 100 stores could use six lanes effectively, the savings equate to $4.8 million per year.

RECOMMENDATION

6.13 That the DoD Resale Executive Board or the Board of Directors outlined in Chapter 11 review self-scanning operations.

6.14 ELECTRONIC DATA INTERCHANGE (EDI)

BACKGROUND

The Troop Support Agency has tested EDI. The Defense Personnel Support Center (DPSC) has tested EDI. Most of the large food manufacturers, many distributors and some brokers are using EDI. The Marine Corps Commissary System is using EDI. EDI is continuing to expand in both industry and government. Not only is EDI fairly inexpensive to implement, but there are significant benefits in reducing ordering time, processing time, mailing time, invoicing time, bill paying time, and their attendant costs.

DISCUSSION

EDI is the practice of sending from computer to computer, formatted business information such as order placement, invoicing and shipment schedules. The Federal Government involvement in EDI is in its infancy and the Service commissary systems are all early participants to some extent. Currently, all participation in the Frequent Delivery System (FDS) is based on electronically transmitting order quantities using portable data entry devices (PDED) to the participating distributor or wholesaler. In some instances, pricing information is also transmitted via PDED to update pricing files for billing purposes.

The Marine Corps commissaries which are centrally managed by the East Coast Commissary Complex (ECCC) at MCB, Camp LeJeune and the West Coast Commissary Complex at MCAS, El Toro, use a unique system which provides automated supply, procurement and accounting functions. Their commissary voucher processing function is also

automated and centralized at the complex level. The ECCC uses Sterling Software's ORDERNET System in Columbus, Ohio as a clearinghouse and transaction service. In addition, the Marine Corps commissary system has been included in a DoD Electronic Funds Transfer (EFT) Vendor Payment Pilot Project. The Marine Corps is successfully using EFT to pay manufacturers and more companies are being added.

The goal of EDI is a virtually paperless transaction, eliminating the need for extensive accounting staffs to review documents and prepare payment "packages." The benefit to industry will be the reduction in transmission errors and in the administrative burden on sales representatives. This will allow the sales staff to prepare new item presentations and increase merchandising efforts.

There are, however some problems associated with EDI implementation:

- **ACCEPTABLE DOCUMENTATION**

Each Service will be required to receive approval for the receipt of electronic invoices. Although the concept seems simple, there are financial regulations and instructions to satisfy electronic signature and security matters prior to approval.

Each Service will be required to receive approval for electronic certification of receipt and acceptance for payment. This is not a major obstacle since the parties involved are both part of the Federal Government (Commissary Complex/Region to Disbursing Office/Accounting and Finance Center).

- **SYSTEM COMPATIBILITY**

The Services will be required to closely coordinate EDI initiatives with the various Disbursing Offices and finance centers to ensure system compatibility. At this point, finance centers that support commissary systems are in a varying state of automation.

The demands of increased automation on existing systems could quickly push these systems past their current capabilities. In addition, increased automation will dictate changes in the supporting work force. These changes traditionally lag behind system development.

- **ELECTRONIC FUNDS TRANSFER (EFT)**

The Treasury is currently moving to convert all government payments to electronic funds transfer. The implementation of EFT can be viewed as a form of EDI although not covered by the current definition. As previously mentioned, the Marine Corps Commissary System in coordination with the Marine Corps Finance Center, the Disbursing Office MCB Camp Lejeune, NC, and the Federal Reserve Bank (Richmond), are coordinating the implementation of EFT for payments due participating companies.

Currently, each Service benefits to some degree from EDI initiatives. The consensus is that increased automation, especially in the area of bill paying, will benefit the commissary systems.

RECOMMENDATION

6.14 DODREB or the Board of Directors outlined in Chapter 11 form a joint committee to develop EDI.

6.15 STORE ADMINISTRATION

BACKGROUND

Each commissary system handles store administration differently than the other commissary systems. The Army is the most decentralized and the Marines are probably the most centralized. The Navy and Air Force are closer to the Marine Corps Commissary System than they are to the Army.

DISCUSSION

While other sections of this report address standardization, supply operations, and Electronic Data Interchange (EDI) as separate topics, this discussion will combine elements of all three.

The MCCS Supply Clerk job description combines several functions that are split out by other commissary systems. For discussion's sake a list of those duties follows:

- Operates data entry/CRT terminal utilizing the full keyboard including special function keys and switches in transcribing interspersed alphabetic and numeric data, coding and programming controls.
- Operates the computer terminal/on-line with the host computer in processing a variety of programs. Sets up CRT and uses proper input and output screens.
- Interprets and distributes data documents and system reports.
- Maintains a perpetual inventory of nonexpendable (Minor and Plant) property for the commissary. Prepares receiving reports, excess equipment reports and equipment condition reports.
- Maintains Self Service and Ship Stores credit cards and transaction records.
- Prepares, submits and follows up on all maintenance work requests for repair and/or maintenance of equipment and structures for the commissary.
- Conducts monthly price verification of commissary prices. Maintains survey log of markdowns, VPRs etc. Extends price computations.
- Screens weekly and monthly order invoice register, against BPA and CDC receiving.
- Drives a government vehicle on errands to various locations around the installation and surrounding areas.

All the Commissary Systems need to be moving toward the above flexibility in their job descriptions and the efficiencies that occur as a result. By standardizing reports, maximizing resources, centralizing supply operations, and building in flexibility, enormous savings can be generated in the control sections and store administration areas. The amount of personnel and other administrative paperwork also needs to be reduced, especially as the government continues to automate.

RECOMMENDATIONS

6.15.a. All commissary systems automate store administration to the maximum extent possible.

6.15.b. All commissary systems jointly develop standardized reports.

6.15.c. Develop flexible job descriptions so that a number of functions may be filled with one position. (See Chapter 9.)

6.16 TESTING NEW INITIATIVES

BACKGROUND

The retail food industry is dynamic and constantly evolving. Today, it is in the midst of the most rapid transition in its history. These changes must be reflected in the DOD commissary system for us to continue working efficiently with industry. We have already discussed EDI and its importance to both the industry and the commissaries. Scanning is another example of technology moving the food industry forward. These concepts and initiatives need to have a forum for testing and approval.

DISCUSSION

New initiatives in the military commissary system are not conceived in a vacuum. They are primarily copied from established industry practices. However all initiatives need a champion. With a champion usually comes a bias regarding these outcomes that often prevents the objective testing of the initiatives. At times, these initiatives have replaced existing systems without adequate testing or contingency planning and must be made to work because no backup system is available. This can result in additional money being spent to correct a problem that was supposed to be a solution.

Sometimes, when an individual Service is faced with budget constraints, decisions are made favoring short-term solutions which create long-term problems for the other Services. These types of situations have occurred with increasing frequency in recent years. Thus there is a need for a systemic method to test new initiatives.

Major new initiatives should be controlled through a central committee, such as the DODREB. All proposed tests should be submitted to the DODREB for approval prior to testing.

The initiatives must have quantifiable goals with defined test parameters. After conducting the test, a briefing will be made to the members of the DODREB. The DODREB will decide whether to extend or terminate the initiative based on the initiative's benefit to the Service member and the commissary system. Only those initiatives that conform to the criteria established by the DODREB should be expanded.

RECOMMENDATIONS

6.16.a. The DODREB or the Board of Directors outlined in Chapter 11 approve all major policy initiatives that may impact on the operations of the commissary systems.

6.16.b. That the DODREB or the Board of Directors outlined in Chapter 11 review test results and approve expansion or termination of each initiative.

6.17 COMMISSARY EQUIPMENT AND FACILITIES MAINTENANCE

BACKGROUND

Fixed equipment and facilities maintenance is generally the same in all four Services. Host-Tenant support agreements normally govern what is a non-reimbursable and reimbursable repair. Fixed equipment and facilities repair and replacement are normally the responsibility of site commanders in all Services. Base level and regional contracts are negotiated for the repair and replacement of all surcharge bought equipment. This equipment is the responsibility of each individual Service.

DISCUSSION

There are some inconsistencies on how fixed equipment and facilities are repaired. At least one Service utilizes the exchange service as a reimbursable agent, while others utilize base negotiated contracts and other negotiated contracts. While these multiple systems seem to somehow get the job done, it does at times seem to be inconsistent and inefficient.

Each Service has certain maintenance functions which it performs well. An annual, or more often if necessary, meeting would benefit all parties.

RECOMMENDATIONS

6.17.a. That multiservice store maintenance contracts be implemented to the maximum extent possible.

6.17.b An annual gathering of commissary system engineers and equipment specialists be conducted to discuss alternatives and foster standardization of equipment and maintenance.

6.18 SUPPLY OPERATIONS

BACKGROUND

Funds for the purchase of all supply items are controlled and distributed at Region level by the Region Commander/Director. Commissary Officers submit an annual projected budget to the Region.

DISCUSSION

ANNUAL INVENTORY

During the calendar year each Service performs an annual inventory of all surcharge equipment utilizing a region generated Surcharge Equipment Inventory Listing. This inventory is used to update the Master Equipment Listing, a comprehensive listing showing category, item number, item description, model number, acquisition cost, serial number, acquisition date, disposal date and code, condition, and quantity on hand.

BUDGET

Commissary Officers analyze inventory results and anticipate their needs for the next fiscal year to develop a store equipment budget. Careful consideration is given to (1) quantities authorized by a predetermined table of allowance, (2) expected years of serviceability, and (3) condition and age of existing equipment as shown on the equipment listing. Region/Complex personnel review store budget requests and verify age, condition and quantity on hand of existing equipment as compared with quantity authorized. All valid requests are compiled and the Region/complex package submitted for Headquarters review.

EQUIPMENT ORDERING PROCEDURES

All approved budget equipment requests are initiated by the store and procured by the Region/Complex; from DLA through existing BPA contracts; or GSA when available. Installed equipment, however, is purchased at store level through the base contracting office.

Occasionally, out of cycle (non-budgeted) requests are submitted from store level to Region/Complex. Such requests are approved/disapproved by the Region/Complex Director on an individual basis, based on circumstances and funds available.

OPERATING EQUIPMENT MAINTENANCE

Commissary Officers and Region/Complex personnel determine which equipment items require maintenance contracts. They then submit purchase requests for needed preventive maintenance contracts to their local contracting office.

Repair of equipment not covered by a maintenance contract is performed on a one-time, as needed basis with requests processed at the local store's contracting office or, in NAVRESSO's case, through the Navy Exchange System.

OPERATING SUPPLIES

Recurring Supplies. In all Services, department managers (grocery, warehouse, front end, meat/deli, produce and bakery) at each store are responsible for a month-end inventory and reorder of operating supplies. These managers know the rates of consumption in their departments and are able to accurately forecast their needs.

Nonrecurring Supplies. Department managers also provide the Region with a written request for nonrecurring supplies. Requests are approved or disapproved by the region/complex and are acted upon immediately by Base Contracting.

REQUISITION PROCEDURES FOR SUPPLIES

Blanket purchase agreements (BPAs) are used by the Region/Complex to the maximum extent possible to procure both recurring and nonrecurring supplies. BPA orders are awarded to the company offering the needed product at the lowest price for that month. BPA orders take seven to ten days and streamline contracting involvement. Supplies not available through BPAs are ordered by the Region/Complex through the Region's Contracting Office. Emergency orders are placed by the Region and are acted upon immediately.

PAYMENT OF SURCHARGE ORDERS

Upon receipt of Surcharge equipment or supplies at the store, signed and dated delivery tickets acknowledging receipt are forwarded to the Region/Complex.

UTILITIES

Region/Complex personnel collect quarterly data from stores on utility consumption and cost. This data is used to facilitate budgeting and is also sent to Headquarters for information purposes.

CENTRALIZATION

As can be seen by the above discussion, controlling operating supplies is a complex system requiring coordination among HQ, Region/Complex, base or exchange contracting, and department managers in the commissary. To effect savings in this area, this function needs to be centralized. Centralizing this function in AFCOMS saved approximately 100 FTEs. TSA could save approximately 50 work years or $1.2 million.

RECOMMENDATION

6.18 The purchasing of all operating supplies should be centrally managed at Region/Complex level.

6.19 TROOP SUPPORT

BACKGROUND

The Troop Support mission is to order, store, issue, and account for subsistence in support of fighting units worldwide. Troop Issue Subsistence Activities or TISAs store specification items, operational rations, and some brand name items. Specification items are items processed to contract specifications. Some of the major differences between specification items and brand name items are shelf life and labeling. The product is usually similar, and prices vary. Operational rations are food components especially developed for use during troop movements.

DISCUSSION

Troop Support in the Navy and Marine Corps is an installation responsibility. In the Army, it is a MACOM/installation responsibility, with TSA delegated the responsibility for operating 12 TISAs. TSA also inspects TISAs as part of a management assistance program. In the Air Force, AFCOMS' primary mission is operating 114 TISAs worldwide.

The Army is preparing to study subsistence distribution through its Natick Research and Development Center. The Army is also examining the transition from peacetime to wartime. There is good probability that Army TISAs may be considered for combining with commissaries. The primary mission for TISAs would be garrison feeding and the commissary could easily absorb the function.

RECOMMENDATIONS

6.19.a. Troop Support remains status quo in Air Force, Marines, and Navy.

6.19.b. Troop Support be studied by Army and necessary action be taken upon completion of that study to realign if recommended.

SUMMARY

In this chapter, several commissary operations initiatives were proposed that will reduce costs, and standardize and simplify operations. While trying to standardize many existing functions, we have tried not to stifle innovation. Any initiative that impacts the operations of other commissaries needs to be formally proposed, objectively evaluated, and terminated or proliferated by a joint board. Many other functions need to be jointly evaluated, milestones determined, goals established, and progress reviewed. The

commissary system using the most efficient operating procedure was cited as the model to follow for all commissaries.

Other areas, such as EDI and central file maintenance are proposing to push some of the systems into the current state of the art in industry. Other functions are perhaps obsolete and should be discontinued and the cost savings used on other initiatives.

A new spirit of cooperation must replace the current spirit of competition among the four commissary systems. We must learn to hang together or we will surely hang separately.

SUMMARY OF RECOMMENDATIONS

RECOMMENDATIONS

6.2 All Services should centrally price electronically at the regional level to the maximum extent possible. Cost savings should be used to increase the level of service at the commissary.

6.3.a. Do not proceed with any more Joint Commissary-Exchange operations. Existing operations may continue under the current system, but must be addressed under a consolidation concept.

6.3.b. As long as the military Services continue to operate their respective commissary systems, the determination of which product categories authorized by DOD 1330.17R are to be sold will be the purview of the Services' commissary systems.

6.4 That the commissary systems standardize commodity groupings so that references and movement data will be consistent.

6.5. That vendors continue to stock items which are authorized for vendor stockage, until funds can be generated to pay for shelf-stocking internally.

6.6.a That operating hours be coordinated by all Services so that optimum service to the community at large is assured.

6.6.b That each Service determine the form of alternative shopping that best suits its needs.

6.6.c. That the DODREB or the Board of Directors outlined in Chapter 11 review costs and sales of the 24-hour operation prior to expanding the concept to other stores.

6.7. Regularly conduct cost comparison analyses to determine if continuation of CA is in the best interests of the government. Secure authority and

resources to revert to in-house when required.

6.8.a. Taking a physical inventory solely for the purpose of inventory revaluation be discontinued.

6.8.b. That stock fund gains be transferred to the TRF.

6.9. All Services automate and centralize file maintenance to the maximum degree possible.

6.10. All Services be permitted to convert GS to WG to meet local work situations.

6.11.a. The requirement to perform a positive identification prior to entry be changed to allow identification at the checkstand based on the requirements of each installation.

6.11.b. The requirements of DOD 1330.17-R be changed to allow the Service Commanders to permit the uniform as an acceptable form of identification in the United States. This determination will be on a case-by-case basis considering Service and installation requirements.

6.12.a. That all Services use cash handling procedures similar to AFCOMS.

6.12.b. That common coupon handling procedures be developed jointly by the Services.

6.13. That DODREB or the Board of Directors outlined in Chapter 11 review self-scanning operations.

6.14 DODREB or the Board of Directors outlined in Chapter 11 form a joint committee to develop EDI.

6.15.a. All commissary systems automate store administration to the maximum extent possible.

6.15.b. All commissary systems jointly develop standardized reports.

6.15.c. Develop flexible job descriptions so that a number of functions may be filled with one position (See Chapter 9).

6.16.a. The DODREB or the Board of Directors outlined in Chapter 11 approve all major policy initiatives that may impact on the operations of the commissary systems.

6.16.b. That the DODREB or the Board of Directors outlined in Chapter 11 review test results and approve expansion or termination of each initiative.

6.17.a. That multiservice store maintenance contracts be implemented to the maximum extent possible.

6.17.b. An annual gathering of commissary system engineers and equipment specialists be conducted to discuss alternatives and foster standardization of equipment and maintenance.

6.18. The purchasing of all operating supplies should be centrally managed at Region/Complex level.

6.19.a. Troop Support remains status quo in Air Force, Marines, and Navy.

6.19.b. Troop Support be studied by Army and necessary action be taken upon completion of that study to realign if recommended.

Chapter 7

INVENTORY CONTROL AND DISTRIBUTION SYSTEMS

OVERVIEW

Inventory control and distribution systems have been implemented and improved over the years by the services' commissary systems, with the overall goals of providing the best possible service to authorized military customers while maximizing available commissary resources. In striving to accomplish these goals, each service has worked independently to achieve similar objectives through both automated systems and varying methods of distribution. The objectives being pursued in meeting these goals include:

- Providing quality items to customers at the lowest practicable prices and offering a broad brand width and depth of nationally available items, as well as being responsive to regional customer preferences.
- Managing inventory, based on available stock fund dollars and commissary resources, to maintain at least a 95 percent or better in-stock position.
- Improving automation for the inventory control and distribution functions to automate the order and receiving process,

to determine economic reorder quantities while reducing excess inventory and safety stocks, and to minimize inventory on hand while increasing stockturns.

- Reducing the administrative overhead burden inherent in this process, particularly in the financial area, by more efficiently utilizing commissary resources in servicing the customer.

The purpose of this chapter is to determine an effective system(s) to ensure the most efficient and economical methods of inventory control and distribution for the future of the commissary system. This system should operate similar to those in the commercial supermarket industry. This chapter is not meant to be a formal distribution study for the total military commissary system (that would be another whole study in itself), but to develop short-range and/or long-range alternatives to improve the commissary system and achieve efficiencies while minimizing costs.

This chapter addresses each of the military services' inventory control and distribution systems, as well as the Defense Personnel Support Center (DPSC) system support interface for commissaries. Information gathered is based on a review of each service's current procurement, inventory control, and distribution systems, policies, and procedures. Comparisons and descriptions are provided to identify similarities and differences among the systems. The systems in the United States and those overseas are treated as separate subsections in this chapter due to unique differences in their systems and associated challenges. Existing distribution studies prepared through contracts with commercial consultants for Navy Resale and Services Support Office (NAVRESSO), DPSC, Air Force Commissary Service (AFCOMS), and Troop Support Agency (TSA) were reviewed. Visits were made to commercial supermarkets, wholesalers, and distributors to study current grocery industry trends in the areas of inventory control and distribution. On-site visits were also conducted at each service's headquarters and selected regions and stores, both CONUS and overseas, to review current operating policies and procedures.

The FY 1988 profile of the military commissary system for sales and inventory is illustrated in Table 7-1. Annual inventory turns for the system are 11.1. For each service, the Marine Corps leads with 19.5 turns, followed by Navy with 12.0, Army with 10.8 and Air Force with 10.6. This descending trend in inventory turns should be indirectly proportional to the volume of sales overseas, i.e., the greater the volume of overseas sales, the lower the inventory turn would be. The majority of overseas sales is generated by the Army system. Therefore, the fact that the Army inventory turn is greater than that of the Air Force could indicate that Air Force on hand inventory levels are greater than they should be.

	Air Force	Army	Navy	Marines	Total
FY 1988 Sales (000,000)	2460.7	1831.8	869.6	171.3	5333.4
Average Inventory (000,000)	231.4	169.1	72.7	8.8	482.0
Inventory to Sales Ratio*	1.13	1.00	1.00	.62	1.08
Inventory Turns*	10.6	10.8	12.0	19.5	11.1

* Based on FY 1988 sales (without surcharge) related to average inventory, including overseas inventories.

Table 7-1. Military commissary inventory statistics

7.1 INVENTORY CONTROL AND DISTRIBUTION IN THE UNITED STATES

INTRODUCTION

Inventory control is the process used to determine which items of merchandise are required to keep commissary shelves stocked with the items customers desire. The manner in which this function is performed is dependent upon the supply source, distribution methods for the merchandise, and the basic ordering system used. In the United States, commissary merchandise is acquired primarily from commercial manufacturers and some items, such as fresh fruits and vegetables (FF&V) and certain meats, are obtained through DPSC sources or contracts.

Each of the services currently uses a combination of four ordering/distribution methods to varying degrees for obtaining merchandise for commissaries. The types of merchandise and sources of supply determine which method of procurement and delivery are to be used. The four methods are:

- Direct store delivery system (DSD)
- Delivery to individual warehouses
- Delivery to central distribution centers (CDCs)
- Frequent delivery system (FDS)

In the United States, military commissaries generally procure subsistence merchandise

through DPSC supply bulletins, DPSC indefinite delivery type contracts, DPSC local defense subsistence offices (DSOs) for FF&V, commissary-prepared blanket delivery orders (BDOs), or commissary-prepared blanket purchase agreements (BPAs). Prices are obtained from the manufacturer on a monthly or as required basis. The contracting, pricing, and authorized item selection processes are controlled centrally at a region for the Air Force, Navy, and Marine Corps commissaries. For the Army, these functions are performed at each individual commissary store.

The automated systems for the inventory control and distribution functions vary by service. The Army, Air Force, and Marine Corps have automated minicomputer systems at the store level; however, most file maintenance is centrally controlled at the region for the Air Force and Marine Corps and at the store level for the Army. The Navy has a region-controlled computer system, comprised of remote terminals at the region which communicate with a main frame computer system at headquarters NAVRESSO. File maintenance is centrally controlled at the region. The store level has no automation other than those functions performed at the store, using a hand-held portable data entry device. For ease of discussion, the services' automated systems addressed in this chapter will be referred to as follows:

- Navy Automated Commissary Systems as ACS
- Air Force Automated Commissary Operating System as ACOS
- Army store-level National Cash Register System as NCR
- Marine Corps Commissary Management Information System as CMIS

DIRECT STORE DELIVERY SYSTEM (DSD)

The direct store delivery system is used by all service commissaries. Under this system, order quantities are generally determined by vendor representatives, in coordination with commissary personnel at the store level. Deliveries are normally made daily or several times per week and items are directly delivered to a store and stocked on the shelves or, in some cases, stored in a back room area for stocking through the week. Items in this category may include fresh bakery products, milk and milk products, ice cream, cookies and crackers, snack foods, eggs, cheeses and other chilled products, frozen foods, baby foods, spices, etc. There is no formal automated inventory control system for determining order quantities for true DSD items. This function tends to be self-controlling for inventory because most items go directly to the shelf, which limits the space available for storage.

The receiving process takes place in a designated receiving area(s) of the commissary. Receiving personnel must ensure that the actual items and quantities received match the delivery and receipt documents. Items are physically counted by the receiver for each item delivered by that manufacturer. Receipts are encoded into each service's automated system, either by scanning the item UPC code or key-entering data with a hand-held device or a terminal. This information is processed by their respective automated systems. Payment for merchandise is made by individual delivery, if necessary to meet Prompt Pay Act requirements, such as for meat, produce, dairy, and products containing edible fats and oils.

Otherwise, payment is normally made weekly to each manufacturer for all deliveries to the store that week, based on an itemized, summarized invoice document forwarded by the manufacturer. The invoice is compared to commissary records and forwarded for payment to the appropriate service's financial office for payment to each manufacturer. Commercial supermarket practices for DSD items are similar to those used by military commissaries.

DELIVERY TO INDIVIDUAL WAREHOUSES

The Army and Air Force systems have warehouses attached or aligned to their commissaries. Deliveries of merchandise are made directly to these warehouses by manufacturers or their designated distributors/carriers on a weekly, biweekly, or monthly basis. Separate accountability is not maintained between the store and the attached warehouse.

The Air Force accomplishes the inventory control function for warehouse items at the store level, using the ACOS system, which generates a suggested order on the applicable order date for a manufacturer. The system maintains a perpetual inventory for each warehouse item; the inventory is updated by adding receipts into the warehouse and subtracting item movement from sales at the front end. The suggested order is based on the average daily demand rate from the scanning system in relation to the number of days stock required for operating levels, shipping time, and safety stock. The orders are reviewed by manufacturer representatives, approved by store management, finalized in the ACOS system, and processed for shipment to the warehouse. When received, the receipt is processed against the open order due-in record in the ACOS system; only changes to the original order for shortages or overages need to be entered into ACOS. Payment for merchandise is made for each individual delivery. Manufacturers forward invoices for payment to the Air Force commissary local finance office at each base.

The Army has no automated inventory control system to accomplish the ordering function for warehoused items. The ordering process is accomplished at the Army commissary store level through reliance on manufacturer representatives. The NCR store system produces a requisition/order/receipt (ROR) work-sheet for each manufacturer, which lists its items and prices that are authorized for delivery to a store. The manufacturer's representative uses the ROR form to inventory the items and determine recommended order quantities. The orders are then reviewed and approved by store management and processed for shipment to the warehouse. After merchandise is received, the receipt quantities and prices are entered into the NCR store system. Payment for merchandise is made for each individual delivery. The store forwards receipt documents to the appropriate TSA region, which certifies invoices received for processing and forwards them to the regional Army accounting office for payment at the base where the region is located.

Both the Army and the Air Force use a merchandise issue document to replenish the

store shelves from the warehouse. This listing is generated by using a hand-held device to wand bar-code shelf labels and enter the quantity needed; this order is then transmitted to the automated system where processed. The Army system can also produce a listing of daily front-end scanning sales data, which is available to be used for the warehouse issue; however, this method is little used at this time until scanning information is more accurate. The listings are used by warehouse personnel to pick items for stocking on the shelf.

The Air Force has implemented a central distribution concept in the San Antonio area, using the Lackland Commissary attached warehouse. Besides providing support to Lackland, it also issues merchandise to the Kelly and Brooks commissaries. Transportation for goods is provided through the local commands.

Warehouses for both the Army and Air Force are operated by appropriated fund civilian labor or by contractors under the Commercial Activities (CA) Program. The contractors are paid from appropriated funds. The Air Force has implemented this program to a large degree. Results have shown that initially there is a cost savings to the commissary by using a contractor; however, recently some significant cost increases have been experienced. Most other operating costs such as warehouse equipment purchases, maintenance and repair, and utilities are paid with trust revolving funds. Some materials handling equipment for the Air Force is paid with appropriated funds from the local base.

DELIVERY TO CENTRAL DISTRIBUTION CENTERS

The Marine Corps and Navy systems operate under a central distribution center (CDC) concept, where one CDC supports all the commissaries in a regional geographical area for semiperishable warehouse type items. In a few instances where CDC support was not feasible due to the location of a store, a commissary may have an attached warehouse. Deliveries are made directly to the CDC by manufacturers or their designated distributors/carriers on a weekly, biweekly or monthly basis. Separate accountability is maintained between each CDC and the stores it supports.

For both the Marine Corps and the Navy, the inventory control function is accomplished in a similar manner on their respective CMIS and ACS systems by means of automated inventory models. These inventory systems and related applications were developed in the early 1980s with the assistance of commercial consultants. The inventory control function is controlled and operated at the region level (not the store). The systems are based on a perpetual inventory for each item, which is updated by adding receipts into the CDC and subtracting issues to supported stores. Orders for items are generated weekly or less often, using a forecasting model which considers operating requirements, order and ship times(OSTs), and safety or reserve levels. Higher reserves are retained for the 20 to 30 percent popular, fast-moving items which represent about 75 percent of sales than for the remaining 70 to 80 percent which are about 25 percent of sales. The systems

generate orders in economic order quantities, in terms of meeting minimum shipment requirements, pallet loads, and truckloads. The Navy inventory model updates OSTs based on actual delivery performance and contains a forward buy feature which will automatically order 50 percent more of an item on VPR, on the last order before a price increase.

When merchandise is received, receipts are processed against the open order file in the automated system; only changes to the original order need to be encoded. If no changes, the delivery is received as ordered. Payment for merchandise is made for each individual delivery. Invoices are processed at the region level and forwarded for payment to the base finance office where the Marine Corps region is located or to NAVRESSO headquarters for Navy regions.

Stores are replenished on a daily basis with merchandise from the CDC by means of an automated issue/transfer system. Using a hand-held device, each store wands a bar-code shelf label and enters the order quantity desired. The order is then transmitted by phone to the region's automated system where it is processed and printed at the CDC. This documentation generally consists of picking labels to be affixed to the merchandise as it is picked; an accountable document by line item, quantity, and price, which accompanies the merchandise on the truck to the stores; not-in-stock reports and other management reports as required. Merchandise is delivered for stocking that same night to Navy commissaries (same-day turnaround) and the following day to Marine Corps commissaries for stocking that evening. Merchandise is generally received at the store using a total case count method of receipt; any adjustments to be made are based on an average cost per case value.

In CONUS, the Marine Corps operates two CDCs, one on the east coast at Camp LeJeune, and one on the west coast at El Toro. The Navy operates 12 CDCs out of 8 regions, which each support from 2 to 10 commissaries; additionally there are 6 individual warehouses that are attached to a commissary. Except for two CDCs (San Diego and El Toro), all Navy and Marine Corps CDCs were established in existing warehouses or other structures which were improved to support a CDC function. One CDC at Auburn WA is leased by the Navy from GSA, using O&M,N appropriated funds. Most CDC operations consist of a two-shift work force. The day shift is responsible for receiving, storing, and slot location maintenance, while the night shift is responsible for order-picking, loading, and delivering merchandise to the stores.

For the Marine Corps, the cost of operating CDCs is paid with O&M, MC appropriated funds for salaries of civil service personnel working in the CDC. CDC expenses such as equipment, maintenance and repair, and utilities are paid with trust revolving funds. Transportation of goods from the CDCs to the stores is accomplished by common carriers, using a rate negotiated by the Military Traffic Management Command (MTMC). This transportation cost is paid by trust funds which are generated as the result of distribution allowances given by approximately 90 manufacturers when they invoice for goods sold. While almost all of

these are on the west coast, the Marine Corps indicates that sufficient monies are received with this discount to pay for their transportation costs on both the east and west coasts. This represents 32 percent of the total distribution cost for Marine Corps CDCs.

For the Navy, the cost of operating CDCs is paid with O&M, N and MPN appropriated funds for salaries of personnel working in the CDC. These personnel are civil service, military, or Navy exchange nonappropriated fund (NAF) employees. Salaries of NAF employees are reimbursed from appropriated funds for commissary functions. CDC expenses such as equipment, maintenance and repair, utilities, tolls, and gasoline, are paid with trust revolving funds. The transportation of goods from the CDCs to the stores is accomplished by one of several methods and varies by region CDC as follows:

- Commissary O&M,N appropriated fund personnel drivers and commissary owned tractor/trailer fleet purchased with trust funds.

- Exchange commercial contract or NAF drivers whose salaries are reimbursed with either O&M, N appropriated funds at two FSOs where funds were available, or with trust funds at five other FSOs where appropriated funds were not available. A common exchange/commissary fleet is utilized; the commissary portion of these costs is paid with trust funds.

For fiscal year 1988, the distribution cost for transporting merchandise to Navy commissaries was $958,870 or 0.12 percent of U.S. sales, as illustrated in table 7-2. These costs do not include CDC and administrative costs for handling merchandise through the CDC.

Fund	Transport Costs	% Total U.S. Sales	% Whse Expense	% Surcharge Expense
TRF	$751,208	0.10	34.2	3.5
O&M,N	207,662	0.03	NA	NA
Total	958,870	0.12	NA	NA

Table 7-2. Navy commissary distribution transport costs by fund category and total

The Navy receives very few distribution allowances from manufacturers (less than five companies) to offset the costs of transporting merchandise to stores. Those that are received are deposited to the Navy stock fund.

As a separate item, FSO Norfolk proposed a distribution initiative as an offset to funding shortfalls to automatically assess a five percent distribution allowance to suppliers who deliver to the Navy CDC at Norfolk. The charge was determined based on total distribution center

costs as a percentage of issues to local commissaries. The funds to be generated, estimated at $1.2 million, were to be used to expand store hours and increase line items. The assumption was made that sales and line items would increase and therefore benefit manufacturers and that all suppliers would be put on a "level playing field" by paying for distribution costs, whether they delivered to the CDC or directly to a store through a distributor of their choice. The attempt to implement the initiative was met with great resistance from industry and the initiative was subsequently dropped.

In addition to supporting CONUS commissaries, the Navy and Marine Corps CDCs provide support to their overseas commissaries for semiperishable subsistence items. This mission is further discussed in Section 7.3 of this chapter.

FREQUENT DELIVERY SYSTEM

The frequent delivery system (FDS) is a type of DSD used by the Navy, Air Force, and Army, but not the Marine Corps. Briefly, described, the frequent delivery system is a method by which merchandise from many manufacturers is ordered by and delivered directly to a commissary by one or more common distributors, which have been designated by manufacturers to deliver their products. Items in this category may include frozen foods, dairy products, or any type of grocery and household items. These distributors make deliveries of merchandise, normally daily, in shelf-stock quantities directly to the store, where previously these same items were delivered to warehouses or backup storage areas. Using a hand-held device, each store scans its store sales floor order from bar-code shelf labels and transmits its replenishment requirements electronically to the distributor for delivery that same evening or, in some instances, the following day. In effect, the distributor warehouses the items for many manufacturers for delivery to the commissary. The commissary takes custody of the merchandise upon receipt.

Under the FDS program, the manufacturer's relationship with the commissary continues in the same manner as for all other manufacturers, in accordance with supply bulletin, blanket delivery order, or blanket purchase agreement terms. The manufacturer interfaces directly with designated commissary personnel to provide price information, negotiate merchandising and promotional events, submit invoices to the commissary for payment of merchandise received, and so forth. The commissary accounting activity makes payment directly to the manufacturer for merchandise received.

Since 1983, the Air Force, Navy, and Army commissary systems have implemented the FDS program, where major distributors were available, to improve efficiencies and to better serve the commissary customer. The number of items currently delivered to commissaries by the FDS program varies widely. A sampling of Navy commissaries, shown in table 7-3, indicates that the number of items delivered by the FDS method ranges from a low of 2583 or 26.2 percent of total items stocked to a high of 6570 or 67.6 percent of total items stocked. Overall, FDS items would represent 44.6 percent of the total

items stocked in CONUS Navy commissaries. The number of suppliers using this method ranges from 100 to 280. This range would be similar for Air Force and Army commissaries as a system. The FDS program will be discussed in greater detail in Section 7.2 of this chapter.

Region/ Distributor	FDS Dry	FDS Chill	FDS Items Freeze	Total FDS Items	Total Line Items	FDS % of Total Line Items
San Diego CWO Jillson	1883	200	500	2583	9843	26.2%
Auburn West Coast Grocers	2160	245	598	3003	8579	35.0%
Pensacola L.L. Harris Lewis bear	2953	558	585	4096	8288	49.4%
Norfolk M.D.V. B. Green Tidewater Wholesale	3730	253	634	4617	9455	48.8%
Mechanicsburg B. Green Nash Finch Tidewater Wholesale Winter Hill MDV	2635	425	1132	4192	10,294	40.7%
Davisville Sam Prawer C&S Wholesale Roger Williams Winter Hill	4518	632	1420	6570	9715	67.6%
Totals	**17,879**	**2313**	**4869**	**25,061**	**56,174**	**44.6%**

Table 7-3. Line items delivered to Navy commissaries using the frequent delivery system

RACKJOBBER SYSTEM

Rackjobbers are companies that purchase products from the manufacturer, add a service charge, deliver the product to a retail store, and stock it on the shelf or display. This type of service operates independently of the manufacturer. Deals and special promotions or allowances may or may not be passed on to the store, or may be partially passed on. Rackjobbers handle product categories such as health and beauty aids, gourmet lines of foods, and other items.

Currently, the Davis Monthan and Williams AFB Commissaries are testing the use of a rackjobber to gain greater efficiencies in uses of resources. The test has been in place for approximately four months for 175 health and beauty aid items, obtained on a BPA basis. These are high inventory type items with low turnover.

AFCOMS indicates that there are advantages to this method of distribution, which have been achieved by the test. The rackjobber warehouses the inventory, orders the merchandise, delivers it every two days, and stocks the item on the shelf. The commissary has achieved improvements in the in-stock position and has little or no on-hand warehouse inventories of the item. Previously, these items would normally have been ordered on a monthly basis. Additionally, one payment is made to the distributor for all deliveries within a billing period, instead of payments for deliveries from individual manufacturers. This method of distribution is also used by some commercial supermarkets, particularly small ones, who cannot afford to tie up money in large inventories.

Conversely, there are disadvantages in using this method in that the prices of items have increased by as much as 15 to 20 percent producing a significantly reduced savings to the customer. Also, manufacturers do not generally favor the use of rackjobbers in military commissaries, due to competitive pricing of other items which may not be delivered by this method, because it could result in lost sales where the rackjobber's price is significantly higher.

The use of rackjobbers in commissaries requires further analysis before any final conclusion can be drawn as to its impact or adoption as a form of distribution for the commissary program. If the concept of rackjobbing is considered for testing on a broader scale, it is more practical to consider this initiative competitively on a regional basis rather than on an individual store test basis; this could provide an incentive towards reduced prices if a rackjobber can be assured of a greater volume of business. Joint participation by all services should also be considered. This method would not be economical for item categories which are already being delivered by a direct store or frequent delivery basis. The experience of the exchange system in this area should be considered. This initiative also has the commissary system buying products other than from the manufacturer.

COMMERCIAL SECTOR INVENTORY CONTROL AND DISTRIBUTION PRACTICES

The Commission visited several commercial wholesalers, distributors and supermarkets to

review commercial sector practices. For this chapter, the areas reviewed center on inventory control and distribution. In general, two methods of distribution are used by the commercial sector: direct store delivery of products to the shelf of retail outlets and central distribution support for all other items. The commercial supermarkets visited had no attached warehouses and very little back room area, very similar to that of Navy and Marine Corps commissaries. The supermarket orders from its supporting distribution center by using a hand-held device to scan shelf labels and entering desired order quantities. The order is transmitted to the CDC computer by phone for processing and delivery that same night or for some stores the following day. Merchandise is stocked by store employees.

All commercial CDCs visited used a formal automated inventory system to replenish CDC stocks, based on a forecasting model and economic order quantity (EOQ) theory. Forward buying is done to a large degree. All contracting, procurement, buying, data automation, and financial functions are performed at a region level. Except for one regional distributor, the firms visited were using state-of-the-art software and technology. While most of the software was off-the-shelf, it was modified in some instances to interface with in-house requirements and operations. The receiving, storing, and issue functions were accomplished very efficiently with current technology materials handling equipment (MHE). One CDC accomplished locator system updates from the MHE, while actually storing and moving merchandise from reserve slots to picking slots. This was done on a hand-held device, which contained a download of the warehouse system locator file. Locations of product could be displayed or changed. In most cases, warehouse standards were used to measure warehouse work performance of employees. None of the service commissary systems uses work performance standards in their warehouse/CDC operations, except the Marine Corps who uses measurements for the picking and receiving processes.

A comparison of commercial sector practices and those of the military commissary systems shows that the inventory control and distribution practices are similar in process, but performed much more efficiently by the commercial sector. There is a wide variation between the services and the industry on the degrees of automation, central distribution, and use of state-of-the-art equipment and technology. These must be improved in the military commissary system if it is to become more efficient into the future. Chapter 11 will discuss the distribution systems of the future for the commissary system. Short-term recommendations to improve the efficiencies of the current inventory control and distribution functions are provided below.

RECOMMENDATIONS

7.1 a. Under the current separate commissary systems, centralize all commissary administrative overhead functions immediately, where region centralization can be accommodated by existing automated systems. Functions to be regionalized should include procurement, accounting, buying, inventory control for warehouses/CDCs, automation, etc; perform only those functions at the

store level which are required for the day-to-day operations.

7.1.b. Establish a Joint Services Commissary Group which reports to a DOD Board of Directors (as outlined in Chapter 11) to review and identify initiatives under the current system, which can be further improved, automated, or eliminated to improve the inventory control, distribution, and bill-paying functions to replace manual processes and achieve short-term efficiencies.

7.1.c. Expand the Commercial Activities Initiative for all services to further contract out CDC/warehouse functions where cost effective.

7.1.d. Conduct a joint services study, in coordination with industry, to determine the viability of product support from commercial supermarket wholesalers/distributors or rackjobbers. This study must include a cost/benefit analysis of this support versus 25 percent savings to patrons.

7.2 POSTURE OF THE FREQUENT DELIVERY SYSTEM PROGRAM

BENEFITS OF THE PROGRAM

Currently the FDS program is implemented at 44 Navy commissaries, 39 Air Force commissaries, and 19 Army commissaries. It has achieved a wide range of goals, resulting in the following key benefits and efficiencies for both the services and industry. For the services these benefits include: enhanced ability to increase line item selection without adding additional storage requirements; improved inventory control through more frequent ordering; increased store sales with fewer inventory dollars needed to support these sales; greater ability to control order quantities; minimized time to replenish product when it is out of stock; reduced time required to receive products; and reduced labor cost to handle the products through the warehouse or central distribution center.

For manufacturers and manufacturer representatives, some of these benefits include: greater opportunity to expand the number of commissary items stocked by addition of new items to commissaries; increased ability to get items into commissaries more rapidly without waiting for warehouse slots; and more time available to the sales representative to review sales trends, present new items, check item code dates, merchandise the shelves, and perform other sales promotion type functions.

For the distributor, some of these benefits include: electronic ordering of merchandise using hand-held devices; reduced receiving time at commissaries; reduction in sharp peaks and valleys in orders for products as a result of more frequent ordering; more effective utilization of the distributor truck fleet through night-time deliveries to commissaries; and the capability with some distributors to provide electronic delivery ticket information to commissaries.

Frequent delivery has become an important part of the commissary systems' strategic plan to more effectively utilize commissary resources and improve service to the customer. The services have worked jointly with industry in an effort to make this program work and to address operational problems which have occurred. To accomplish this objective, the service commanders of the Joint Services Commissary Committee established a joint services FDS task force in November 1985, to develop a uniform standardized approach to the FDS program. This group has met at frequent intervals and developed the following initiatives which have been adopted and implemented by all the services:

- A policy for a joint services uniform FDS program was published officially in December 1987, to all commissaries and to industry. The policy defines frequent delivery and provides guidelines for pricing, ordering, processing of orders, receiving, handling of overages/shortages, invoice/payment processing, a contingency plan for ordering when automation problems occur, and a requirement for a memorandum of agreement between the commissary region and the distributor for the FDS process.

- A uniform "notice to the trade" was developed and implemented in June 1988, to notify industry when conducting a study to determine the feasibility of implementing the FDS initiative. This provides for more open communication among all players and is now being used by all services.

- A revised receiving procedure was developed to include a policy for receiving FDS items at the commissary by total case count for deliveries, in lieu of a line item count. This procedure was incorporated into the joint FDS policy and published for implementation in December 1988. This receiving procedure can be used where agreed upon by the service commissary and the distributor. Where in place, this new receiving procedure has reduced receiving time for commissary store personnel by almost 50 percent.

COSTS OF THE PROGRAM

However, although the services and industry have benefited from the FDS program, there are some drawbacks to the system. Additionally, industry has expressed some concerns with regard to frequent delivery. As a result, the American Logistics Association (ALA) established an industry FDS task force which has worked with the joint services FDS task force at regular intervals over the last three years to address concerns. While many issues have been resolved, some continue. Some of the costs and drawbacks to the program are summarized generally as follows: there is pressure to utilize frequent delivery without regard to the costs, which must be borne by industry or passed on in the cost of the product. Problems exist in the ordering process at some commissaries, with ordering insufficient product for displays, buying in at the end of a deal period, or failing to order some items when scanning the store.

Not-in-stocks (NISs) occur at the store when distributors have inventory problems. A distributor previously carried higher inventory due to the large peaks and valleys in the

commissary order cycle. Now, with frequent delivery, there is almost a straight line demand curve for product. This has enabled the distributor to reduce inventory. However, when the store orders beyond what the distributor expects it to order, such as for promotional activities, the distributor must order additional product from the manufacturer(s). Distributors have indicated that there is sometimes a breakdown in the communication process. Frequent delivery will work if the sales representative or manufacturer has effective communication with the distributor about displays, new items, deleted items, and special coupon promotions. The commissaries must be involved in this communication process. The experience of distributors is that the lead time for placing an order and receiving product from the manufacturer ranges between seven days and three weeks. As a result, when the distributor is out of product, the commissary is out of stock.

Problems exist with the increase in paperwork and administrative handling costs involved with frequent delivery. Substantial differences exist in the way paperwork related to frequent delivery is handled by both the commissary store/region and the distributor. The lack of uniformity makes it difficult to work with the various, dissimilar formats. This can contribute to a delay in invoice processing and receipt of payment. This problem is directly related to the degree of automation and the differences among the services' systems as well as among manufacturers and distributors. The administrative costs associated with FDS for the additional volume of documentation and handling of merchandise through a distributor can range from 6 to 10 percent. Some manufacturers indicate that pricing has been kept at existing levels to meet competitive activity, while others indicate these costs are included in their prices. For some manufacturers, the distributor has been used as a more efficient means of product delivery than shipping direct through a common carrier or handling the product themselves. There are many trade-offs to be considered when determining the method of delivery for a product.

HOW THE PROGRAM WORKS

In general, frequent delivery has been implemented with manufacturers who were already using a major distributor. Other manufacturers continue using their own methods of distribution; some have switched to the FDS method. While concerns still remain, some can be resolved with management support and involvement on the part of the commissary program and industry and continued emphasis on communication, training, automation initiatives, and uniformity of systems and procedures. While there are degrees of difference in the services's commissary systems, the same is true of distributors and manufacturers.

A large portion of the costs for frequent delivery are the costs associated with the preparation and processing of documentation. This whole process is labor-intensive and involves voluminous stacks of paper. Each delivery to a commissary must be accompanied by an itemized delivery ticket for each item delivered. Because the order was transmitted from a store to the distributor system, the order does not become a part of the service's automated system until after the receipt of the

merchandise. Therefore, the store uses the delivery ticket as the receiving document; it must contain the quantity of each item delivered. A delivery ticket may or may not be priced by a distributor. At the end of a billing week the distributor prepares a weekly summary of deliveries for the week, adjusted for overages/shortages, which is itemized by vendor and line item. Some distributors also provide information for deliveries either daily or for the week by electronic media for entry into the Navy ACS and Air Force ACOS automated systems. This reduces the time involved and improves the accuracy for data encoding. The Army NCR system does not handle this process at this time; because of this, the Army requires distributors to price weekly summary documentation to facilitate the bill-paying process. The distributor also provides this same summary information of deliveries to each manufacturer for each store. Based on this information, manufacturers invoice the commissary system weekly for all deliveries to each store. This invoice could be a copy of the distributor's summary or it may be the manufacturer's system-produced invoice, created by encoding distributor information into the automated system. Payment for FDS deliveries is made by the commissary to each individual manufacturer for all deliveries to a store that week.

ISSUES

The ideal FDS program would be paperless and would be a total electronic process, beginning with the creation of the order and ending with payment to a manufacturer by electronic funds transfer. However, neither the services nor industry have systems in place today to process by this mode. For the interim, the services have been working with distributors to automate those parts of the frequent delivery process which lend themselves to automation under current systems, with minimal amount of software programming effort. Initiatives implemented to date have resulted in labor savings related to receipt processing and bill paying:

- Electronic media transmitted or provided by the distributor, on a daily or weekly basis, is loaded into the Navy and Air Force systems. This data represents deliveries to each store for the week by line item. Commissary data processing personnel then data-verify the input before processing the FDS receipt for invoice-matching and payment. The labor savings realized from this effort was approximately 50 percent of data encoding time, as well as greater accuracy of data input. This process is not a UCS/EDI interface, but a transfer of the item order number and quantity into the service's automated system for processing against their master files.

- NAVRESSO has implemented a bill-paying roll-up program, in conjunction with distributors and manufacturers, which allows store deliveries to be rolled up into a region summary for all stores within the region, so that each manufacturer submits a weekly region invoice for payment instead of individual store invoices. The result of this initiative was an 80 percent reduction in the number of invoices paid for FDS receipts, where this initiative has been implemented. Figure 7-1 illustrates

a summary invoice in a format which meets government criteria for a "proper" invoice, and information requirements between the distributor and the manufacturer.

Sold to:
Navy Region XYZ
Bldg 27
Naval Air Station
Kalamazoo MI, 32508
ATTN: Accounting Department

Invoice No: 7782
Invoice Date: 12/20/89

ABC Grocery Company
P.O. Box 7777
Kalamazoo, MI 32508

Remit To: ABC Grocery Company
P.O. Box 9175
Chicago, IL 76144

Delivery Dates	Terms	Order Number
12/04-12/09/89	Net 30	N12345-90-F-4230

DESCRIPTION	CASE UPC	VPK	CASES	UNIT COST	EX-TENSION
Store.No: P21 P23 P24 P25 P26 P27					
Flounder Fillet Raw 1lb T O's	0007094010170	012	12	2.93000	421.92
Case.Qty: 1 2 3 1 2 3					
Haddock Sknls 1lb Taste O'Sea	0007094010260	012	15	3.09000	556.20
Case.Qty: 1 2 3 4 2 3					
Perch Fillet 1lb Taste O'Sea	00070940 0500	012	18	1.99000	429.84
Case.Qty: 1 2 3 4 5 3					
	Total		45		$1,407.96

VENDOR RECAP

Supp.Call.No	Store.No	Store Name	Cases	Total Amount
2112	P21	Commissary A	3	96.12
2312	P23	Commissary B	6	192.24
2412	P24	Commissary C	9	288.36
2512	P25	Commissary D	9	279.00
2612	P26	Commissary E	9	263.88
2712	P27	Commissary F	9	288.36
		Total	45	$1,407.96

Figure 7-1. Sample invoice format for frequent delivery region summary invoice

The benefit of the region bill-paying roll-up program to industry was a significant reduction in the volume of paperwork the distributor furnishes to the manufacturer. The cost to the distributor was a software change to his automated system to print FDS delivery summary information in a revised, more useable format. For this process to work smoothly, there must be communication between all the parties involved in this process.

ALTERNATIVES

As previously stated, frequent delivery has become an important part of the current commissary systems' strategic plan to more effectively utilize commissary resources and improve service to the customer. This is evidenced by the degree to which the FDS program has been implemented. There are significant savings and efficiencies to be gained by the Navy and the Army in the short-term, through resolution of the cumbersome invoice/payment process and through region summarization of payments, similar to the process described. A region summarization does not have application to the Air Force at this point in time, due to their process of invoice payment by each individual base finance office.

The majority of industry complaints concerning the FDS program are related in some manner to the invoicing/bill paying process. A focused effort for this process could alleviate much of the burden. The costs of this effort would be resources to make the software changes to automated systems to summarize and print bill-paying information in a revised format. A further initiative which could be pursued would be that of developing a method whereby the services could pay one weekly bill to the distributor for all manufacturer deliveries made by that distributor, similar to the method a commercial supermarket might use to pay a wholesaler. The distributor would, in turn, pay manufacturers. The commissary would benefit through significant reductions in invoice payments to individual manufacturers. The distributor and the manufacturer would benefit because invoicing would not have to be accomplished for each individual commissary supported by FDS.

CONCLUSION

The significant potential savings and efficiencies to be gained warrant that the initiatives discussed in this section be addressed as interim measures towards improving the current FDS systems. Using a sample based on the Navy FDS program, Table 7-4 provides an analysis of potential invoice payment reductions which could result from the initiatives described. For example, if 44 commissaries utilized the FDS program with 1126 manufacturers whose products were delivered through 17 distributors, the requirement for the number of weekly invoices would be 7980 if payment is made by store; 1126 if payment is made by region; or 17 if payment is made by distributor for the region.

The potential reduction in the number of FDS invoice payments is great if payments were to be made to distributors. However, in doing business with the manufacturer as the

prime source, the more realistic approach towards invoice payment reductions is the region roll-up method (vice individual store method) to each manufacturer on a weekly basis.

Regions	No. FDS Stores	No. Supp.	No. Dist	No. Wkly Invoices By Store	No. Wkly Invoices By Region	% Reduction of Invoices	No. Wkly Region Invoices By Dist.	% Reduction of Invoices
Norfolk*	5	280	3	1400	280*	80.0%	3	99.8%
Davisville	8	242	4	1936	242	87.5%	4	99.8%
Pensacola*	9	184	2	1656	184*	88.9%	2	99.9%
Mechanicsburg	7	164	5	1148	164	85.7%	5	99.6%
Auburn	5	144	1	720	144	80.0%	1	99.9%
San Diego	10	112	2	1120	112	90.0%	2	99.8%
Total	44	1126	17	7980	1126	85.9%	17	99.8%

* FDS region rollup payment system implemented at these Navy Regions.

Table 7-4. Potential invoice reduction under a frequent delivery summary region payment process

Recommendations

7.2.a. Establish a Joint Services FDS Task Force of operations, financial, and systems personnel to develop a uniform process for implementation of a region summary invoice payment system for the current FDS program, in coordination with industry. This group will report to the DOD Board of Directors (outlined in Chapter 11).

7.2.b. Conduct a joint services study, in coordination with industry, to determine the feasibility of providing for payment of weekly invoices to distributors, in the manner discussed in the text. The vehicle for conducting the study should be the Joint Services FDS Task Force, which will work with the ALA FDS Task Force to identify and address the issues, and report to the DOD Board of Directors (outlined in Chapter 11).

7.3 INVENTORY CONTROL AND DISTRIBUTION FOR OVERSEAS COMMISSARIES

INTRODUCTION

One of the most important aspects of the commissary program is the overseas commissary support mission. Maintaining a quality of life for our personnel overseas, equal to that of their counterparts at home, is a critical part of this support role. The commissary is the only "store in town" where our patrons can purchase American products and sense the feeling that a part of home is with them, as they adjust to their new surroundings in a foreign country.

In providing optimum levels of service to our overseas patrons, the inventory control and distribution functions are of extreme importance. How well these functions are performed has a direct impact on continuous, effective support to overseas commissaries. In general, the pipeline required to supply products to overseas stores ranges from a low of 28 days to a high of 140 days. While the distance of the overseas activity has a bearing on the over-the-water surface portion of the pipeline, other factors which directly impact the length of the pipeline are the methods of inventory control and automation, the type of support system used, the manner in which merchandise orders are processed and transshipped, and foreign port handling and customs requirements. This section of this chapter will address these areas.

NAVY SUPPORT SYSTEM

Navy overseas commissaries receive distribution support for semi-perishable groceries and supplies from their servicing NAVRESSO Field Support Office (FSO) Central Distribution Centers (CDCs). Orders for most items are placed on 14 day cycles. The balance of items is ordered monthly. In some cases a large overseas commissary warehouse may source-load merchandise direct from CONUS manufacturers, where normal continuing requirements are met on a monthly basis. At overseas region locations, grocery merchandise is further distributed from the overseas region warehouse to region branch commissaries.

Automation at overseas Navy commissaries is performed by the Commissary Overseas Inventory Control Navy System (COINS). This system is designed to provide overseas commissaries with an automated means for performing various procurement, accounting and inventory control functions. The COINS system does not communicate with the ACS system at supporting FSOs.

Overseas perishable items (freeze/chill) are supported from a Defense Personnel Support Center (DPSC) overseas depot where available. This method of support is used for Navy commissaries at the United Kingdom, Naples and Yokosuka regions. Otherwise, all other commissaries order direct from CONUS manufacturers where this merchandise is

consolidated and transshipped through CONUS ports. When this support is provided from CONUS manufacturers, overseas activities normally submit orders to the supporting FSO for processing, utilizing FSO prices/procurement documents, or they may submit orders direct to the manufacturer where the FSO ordering system is not yet in place. Overseas FF&V items are supported from a DPSC CONUS or overseas source.

Order quantities for overseas activities are determined by the COINS system, using an unsophisticated inventory model. The system requires a physical stock control inventory to be taken when each item is due to be ordered. Orders are generated based on a forecasting model which considers operating requirements, order and ship times (OSTs), and safety or reserve levels. For Navy commissaries, the safety levels are maintained at 35 days for the 30 percent of the items which are the fast-moving, high-sale, popular items; safety levels are maintained at 21 days for the remaining 70 percent of items. The overall weighted average would be 25 days for safety levels.

The average order processing time at overseas Navy commissaries averages 14 to 21 days. After the COINS order has been created, it is encoded into a hand-held device and transmitted by regular phone lines on a scheduled date to the FSO automated system for CDC items or to a distributor for FDS items. Orders for DSD type items are recorded to FSO-furnished order documents and faxed to the FSO for placing to manufacturers. Where phone line quality is poor (Italy), orders are mailed. The orders are processed and issued from the CDC that same day for CDC items. FDS items are delivered to the CDC or shipped direct from the distributor (Keflavik and Bermuda) if the order fills a van. DSD type orders are delivered to the CDC within 3 to 7 days for transshipping with warehouse items. Notification of any not-in-stocks (NISs) is provided to the overseas activity by Naval message. All documentation is prepared by the FSO and merchandise for the activity is staged and stuffed into containers. The container stuffing function is funded by O&M,N appropriated funds and is done by FSO exchange NAF personnel on a reimbursable basis (Norfolk) or by a government contractor (Oakland). Van stuffing costs for FY 1988 were $1.9 million. Containers are then drayed to the port for shipping.

This system provides optimal turn-around time, averaging 45 days from receipt of order at the FSO to arrival at the overseas destination. Current FSO prices, including current VPR's, are utilized for the orders. Other advantages of the Navy overseas support system include reducing the amount of stock fund dollars required overseas, fresher stock through more frequent deliveries, reduced markdowns and surveys of outdated stocks, and reduced requirements for safety stock and warehouse space. The Navy system can react quickly to the needs of their overseas commissaries because the support system is handled within the commissary program and the Navy only has 19 overseas commissaries. Therefore, it is easier to manage the scope of operations and to give expeditious personalized service.

Once stock is received at the overseas warehouse, it is further distributed from the

region "CDC" to smaller branch commissaries, normally on a 14-day cyclical basis. Orders are computed by the COINS system using the inventory model for the larger branch stores, i.e., a "push" system. Small stores use a "pull" system and determine orders manually, which are picked at the warehouse. The order is then processed in the COINS system. Separate accountability is not maintained between an overseas "CDC" and the store to which it is attached, due to the labor-intensity and inefficiencies of the COINS system. O&M,N and MPN appropriated funds are used to handle the in-country distribution function; personnel are military, U.S. civilian, or foreign nationals. Second destination transportation costs are paid with O&M,N funds or in-theater appropriated fund contracts.

MARINE CORPS SUPPORT SYSTEM

The Marine Corps provides support to one overseas commissary in Iwakuni, JA, from its west coast region at El Toro. This support is provided in a manner similar to that of the Navy. The Iwakuni Commissary determines its order requirements on a weekly basis. Orders are encoded into a hand-held device and transmitted to the El Toro CDC automated system at the region. Orders are picked, staged, and stuffed into containers at the CDC, then drayed to the port for shipping. The OST averages 28 days. In an emergency, order/ship time can be reduced to as low as 20 days. The benefits of the Marine Corps system are the same as those of the Navy system. O&M, MC funds are used to provide the overseas distribution support.

ARMY AND AIR FORCE SUPPORT SYSTEM

Inventory control for Air Force overseas commissaries is performed using the ACOS system at most stores. Where not implemented, an IBM programmable work station is used. The IBM system uses the 3-month sales history of items in determining order quantities to DPSC. The ACOS system is described in section 7.1 of this chapter under "Delivery to Individual Warehouses".

Inventory control for Army commissaries is performed using the District Oriented Store System (DOSS). DOSS is an ordering, receiving, inventory management system which supports European commissary region operations. It runs on Honeywell minicomputers with two operating systems and supports the ordering process for MILSTRIP and off-shore procurements, based on historical movement. This system was developed and implemented at the six districts, beginning in 1985 and completed in mid-1989. The system operates through a network of dedicated and dial-up communications between the stores and districts.

Army and Air Force overseas commissaries are supported by DPSC Philadelphia under the Direct Commissary Support System (DICOMSS) and the Perishable Subsistence Automated Supply System (PSASS). DICOMSS is the system

used by DPSC to provide semiperishable brand name resale items to Army and Air Force commissaries overseas. Commissaries submit monthly requisitions to DPSC for manufacturer orders on the 10th and 25th of each month. Upon receipt of overseas orders, delivery orders are prepared against the supply bulletins by DPSC for Army and Air Force commissaries. The DICOMSS system screens these requisitions to determine which are large enough to purchase for seavan loading at the manufacturer's plant for subsequent direct delivery to the overseas commissaries. The balance of the requisitions are consolidated into a single line purchase for delivery to the DDMP. PSASS is the system used by DPSC to provide perishable brand name resale support to commissaries. Offshore acquired (OSA) semiperishable subsistence items are requisitioned by the Army and Air Force through DSRE, Zweibruecken, Germany. Current requisitioning and supplying practices are not sufficiently effective to supply the needs of the overseas commissaries on a satisfactory basis. Problems include out-of-stock conditions, outdated product, stock fund investment, surges in deliveries, pricing controls, and van detention charges. The DPSC support system is discussed in greater detail further in the text.

SUPPORT INITIATIVES IMPLEMENTED BY THE SERVICES

Various initiatives have been undertaken by AFCOMS and TSA to bypass the DPSC system and enhance the distribution system and service to overseas commissaries. While both these services continue to work with DPSC in improving the current DICOMSS program, the constraints of this system are still resulting in continuing problems such as long order/ship times (OSTs), order cancellations, periodic van bunching, and inability to react sufficiently to market charges from an overseas environment. For example, the length of time required to introduce new items to overseas customers from manufacturers introduction in CONUS to overseas point of purchase is approximately five to six months. The initiatives undertaken by TSA include support to Panama through the TSA Midwest Region and support to Korea through the TSA Western Region. The initiative undertaken by AFCOMS includes support to Turkey through the Robins AFB Commissary.

TSA MIDWEST/PANAMA AND WESTERN/KOREA INITIATIVE

The Midwest/Panama initiative was implemented to improve support to Panama and reduce OSTs. This initiative, which represents 35 percent of Panama's business, bypasses DPSC for source-load orders direct from the manufacturer to Panama. Less than truckload orders are still processed by DPSC through DDMP Mechanicsburg. The costs at the Midwest Region are estimated to be approximately three work years at an annual O&M cost of $72,000. No reimbursement is received from DPSC.

The following process is used to process orders to Panama. Panama sends orders for 32 companies to the Midwest Region, which places these orders to the manufacturers against region blanket delivery orders. The

orders are processed by the manufacturer and source-loaded direct to Panama; no merchandise is shipped through the Midwest Region. The region assists the manufacturer in booking vans through MTMC. Invoices for payment of the product are submitted to the Midwest Region for processing.

Shipments to Panama by this direct source-load method have averaged 60 days OST vice the 90-100 days OST for previous DPSC shipments. Other results include reduced inventory, fresher product and better prices.

A similar initiative was implemented by the TSA Western Region for Korea for three companies who ship 25 vans per month direct to Korea. The OST was also reduced to about 45 days.

AFCOMS ROBINS/TURKEY INITIATIVE

The Robins/Turkey support initiative was implemented with a goal toward improving support to Turkey by reducing the order and ship time (OST) and providing commissary patrons in Turkey with fresher products. This support initiative bypasses the DPSC system, and is being provided with AFCOMS resources without any reimbursement from DPSC. The costs at Robins are estimated to be three work years at an annual O&M cost of $72,000 and a one-time trust fund cost of $15,998 to purchase a printer and upgrade the computer system for this function.

The following outlines the general concept of how the Robins/Turkey initiative works. The Turkey commissaries send orders direct to the Robins store via the Defense Data Network (DDN) system. The Robins store then runs a separate Automated Item Order Form (AIOF) for each Turkey store against Blanket Delivery Orders or Blanket Purchase Agreements. Once it is known when sufficient products will be available at the Robins warehouse, the Air Logistics Center's Consolidation Containerization Point (CCP) is contacted to spot a van at the Robins commissary warehouse. Upon loading of the container, the CCP arranges for line haul to the port of Charleston. In essence, the CCP handles transportation for the Turkey shipments. Products ordered for Turkey are purchased and paid for at Robins. Since separate and unique call numbers are used, products destined for Turkey can be easily identified by vendor and store. The Turkey stores use the Robins stock list.

Shipments made from Robins to Turkey have averaged under 70 days OST vice 120-140 days OST for previous DPSC shipments. AFCOMS expects to have the three Turkey stores totally on Robins support this year. Once the initiative is fully implemented and fine-tuned, many more benefits and improvements are expected. Stores should be able to reduce the 60-day safety level currently stocked in Turkey to 30 days, thus freeing up valuable warehouse space and providing fresher merchandise for commissary patrons. Reduced stock levels will also decrease the amount of losses incurred due to deterioration and infestation. AFCOMS expects to see price reductions in the Turkey stores of 10-15 percent. This is because the Turkey stores will have the same prices as the Robins store.

AFCOMS OKINAWA INITIATIVE

In addition to the Air Force commissary at Kadena AFB, AFCOMS also operates and supports two commissaries in Okinawa for the Marine Corps, and a third store is due to come on line in the near future. Orders are placed to DPSC under the DICOMSS program for semiperishables for delivery to one central warehouse in Okinawa, and under the PSASS program for perishables. Most deliveries are source-loads direct from the manufacturer. This warehouse supports the commissaries in Okinawa. Merchandise is delivered using trucks provided by the Kadena Air Base, using both military personnel and commercial contractors.

CDC STUDY

TSA and AFCOMS have commissioned a joint study to determine if it is cost effective to operate a central distribution center to support the commissaries in central Europe. A contract for the study was awarded on 15 March 1989; the study is currently in process and is not scheduled for completion until the fall 1989 time frame. The contractor is to address where the CDC should be located (CONUS or overseas) and how it would operate, and to provide an implementation plan with milestones. Study results were not yet available for formal review by the Commission.

DEFENSE LOGISTICS AGENCY/DEFENSE PERSONNEL SUPPORT CENTER SYSTEM

An overview of the DPSC system and its organizational structure are provided in Chapter 2, "The Current Commissary System". DLA/DPSC has the responsibility for the worldwide network of wholesale subsistence distribution, procurement, and inventory management for supply support to the commissary program. This section will address the mission as it relates to the support of perishable and semiperishable brand name items.

PERISHABLE SUPPORT SYSTEM (PSASS)

Perishable brand name support is provided to overseas commissaries by the DPSC Perishable Subsistence Automated Supply System (PSASS). PSASS is a depot-stocked system with warehouse depots located at Felixstowe in England, and Bremerhaven and Kaiserslautern in Germany. Approximately 840 line items are warehoused. Other commissaries in the southern Mediterranean area and the Far East are supported by DPSC/DSR Pacific by means of direct orders to DPSC for manufacturers, which are forwarded to CONUS ports for consolidation and transshipping by DSOs to the overseas commissaries. Under PSASS, the commissary generates an individual requisition for each item to be ordered. For Army commissaries, requisitions are transmitted by DDN to TSA-EURCOR Headquarters for funds obligation and then to the DPSC Philadelphia automated system for processing. For the Air Force, the store or complex sends the requisition directly to DPSC in Philadelphia. If the item is in stock, the material release order (MRO) is transmitted from DPSC to the overseas depot for an issue. Turn-around-time for hardy chill/frozen orders is currently 8 days. Most of the warehouse time (7 days) is consumed by manual load planning for refrigerated

conveyances. An updated warehouse module could run inventory location and load planning. At present the depots have only a mini-computer (IV Phase) that is basically a location system; it doesn't perform shipment planning. MROs must be transmitted by commissaries to the depots seven days before the required delivery date (RDD) to allow time to plan loads and order conveyances. This means that stores must transmit orders eight days before the RDD, necessitating the need for a store inventory greater than 2 - 3 days stock. Automated shipment planning would conservatively reduce in-theater OST by 4 days, and stores could reduce perishable freeze/hardy chill inventory.

From a support standpoint PSASS, where it exists, works as a CDC support system within Europe. Large commissaries order several times a week if in close proximity to the depot; otherwise orders are processed and delivered weekly or every 14 days. High safety stock levels do not have to be maintained at the store level. Including the commissary processing time of 7 to 14 days with the depot time of 8 days, the total OST for in-theater perishable support ranges from 15-22 days, depending on the distance of the store. However, problems do exist with consistent satisfactory fill rates and outdated stocks from time to time. These occur due to the long OSTs from CONUS and the inability of the DPSC inventory model to adjust to unusual demand. The process of phasing in new items and phasing out discontinued items takes about six months. Additionally, erratic ordering by commissaries contributes to the demand forecasting problem. The DPSC inventory model uses the latest six months demand history to determine order quantities to replenish the depots. Item managers at DPSC review replenishment data and may make manual adjustments to orders. The system goal is to maintain 30-day operating and 15-day safety stock levels at depots.

SEMIPERISHABLE SUPPORT SYSTEM (DICOMSS)

DICOMSS currently supports Army and Air Force overseas commissaries. It is not a CDC support system. The general concept is to provide wholesale deliveries from CONUS directly to the individual stores. A few small stores are supported from the Defense Subsistence Support Facility at Germersheim (DSSF-G). Considering the distance, number of organizations included, and the management process, DICOMSS does work. However, much of this performance is attributable to the dedication of the personnel involved and willingness of the Army and Air Force to carry huge quantities of inventory. The DICOMSS program in Europe was reviewed and analyzed by Arthur Young Company who conducted a study of the system for DLA/DPSC. The resulting evaluation was provided:

- Management control is splintered among six separate and distinct major organizations of DOD. This has resulted in inconsistent degrees of control throughout the process, redundant tracking systems, and inappropriate performance measures.

- The order-ship time (OST) significantly exceeds the goals of 46 days for direct shipments from vendors and 55 days for shipments from vendors to a

consolidation point at the Defense Depot Mechanicsburg PA (DDMP) and then on to the store. When measured from the overseas commissary's point of view, which it should be, OST ranges from 77 to 130 days.

- The segmenting of the ordering process into two cycles is cosmetic from the customer's perspective and creates large workload peaks throughout the system. Different manufacturers are ordered for each cycle.

- DICOMSS does not consider the ability of stores to receive containers or vans. This is a particular problem at small stores and a major contributor to the high detention costs being experienced by the Army and Air Force.

- Item prices are inconsistent within and between services. Lot pricing, FIFO inventory management, procurement practices, and off-invoice VPRs are not congruous.

- Inventory investment is very high because of the long OST and the uncertainty of delivery. It is difficult to maintain consistent OSTs in the inventory management process when the commissary does not know if the DPSC system will process orders as source-loads or DDMP shipments.

- The services have large warehouse infrastructures because of the large on-hand inventory even though the goal of DICOMSS is to serve the stores directly and to minimize inventory.

- Patron satisfaction is high, primarily a reflection of the resiliency of the patron and extraordinary efforts by commissary personnel to provide support.

Arthur Young provided several recommendations to improve the semiperishable support mission to European commissaries. They consisted of making improvements to the current DICOMSS program or to implement one of three possible reconfigurations of the DICOMSS programs for central distribution support:

- One CDC on the east coast of the United States, or

- One CDC in Germany, or

- Three CDCs to be located in Germany, Italy and the United Kingdom.

Arthur Young projected that any of the three distribution center configurations would be advantageous to the commissary customers, especially in the case of those located in Europe. Service would be improved, OST reduced, prices reduced, major reductions in inventory would be possible, and significant savings and cost avoidance would accrue to the Department of Defense and the Federal Government. They recommended that DPSC first proceed with the plan to activate a distribution center in Germany, as this would impact the greatest number of stores in the shortest possible time.

In early 1987, after all services had reviewed the study and commented upon it, the Defense Logistics Agency determined that the inventory costs would not materialize for

the government and that there would be net additional costs to provide CDC's in Europe. DLA decided not to proceed with actions to establish a CDC in Europe, but to continue with actions to improve the current system.

Since the Arthur Young Study, some improvement of the DICOMSS OST to Europe has been made. OST for source-load shipments (total time in pipeline from store requisition till receipt at store) has gone from 120 days to 90 days on average, while shipments that go through DDMP went from 130 days to 105 days. Similar improvements were made for the Far East, Panama, and Mediterranean shipments. Nevertheless, the new OST has not resulted in significant reductions in store inventories. Ordering frequency is still only monthly. Bookings and shipment schedules are often sporadic; and store managers must still forecast store sales 3-4 months into the future as they have been doing since DICOMSS began.

Arthur Young Company has already outlined the resulting costs and operational difficulties of the DICOMSS program. Other initiatives such as Electronic Data Interchange (EDI) to reduce order time to the vendors at DPSC are only in the formative stages. All improvements forecasted will not reduce OST to anywhere near a 7 day or less OST that would be possible with a European CDC. This type of OST is already a fact for perishable subsistence in Europe. Central Distribution Centers (CDC's) in the commercial world are now "state of the art" and are used to reduce store inventory. A CDC concept of operations is addressed in Chapter 11 of this report. After analysis and funding determination, these initiatives should be set in motion. As Arthur Young has shown, reduction of inventory costs and O&M manpower costs to maintain inventories, can generate the funds necessary to finance CDC's. In their 1986 study Arthur Young revealed that, by the use of three distribution centers in Europe, the total system had a combined cost of $13.5 million cost versus the current system costs of $35.5 million. Although transportation costs would increase by $1.1 million, both stock fund (inventory reduction) and warehousing costs would decrease. With in-theater CDC's, store inventories (stock fund) would be reduced and overall warehousing costs (O&M) would also be decreased. There would be no need for a break-bulk point at Defense Depot Mechanicsburg, and much of the warehousing costs at overseas stores would no longer be needed. The same logic should apply for a west coast distribution center, but overall savings would be less as volume business is less. A commercially-run distribution center for the Far East could eliminate Defense Depot Tracy DICOMSS Operations, and at the same time reduce store inventories by reducing OST.

Any initiative to establish CDC's must also consider operational control by the military services rather than DLA/DPSC. Goals should be to lower the cost of the product, reduce inventories, reduce OST and improve customer service. These goals cannot be optimized by use of the current system. The total 90 to 120 day order ship times via DPSC procurement and delivery cannot be reduced sufficiently to satisfy optimum service goals. DICOMSS requisitions originate from the Army and Air Force, pass to DPSC who then sends orders to manufacturers. They ship to service stores via port of embarkation (POE) or to DLA

activities DDMP/DDT. Transport is arranged via MTMC. As Arthur Young concluded there are many government activities involved and it is hard to assign responsibility for long OSTs to overseas destinations.

CONCLUSION

The overall consensus of the military Services is that DPSC fresh fruit and vegetables (FF&V) support from CONUS DSOs is performed in a very professional and effective manner. DPSC perishable support of hardy and chill FF&V for overseas commissaries is also accomplished in an effective manner. The semiperishable support mission under DICOMSS and the perishable support mission under PSASS have common problems - an order ship-time to customers that is unsatisfactory and cost of products that is higher overall than in CONUS. It is the Commission's determination that the semi-perishable wholesale mission, including requisition, procurement, voucher processing, storage, and delivery, should be combined under a Joint Services Command, and a central distribution concept of operations should be implemented. In order to make such a system work, line item selection would have to be realistic. A stocked system would need discipline in order to make forward buying and price negotiations possible on a recurring basis. Voucher processing for orders into CDC's would have to be assumed by the Joint Services Command. An inventory model must be utilized to replenish product in a CDC, as well as handle new items into the system. Merchandising would be a joint services effort for uniform VPR's and economic buys. Distribution Centers should be commercially owned and operated as DPSC now does for perishable troop issue subsistence to avoid large capital outlays.

This study partially disagrees with recommendations of the Arthur Young Study. In their study they recommended three CDC's--one in Germany to support central Europe, one in Italy for the Mediterranean area, and another in the United Kingdom for support in that country. The Commission envisions one in Germany to support central Europe, one in the United Kingdom for that area, and a southeast coastal CONUS CDC that supports the Mediterranean as well as CONUS customers in its regional area.

For comparison purposes, the Commission reviewed DDMP costs of handling product at Mechanicsburg versus handling costs for a commercially operated CDC in Europe. The total DDMP cost of operation was divided by total cases handled in FY 1988 to determine the cost per case. It was matched with a commercial CDC price quote (The Dornbush Group, Atlanta, Ga.) to warehouse and distribute products in Europe. It should be noted that DDMP is a transshipment point with far less frequency of stock-selection and van-stuffing than a CDC, and that transportation or delivery is excluded from their costs. Table 7-5 reflects the comparison.

	Total Operating Cost	Total Cases Handled	Cost To Handle Case
DDMP	$7,226,000[1]	6,579,429	$1.10 Handling
DORNBUSH GROUP	N/A	13.134,804	$ .6471 Delivery $ .2884 Handling **$ .9355 Total**

[1]Excluding transportation.

Table 7-5. Cost comparison for DPSC versus commercial distributor

Neither of the cost totals in the above table reflects the overseas transportation costs, since they are considered to be the same. However, in-theater moves to a centrally located European warehouse as part of the ocean carrier contract would obviously be less expensive than in-theater moves to practically all commissaries throughout central Europe from the port of embarkation. The result indicates that a move toward commercial CDC's as an alternative to government depot operations is warranted. The future CDC concept of the Commissary Program is discussed in detail in chapter 11.

RECOMMENDATIONS

7.3 a. Transfer the wholesale brand name mission to include procurement, storage and distribution out of DLA and establish it with regional procurement/merchandising managers to execute the CDC program for overseas commissaries, i.e., centralized inventory control, pricing, forward buying, etc.. Transfer of appropriated funds and manpower positions will be required to support the workload of the mission. If the consolidation concept is approved, this mission should be established under DECS. If the functional centralization concept is chosen, this mission should be established as a joint services initiative, managed by a lead service, which will report to a DOD Board of Directors (outlined in Chapter 11).

7.3 b. Establish a CDC distribution network for overseas, using a commercially-owned commercially operated concept.

7.3 c. Identify and fund hardware and commercially available software packages to accomplish central distribution center initiatives.

SUMMARY

As originally stated, each service has worked independently to develop and implement systems to improve their inventory control and distribution functions. Efficiencies have been achieved through the automation of many processes. However, there are still further savings to be gained to reduce the volumes of documentation and cumbersome processes inherent in the current systems.

The most important aspect of the inventory control and distribution functions which should be addressed immediately is that of the overseas support mission. The current system for providing merchandise to overseas commissaries is inefficient and very labor intensive. Separate and unrelated organizations are responsible for merchandise support, with no single organization in charge of the whole system. Ordering by each store or region is a time-consuming process based more on experience than scientific forecasting techniques. Overseas automated systems are archaic and require significant manual manipulation of input and output to accomplish tasks. Long OSTs require the services to carry large inventories, which include an overall average of 30 days safety level, in addition to operating levels. Inventory turns are low due to the monthly frequency of ordering, as well as the volume of safety stocks and the impact of long OSTs. Some initiatives have been implemented by the services to work around the DPSC system in an effort to reduce OSTs and improve support to overseas customers. However, these efforts do not significantly impact overall system improvement.

In the United States, the distribution and inventory control functions are being accomplished somewhat more effectively than for overseas commissaries. However, there are still many improvements to be made to bring the system up to par with the systems used by commercial supermarkets and their distributors, and to reduce the administrative overhead burden which results from our methods of distribution and documentation processing.

In summary, the commissary system as a whole must operate in a business manner, similar to its counterparts in the commercial sector, to achieve future efficiencies and remain a viable system. These goals can be achieved through centralized, uniform automation systems, using state-of-the-art software and technology and improving upon commissary methods of distribution. This chapter has addressed some short-term alternatives for consideration. Chapter 11 will address the long-term inventory control and distribution strategies for the future of the Commissary Program.

Chapter 8

ENGINEERING

OVERVIEW

This chapter provides background on the engineering and material management responsibilities inherent in each Service commissary system. It also addresses the notable differences in procedures which are similar in kind and required by law, DOD instruction, regulation, or policy. The recommendations at the end of the chapter express an overall requirement for standardization of policies and procedures. The central theme of the chapter is the engineering and management responsibilities involved in the execution of commissary construction requirements. An "ideal" engineering organization is suggested which provides the type of structure, line authority and expertise specifically needed for optimal effectiveness.

MISSIONS

ARMY COMMISSARY SYSTEM

The U. S. Army Troop Support Agency (TSA), Directorate of Engineering and Material (DEM) is responsible for planning, programming, constructing, and equipping commissaries and troop support facilities (Troop Subsistence Issue Activities, Dining Facilities and Central Issue Facilities). The directorate also provides consultant services to other directorates within the headquarters and outside agencies on an as-needed basis. For example, consultant services have been provided for development of prototype designs for Clothing Sales Stores and Child Care Centers. It is responsible for developing and maintaining current state-of-the-art commissary and troop support facilities layouts and design criteria, and it acts as Program Director for the Army's Modern Food Service Systems OMA Funds. The Directorate prepares dining facility, troop issue subsistence, and commissary equipment schedules for use by major commands and installations; and it assists the U.S. Army Corps of Engineers in the development of construction contract drawings and specifications for dining, troop issue subsistence, and commissary facilities. It is also responsible for all facets of commissary equipment accountability to include equipment authorization documents, authorization of excess or nonstandard equipment, the equipment replacement program, and distribution of excess equipment within TSA. In FY 1990, the Directorate will assume program manager authority for Troop Issue Support Activity equipment replacement Army-wide.

AIR FORCE COMMISSARY SYSTEM

The Air Force Commissary Service (AFCOMS) Directorate of Engineering serves as the command consultant on all engineering matters and establishes priority construction program listings. It is also responsible for developing standard drawings for multiple size commissaries, together with fixture and refrigeration packages, and developing construction programs utilizing commissary surcharge funds. The directorate ensures MAJCOM support for repair and maintenance of existing facilities and prepares specifications for new energy management procedures in commissaries. It also acts as the focal point for all major and minor modernization projects and new commissaries.

NAVY COMMISSARY SYSTEM

The Navy Resale and Services Support Office (NAVRESSO) Facilities Division provides general facilities support to Navy exchanges, commissaries, and lodges. This includes budgeting, master planning, siting assistance and layout preparation; interfacing with Naval Facilities

Engineering Command (NAVFACENGCOM) for design and construction services; managing equipment requirements; administering maintenance programs; and providing turnkey job assistance for new and remodeled facilities for Navy exchanges, lodges, commissaries, ships stores and distribution centers.

MARINE COMMISSARY SYSTEM

The Headquarters, United States Marine Corps does not have a dedicated engineering staff. Engineering assistance is provided by the Naval Facilities Engineering Command (NAVFACENGCOM) and base engineers on an as-needed basis.

CURRENT PROCEDURES

ARMY COMMISSARY SYSTEM

The Troop Support Agency maintains a budget year plus five-year major commissary construction program. The program is formally reviewed and updated annually. TSA requests from each Army Major Command (MACOM) and TSA region any revisions, substitutions, additions, and/or deletions to the currently approved program. MACOMS and regions request input from their respective installations and stores. In coordination, they evaluate and prioritize proposed projects and forward program recommendations separately to TSA. TSA evaluates the MACOMS' and regions' recommendations, develops a proposed program, and coordinates the proposal with the MACOMS and regions. TSA presents the proposed program, and coordinates the proposal with the MACOMS and regions. TSA presents the proposed program to the DA Subsistence Review Committee (DASRC), which reviews the program, hears dissenting comments from the MACOMS, and if necessary, makes revisions as required and approves the program. The DASRC is comprised of General Officer participants from the Deputy Chief of Staff for Personnel, Comptroller of the Army, Deputy Chief of Staff for Research, Development and Acquisitions, Chief of Engineers, Surgeon General, and the Sergeant Major of the Army. The Chairman is a DADCSLOG general officer representative. The program is disseminated to all MACOMS and regions after DASRC approval. The program is executed by TSA. Project documentation is obtained, reviewed and forwarded to the Office, Chief of Engineers (OCE) for technical review and issuance of design directives. District Engineer (DE) offices handle the design and construction of major commissary projects. Congress approves the execution of construction projects via the annual Nonappropriated Fund (NAF) Report which lists those projects expected to be placed under contract during the reporting period.

TSA maintains a five-year Minor Construction Improvements Program (MCIP) for projects costing less than $500,000 in funded costs. The program is reviewed and updated annually. TSA requests from the regions any revisions, substitutions, additions, and/or deletions to the currently approved

program. The headquarters evaluates the Regions' recommendations and develops the proposed program for approval by the commander. The program is disseminated to the regions after approval. The regions are responsible for program execution. The regions request project documentation from installation Director, Engineering and Housing (DEH) offices. Documentation is forwarded to TSA Headquarters for scope approval and funding authorization. The installation DEH handles the design and construction of an MCIP project. The DEH will either execute the project in-house or request a District Engineer office to execute the project.

TSA Region Commanders/Directors in CONUS have construction project approval and funding authority for projects costing up to $10,000. The European Commissary Region (EURCOR) Commander has construction project approval and funding authority for projects costing up to $50,000 in funded costs. The TSA Commander has construction project approval and funding authority for projects costing up to $500,000 in funded costs. The Army DCSLOG has construction project approval authority for projects costing over $500,000 in funded costs. Congress approves the execution and funding level of major commissary projects (>$500,000 in funded costs) via the annual Nonappropriated Fund (NAF) Report. After congressional approval, those projects costing over $300,000 in funded costs are reviewed by the Office, Chief of Engineers for technical sufficiency and project site approval.

TSA commissary designs for new commissaries were originally based on computer aided designs which were developed jointly by the Corps of Engineers' Huntsville Engineer Division and TSA. These standard sizes have evolved due to changes in services provided, use of frequent deliveries in the U.S., improved warehousing techniques, and future establishment of a central distribution center in Europe. TSA uses a computer sizing model for sizing of new commissary facility projects. Sizing is based on historical sales or population to be supported or a combination of the two. Presently, CONUS major commissary projects are executed under commercial design-build procedures and sizing criteria is only used for programming purposes. For overseas projects, sizing criteria is used for design of major commissary projects.

TSA Regulation 700-1 prescribes the responsibilities, procedures, and policies for requisitioning, acquiring, accounting for, controlling, maintaining, cross-leveling, and disposing of commissary equipment. TSA maintains a commissary equipment authorization list (CEAL) and a commissary equipment authorization schedule (CEAS). The CEAS lists authorized equipment, specification description, and estimated item cost. The CEAL lists authorized equipment by store size. TSA Headquarters develops an annual equipment program for new and replacement equipment. Equipment requirements are submitted by the regions to TSA Headquarters for review, approval and insertion into the annual program. The exception is commissary equipment for new stores. Equipment associated with a major commissary construction project is funded out of project funds. After program approval, regions submit requisitions for equipment having a unit price of $200 or more to TSA Headquarters for review and passing action to the appropriate supply source. Additionally, replacement of refrigeration equipment costing $40,000 or more is reviewed by a qualified

equipment specialist from the Directorate of Engineering and Material. Refrigeration equipment costing less than $40,000 is reviewed by region technical personnel to certify replacement requirement.

Maintenance and repair (M&R) of commissary facilities is the responsibility of the Directorate of Engineering and Housing (DEH) at installation level. DEH is responsible for the M&R of all installed equipment to include HVAC, utility systems, intrusion detection systems, etc. Maintenance and repair of commissary unique equipment is performed by the DEH on a reimbursable cost basis. Contract maintenance is used quite often for commissary processing equipment. Contract maintenance for refrigeration systems is used particularly at installations where the DEH does not have the in-house technical expertise or the level of DEH support has been unsatisfactory.

AIR FORCE COMMISSARY SYSTEM

In July 1985, AFCOMS initiated a comprehensive planning process which identified all commissary construction needs. The plan, referred to as the AFCOMS 2000 plan, encompassed all known facility requirements which would enhance or replace all commissary facilities to "new store" standards by the year 2000. The initial plan was presented to the AFCOMS Board of Directors (BOD) in September 1986. It identified the total backlog of construction and funds required to buy out the program. The initial requirements were identified by the base, Major Commands and Regions, and reviewed by AFCOMS Headquarters to establish the scope of the work and integrate the region and MAJCOM priorities into an AFCOMS priority list. Prior to BOD approval scope and priority were validated by on-site teams of region and headquarters operational and engineering experts. A three-year construction program was established and is approved each year by the BOD. The three-year program consists of the current year, design year, and a "freeze" year. The plan is reviewed and updated annually by the stores, Regions, and MAJCOMS to ensure it responds to mission requirements and to ensure the project priorities are still correct. The plan is also used to coordinate equipment replacement with construction projects to minimize the disruption of patron services. The identification of maintenance and repair requirements for the facilities and installed equipment is made by the Base Engineers. Each base programs and budgets for the work required.

Since 1976, when AFCOMS was organized, an aggressive construction program has been pursued. Since the beginning an average of six new stores have been completed annually.

The AFCOMS Region commanders can approve funding projects with total cost up to $50,000. The AFCOMS commander can fund projects with a funded cost of up to $500,000. The Secretary of the Air Force (SAF) has unlimited project approval. Projects over $500,000 that have been SAF approved will be reported annually to the House Armed Services Committee (HASC) no later than 1 July each year, as part of the annual Nonappropriated Fund (NAF) Construction Report. Originally sizing criteria was contained in Air Force and Department of Defense Manuals. AFCOMS initiated a study

in June 1981 to determine a new method for sizing stores. A computer sizing model was developed in 1982. The model was based on forecasted sales volume and sized each integral component of the facility. The forecasting of anticipated sales was based on past sales, monthly sales adjusted for inflation, and an "attractiveness" factor added to the projected sales volume to account for an increase in real sales that occurs within the first two years of a new store opening. The Deputy Assistant Secretary of Defense (Installations) eliminated the DOD space requirements for commissary stores in June 1985 and delegated authority to the Services to determine store sizes. Based on deletion of the DOD criteria, AFCOMS implemented AFCOMS Regulation 86-1, dated Jan 1986. The regulation established the guidelines and criteria for sizing stores using the AFCOMS computer sizing program.

Air Force regulations outline procedures, policies and responsibilities and prescribe documentation formats for identifying and funding real property requirements. They prescribe procedures for planning and developing commissary surcharge funded programs and submitting them to approving authorities.

All facility projects with related construction, Supervision Inspection and Overhead (SIOH), equipment purchase and installation are normally funded with Commissary Trust Revolving (surcharge) Funds. All design services are funded by surcharge except for those projects approved for accomplishment using appropriated funds (APF). Maintenance and repair of commissaries are APF responsibilities, whether in CONUS or overseas. Only in clearly justifiable instances are maintenance and repair of commissary facilities funded from surcharge funds.

AFCOMS Regulation 145-5 outlines procedures for the acquisition and control of equipment. Equipment costing $1,000 is programmed by the regions. The items authorized depend upon the class of the store. These items are sent to the local contracting office for procurement. Material handling equipment (MHE) is requisitioned through the base Transportation Officer. Requests for more than one refrigerated display case, all walk-in storage boxes and other related refrigeration equipment are reviewed and approved by Headquarters AFCOMS/DE (Engineering). Equipment is procured by the local base contracting.

New refrigeration and processing equipment is generally furnished by the construction contractor when a replacement store is constructed. Equipment that requires replacement when a construction project is not planned will normally be replaced as a headquarter's planned and funded project. The AFCOMS regions can procure only single pieces of refrigeration equipment. More than one item requires Headquarters approval. Processing equipment is normally funded by the region which procures the items through the base contracting office at the base where the region is located or where the store is located.

Maintenance and repair (M&R) of commissary facilities is the responsibility of the Base Civil Engineer (BCE). Each BCE identifies the requirements, programs and

budgets for the work required. Effective FY 1990, AFCOMS is assuming the responsibility of the M&R of certain specific commissary Real Property Installed Equipment (RPIE) with Commissary Trust Revolving Fund (CTRF). The propriety of using CTRF for the purpose of M&R of RPIE was researched and it is felt relevant statutory language and DOD guidance are broad enough to allow use of CTRF rather than host base O&M funds to maintain and repair certain RPIE. The safety and security items that impact a commissary store's operational environment are automatic doors, air conditioning systems and dock levelers.

Equipment whose ownership is retained by the commissary is generally maintained by contract in the CONUS. When contract services are not available, bases overseas will perform maintenance on equipment on a reimbursable basis. Refrigerated equipment in the CONUS is maintained and repaired by regional contract.

AFCOMS uses Architect-Engineer (A-E) firms to design all projects and provide construction management for projects over one million dollars. Construction management is accomplished solely by the Base Engineers for smaller projects (less than $1 million) while the base's contracting office provides procurement services for all projects regardless of size. In some instances, AFCOMS will fund an overhire position to augment the Base Contracting Office. Commercial specifications are used in all cases. The commercial design-build method of construction has been used in two cases, Bolling and Ellsworth AFBs. The evaluation of this method of design and construction will be studied by a contract Architectural-Engineering firm when the Bolling project is completed.

NAVY COMMISSARY SYSTEM

Major projects are generally identified and scoped by headquarters personnel, either operations or engineering or a combined effort of the two sections. Where major projects are proposed by field activities, headquarters personnel usually visit the activity to assist in detailed project development. All programming and budgeting are done at NAVRESSO Headquarters. This is done through a Permanent Improvement Projects (PIP) committee made up of members from Operations, Financial Management, Distribution, and Engineering. All major projects are reviewed individually and the Five-Year Obligations Plan is revised annually at budget submission time, usually in July. Selection of projects is based on quality of existing service, sales potential, and the availability of funds.

Funds utilized for capital improvements come principally from sales surcharge (approximately 45 percent of surcharge collections) which are augmented by cash discounts and salvage revenues. Disposition of these funds is totally controlled at NAVRESSO Headquarters. Approval authority for overall capital budget and major projects over $200K rests with the Commander of the Naval Supply Systems Command (COMNAVSUPSYSCOM). Within the approved budget envelope NAVRESSO approves all individual items of work between $2.5K and $200K. Items less than $2.5K are charged to local store expenses. Project

budgets are direct reflections of the Five-Year Obligations Plan for major projects. The budget targets for minor projects and M&R are determined by historical usage statistics modified as needed to meet any unique situations.

In 1983 four prototype commissary plans were developed to accommodate monthly sales from approximately one million to four million dollars. Naval Facilities Engineering Command (NAVFAC) facility planning criteria was used to determine how many prototypes were needed. Sales per square foot values of existing commissary stores were used to determine the sales capacity of each prototype. New store sizes are based on monthly sales volumes. Gross sizes of prototype commissaries are 28,000, 40,000, 50,000, and 62,000 square feet for monthly sales volumes of $860,000, $1,700,000, $2,750,000, and $4,300,000 respectively. Prototype size is based on a sales area of 59 percent of the entire building.

Major projects are handled directly between the Commander, Naval Facilities Engineering Command (COMNAVFACENGCOM) headquarters and NAVRESSO. Funding documents are passed directly and the local commissary participates little until contract completion when they take possession of the space. Minor projects and M&R are handled almost exclusively at the activity level. Funding authority, based on an approved scope and cost, is passed to the Commanding Officer of the local Field Support Office.

Major projects almost always require design and NAVFAC Headquarters will parcel this out to one of their seven regional field divisions based on project scope and cost. Minor projects which require design or at least preparation of construction contract documents will be passed to the local NAVFAC agent in the area, usually the base Public Works Officer. This work is normally performed using reimbursable work orders.

Project related equipment estimates are included as part of total project requirements. New and replacement equipment requirements are summarized from budget-call submittals for the target year and replacement requirements for the out-years are projected from database calculations. The target year budget is a function of the overall Trust Revolving Fund (TRF) projections and funding priorities. It identifies the replacement and new equipment program.

Equipment acquisition is accomplished in accordance with the Navy Resale Manual, paragraph 2500 (series), and Navy Resale Publication 117, the Equipment Management Guide (Attachment B). The requisition/acquisition process is centrally monitored and controlled, providing the means for updating the equipment inventory data base, and updating purchase commitments against approved account budgets.

Equipment maintenance and repair data is not captured centrally, except for those costs associated with vehicles and material handling equipment (MHE). Captured data is submitted annually for use in evaluating replacement needs. Maintenance at the field level might be provided by an in-house staff, through a Memorandum of Understanding (MOU) with the Navy Exchange Facilities Maintenance Department, through a Public Works Department, or through a locally initiated contract with a commercial source. Such contracts are common for refrigeration,

front end and meat preparation equipment, all funded by TRF.

Project-related equipment is identified from the project scope and the resultant store layout. Other new equipment requirements such as the CheckRobot Automated Checkout Machines (ACM) currently under test, refrigerated cases and lobster tanks to support the "Fresh Fish" program, etc. are identified through various program initiatives. Replacement equipment requirements are identified from a commissary equipment data base which is based on the age of equipment compared to the life expectancy for that specific item. In the case of vehicles and material handling equipment (MHE), consideration of item usage and repair costs is taken into account. The list of candidates is prioritized by the field activity and addition and/or deletion recommendations are noted. M&R requirements for facilities and equipment are almost always identified by a field activity.

MARINE CORPS COMMISSARY SYSTEM

The development of major projects ($500K) is a coordinated effort among the local command, the respective complexes and Headquarters Marine Corps (LFS). Headquarters Marine Corps (HQMC) reviews all requirements and develops a listing by priority for programming purposes. The Deputy Chief of Staff for Installations and Logistics (DC/S I&L), HQMC, has approval authority for major projects. Minor projects are usually initiated by the commissary officer and coordinated with the local Public Works Officer (PWO). Minor projects are submitted to the complex director for inclusion in the Marine Corps Trust Revolving Funds (MCTRF) budget. The Director, Facilities and Services Division (LF), HQMC, has approval authority for projects costing less than $500K.

All programming and budgeting is done at HQMC (LFS). Local commands develop and justify proposals and coordinate needs with the respective complexes. Proposals are submitted to HQMC (LFS) for review and prioritizing. A construction program is developed based on anticipated earnings to determine construction years. Funds used to support the construction program are generated from commissary surcharge. Considerable emphasis is placed on the conservation of surcharge funds in the area of operating expenses in order to free dollars for construction. Approval authority for the capital asset budget rests with the Director, Facilities and Services Division (LF), HQMC. The approved budget is administered by HQMC (LFS). Equipment replacements are included in major projects to the greatest extent possible. Maintenance and repair of the commissary facility is the responsibility of the PWO. The commissary officer develops and prioritizes needs and coordinates the annual program with the PWO. It is the responsibility of the PWO to program and budget for maintenance and repair work required.

The Marine Corps commissary system is small in size; and, as a result, only constructs a new commissary every three to four years. In the past the Marine Corps used DODM 4270.1 as the sizing criteria. In 1985, after the deletion of sizing criteria for commissaries by OSD, the Marine Corps

opted to continue to use the previous guidance as a starting point for commissary construction. Currently, the Marine Corps coordinates with the other Services and industry to develop modern design criteria. The emphasis on design/build and turnkey acquisition methods have afforded the Marine Corps the opportunity to benefit from lessons learned by the U.S. Army Troop Support Agency in similar developments. Total facility sizes developed by the other Services are adjusted to consider the Marine Corps uniqueness.

Major projects are coordinated between HQMC (LFS) as the fund sponsor and HQMC (LFL) as the construction sponsor. Depending on the size and scope of the project, the project is administered by the PWO at the installation or by NAVFAC. Funding is issued directly to the local installation for administration. Currently, the Marine Corps is constructing the Camp LeJeune consolidated commissary facility using the design/build concept. The local NAVFAC agent has contracted with an A&E for development of the RFP. Minor projects are designed in house at a level commensurate with the cost and complexity. Costs are paid for from MCTRF.

Government furnished equipment is procured using local contracts. The Complex directors have contract authority up to $25,000. Contractor-furnished, Contractor-Installed (CFCI) equipment is handled at the Naval Engineering Command. Equipment maintenance and repair is managed at the local installation either through the PWO or local contract and funded by MCTRF. Commissaries submit turn-in requests through the complexes to HQMC (LFS) for disposition instructions on unserviceable equipment.

The commissary officer works closely with the installation Public Works Officer to develop and program maintenance and repair requirements of facilities for each budget year. Maintenance and repair of commissary equipment is performed by the host installation on a reimbursable basis. Local M&R contracts are used to a limited extent. The installation is responsible for preparing budgets and justifications to fund needed work.

The commissary officer in coordination with the installation PWO develops the requirements for new or replacement equipment. The Marine Corps Commissary Complexes consolidate equipment requirements and submit the program to HQMC (LFS) for review and approval.

The Marine Corps operates Central Distribution Centers (CDC), thus, eliminating the need for the warehouse requirement at store level. Final approval for the size of a proposed facility rests with HQMC.

ENGINEERING ISSUES

8.1 SIZING STORES

To allow comparison of the store sizing methods used by the different Services, an example was selected to have each Service furnish the store sizes they would select based on a given monthly gross sales. One, two, & four million dollars monthly sales volumes were selected for comparison purposes. Figure 8-1 reflects the comparison. The Navy has four standard sizes based on gross monthly sales. They design so that 59 percent of the store area is dedicated to sales. Reportedly, this percentage was arrived at to keep their space allocations in line with commercial stores. This percentage can be used because the Navy has Central Distribution Centers (CDC). The Army and Air Force use very similar sizing models. The space allocated to resale is slightly larger in the Air Force stores (40 percent vs 34 percent), but the overall gross size of the facility is basically the same for the one MIL and two MIL sizes but the four MIL Army store is 15,000 square feet smaller than the Air Force store (118,600 vs 133,900 square feet). The sales area is proportionally higher in the AF store (40,320 vs 48,340 square feet).

SALES/MTH	$1,000,000	$2,000,000	$4,000,000
NAVY (1)	28,000 sf	40,000 sf	62,000 sf
-SALES AREA	16,520 sf	23,600 sf	36,580 sf
-% OF TOTAL	59 %	59 %	59 %
ARMY (2)	50,725 sf	77,893 sf	118,593 sf
-SALES AREA	17,055 sf	26,464 sf	40,322 sf
-% OF TOTAL	34 %	34 %	34 %
AIR FORCE	50,500 sf	78,400 sf	133,900 sf
-SALES AREA	20,760 sf	29,800 sf	48,340 sf
-% OF TOTAL	41 %	38 %	36 %
(3)	55,000 sf	85,000 sf	141,000 sf
-SALES AREA	25,260 sf	36,400 sf	55,440 sf
-% OF TOTAL	46 %	43 %	39 %

NOTES:

(1) NAVY STD SIZES ($860K, $1,700K, $2,750K, $4,300K)
(2) SIZES USED FOR PROGRAMMING
(3) STD MODEL SIZE THAT WOULD BE SELECTED

Figure 8-1. Size comparison

When a commercial one-step, design-build procedure is used, there is no standard size. The size is based upon whatever the contractor's designer determines to be the correct size, by commercial standards for the projected gross sales. The Air Force has tested the commercial Design-Build procedure at two locations, Bolling and Ellsworth AFBs. Until the decision is made to do more of these procurements, the Air Force is continuing to use standard size stores. In the case of the example used, each size the model computed was significantly increased when the next larger standard size store was selected. The use of the standard sizes results in a store size 6.6 percent to 8.9 percent larger than computed. All of the size increases went into the sales area. The Marines have no store sizing criteria, but use their own and others' experience when a new store is planned.

The Air Force sizing model is based on 48 hours a week of operation for stores with monthly sales over one million dollars and 40 hours a week of operation for stores with monthly sales over $300,000. With extended hours and additional days the model will size stores with a sales area larger than required if the sales volume stays the same. The sales volume normally does increase so a direct reduction in sales area, aisle widths, etc. can not be easily made without further study. The typical aisle width of a commercial supermarket is 6-7 feet, whereas the Air Force Commissary standard width is 7 1/2-8 ft. The wider aisles were designed to help traffic flow due to the high density patron volume. Additional hours/days could reduce this congestion and possibly reduce the need for the wider aisles. There is certainly construction funds to be saved and/or congestion to be reduced if the sales area is properly sized.

Store sizing models need to be updated to incorporate the increased operating hours and days. The basic problem is that the amount of funds available to fund hours of operation vary by the availability of budgeted APF so that an intelligent decision on sizing the sales area is practically not possible. This is one of the many reasons why the size of commissaries can not be compared with commercial supermarkets.

Store sizes will continue to be a point of contention until hours/days of store operation can be predicted with some degree of accuracy.

8.1 a. RECOMMENDATIONS

The Services should jointly develop four or more typical commissary standard sizes. Possible standard commissary sizes are: 25,000 sq ft; 50,000 sq ft; 75,000 sq ft; and 100,000 sq ft. These sizes should cover ninety-five percent of the needs of typical commissaries. The very small "grocery store" commissary or very large commissary would be a unique design.

8.2 FUNDING CONSTRUCTION

CONTRACT AUTHORITY

Contract authority is the authority given an agency which allows it to enter into contracts prior to realization of

revenues needed to pay such obligations. AFCOMS presently uses Contract Authority and has for the past 5 years. TSA is in the process of obtaining the same authority. An additional $60-70 million would be available annually for construction when TSA implements contract authority. The authority does not generate new funds but merely allows the use of the agency's future revenues. This process does not cost anything and is therefore the best alternative if incurring no new debt is of concern.

PRIVATE SECTOR FINANCING

Private Sector Financing (PSF) allows private investors to fill Services' needs while earning a market rate of return for their investment. The current rate of return ranges from 15 to 16 percent. This method of financing can also provide construction and even maintenance of a facility by the investor. The relatively high cost of this type financing can only be justified when there is a significant increase in revenues realized by the replacement of an old store with a new modern sized commissary. In overseas locations, there does not appear to be significant long-lived increases in sales resulting from construction of new stores. As long as the US dollar remains relative weak overseas, the patrons will continue to shop at the commissaries regardless of facility condition or convenience. In an AFCOMS study of PSF a long term increase in revenues in the CONUS, resulting from the construction of replacement stores, was not sufficient to justify the investment. In addition, if one of the PSF commissaries was involved in a base closure, then the debt would remain to be paid off with an absence of revenue.

FEDERAL BANK LOANS

The Federal Finance Bank lends monies at one quarter percent over the federal loan rate with flexible terms. The flexible terms are available because the loan rate is adjustable. TSA has investigated this procedure and considers it feasible. This plan infuses new money into the system at a reasonable cost with flexible terms.

SURCHARGE CONTRIBUTION

All of the Services presently contribute about one half of the five percent surcharge collected to their construction programs. If a one percent increase in the surcharge were initiated for construction, $50 million could be generated annually.

8.2.a. RECOMMENDATIONS

Contract Authority is the recommended method to finance and accelerate construction. The ability to execute the program is the limiting factor. Obtaining additional funds with no improvement in the execution phase would be of no value. The only advantage that PSF has is the ability to have the investors help construct the facility and maybe even maintain it. The market rate charges make this the most expensive method of financing construction. The amount revenues are increased by the construction of new stores would not normally justify this method. If an efficient method of executing the program were available to a Service, then borrowing funds from a Federal Bank could be the most effective means of building out the program in the shortest period of time. An increase in

the surcharge for any reason would not be well received by the patron. This method of raising funds to finance a construction program would be recommended only in cases of emergencies.

8.3 REGIONALIZATION CONCEPT

The mind-set that assumes every installation must have its own commissary must be altered. The commissary's operating and construction costs can be reduced by eliminating the small inefficient stores and replacing them with centrally-located, larger commissaries. The patron would prefer modern stores, well stocked with a wider assortment of line items and convenient hours and days of operation, compared to a small store with limited stock assortment and hours of operation. This is not to say each installation should not have a branch store where patrons could purchase milk, bread, fruit, candy, soft drinks etc., at commissary prices. The attempt to operate full-service commissaries at all installations is questionable in regards to the construction backlogs and shrinking appropriated fund support.

A cursory review of the Army commissary construction program in Germany indicates several opportunities to implement a regional concept. Examples would be the construction of the replacement Mannheim commissary at the Autobahn Caserne located midway between Mannheim and Heidelberg (five miles each way). Sized large enough, it could replace the Mannheim store and allow the Heidelberg store to be closed. A replacement store at Pirmasens is programmed at $7.5 million in the FY 1992 Program. A new store 15 miles away is presently under construction at Zweibruecken. If the Zweibruecken store was adequately sized, the construction of a new store at Pirmansens could be avoided and the old store ultimately closed. A replacement store for Goeppingen is programmed in FY 1994. It could be sized large enough to allow the closure of Schwaebish Gemund, 10 miles away, that has a replacement in an out-year program.

Also the same concept could apply in the CONUS where stores are programmed for replacement at Fitzsimmons Hospital ($5.9 million). The annual operating cost is $1,553,000 with monthly sales of $857,000. Fitzsimmons is within a few miles of an existing large commissary, Lowry AFB. Additions, if required, could be constructed at Lowry in lieu of the new store at Fitzsimmons.

The replacement stores programmed for Fort Eustis ($11.4 million in FY 1990), Ft Monroe ($7.2 in FY 1995), and the Add/Alter project at Langley AFB ($4.2 million in FY 1991) could be replaced by a regional store that could serve the bases at a greatly reduced cost of operation and a significant saving in construction funds. The combined annual operating cost for these stores including Yorktown NS is $5,950,000 (Fort Eustis $1,732,000; Fort Monroe $976,000; Langley $3,048,000; Yorktown $194,000). The annual operating cost for one store that could handle the same volume of sales would be $4,300,000. It would cost $20 million to build a new store to replace the others. In addition to the millions ($2.8) of dollars of construction surcharge funds that would be saved, over one

and one half million dollars a year could be saved in operating costs.

Analysis of the Services' commissary construction requirements to avoid duplication can best be done with a consolidated construction program. Only with a knowledge of each Service's requirements can proper priorities be assigned.

The multi-service construction program would need to be prioritized by a joint service board (DOD Board of Directors or Resale Executive Board) using a consolidated construction fund. To ensure credibility of each Service's 5-year construction programs, an FY 1994 implementation date would be most logical. The fund should be used to correct the most urgent requirement regardless of service affiliation.

Construction priorities can best be addressed with a combined service construction program. Stores in close proximity of one another, regardless of Service, should be studied to see if an existing store should be increased in size instead of building a replacement store at another location. An economic analysis should be made to determine if one of the stores should be closed and the sales transferred to a near-by store. This procedure would provide a continuing method to reduce operating expenses and avoid spending construction dollars needlessly. This procedure is in keeping with DOD 1330.17-R, paragraph 5-105d, that states: When there is another commissary of any Service within a 30 minute travel time, a cost analysis considering the cost effectiveness and potential quality of service that would be provided by an executive operation by a single Service will be conducted by the Military Service having the predominant number of active duty personnel assigned. The results of this cost analysis should be considered by the DoD Commissary Executive Board on a recurring basis.

8.3.a. RECOMMENDATIONS

The location of new/replacement stores must be based upon realistic business-like decisions with a proper perspective on convenience and level of service to be provided to the patron. The project approval decisions must be elevated to a high enough level (DOD Board of Directors) to eliminate the overpowering politics at the local levels of management.

The distribution problems of numerous smaller stores could be greatly reduced with a smaller number of larger and more accessible stores.

Manning (and thereby APF) can be reduced significantly while being able to operate at the hours desired by the patron.

In Europe, to save operating costs and to reduce the construction backlog, regional commissaries are the answer.

However, gaining the ability to implement such a program is most unlikely as long as each local commander insists on a store at his own installation.

8.4 DESIGN AND CONSTRUCTION PROCEDURES

Table 8-1 lists the data received from the Services and Corps of Engineers that was used in the comparisons made later in this section.

	FY Award	CST Time Months	Size (SF)	Construct ($000)	Equip ($000)	Total ($000)	Design ($000)	% Total	SIOH ($000)	% Total	Cost/SF Total
NAVRESSO											
NS San Diego	87	22	62000	6813	1532	8345	435	5.2	469	5.6	135
NB Norfolk	86	22	50000	5350	450	5800	249	4.3	337	5.8	116
OLF Imp Beach	85	16	71600	4971	1350	6321	333	5.3	377	6.0	88
AFCOMS											
Brooks AFB	88	11	44000	3596	693	4289	230	5.4	116	2.7	97
Goodfellow AFB	88	9	49000	4281	220	4501	246	5.5	220	4.9	92
*Bolling AFB	88	***	76300	6990	2060	9050	553	6.1	77	0.9	119
Malstrom AFB	87	12	66500	4640	1140	5780	302	5.2	119	2.1	87
Kirtland AFB	87	13	107500	7680	1650	9330	341	3.7	45	0.5	87
Bangor MAP	86	13	23600	1908	1250	3158	73	2.3	40	1.3	134
Scott AFB	85	27	96000	10214	790	11004	336	3.1	93	0.8	115
Warren AFB	85	14	50500	4450	1123	5573	208	3.7	95	1.7	110
TSA											
**Yuma PG	87	13	23135	2165	475	2639	95	3.6	145	5.5	114
*FT Sheridan	87	12	47200	2206	925	3131	248	7.9	212	6.8	66
**West Point	87	15	71600	10150	1219	11369	694	6.1	592	5.2	159
**FT Irwin	86	10	56500	6052	837	6889	457	6.6	379	5.5	122
FT Drum	86	17	82700	7545	1332	8877	581	6.5	483	5.4	107
**FT Lewis	85	11	109400	8410	1550	9960	605	6.1	549	5.5	91
FT Meade	84	22	118900	7374	1480	8854	665	7.5	516	5.8	74
FT Jackson	84	18	118300	6374	1480	7854	649	8.3	431	5.5	66

* Commercial one-step (Design/Build). ** One-Step (Design/Build). *** Under Construction

Table 8-1. Commissary design and construction data

DESIGN BUILD

The commercial Design-Build method of construction has not been tried by the Services long enough to give the process an absolute vote of confidence. This version of Design-Build recommended by the Congressional subcommittee leaves the size and the physical layout of the commissary to someone with commercial grocery store experience but who has no understanding or appreciation of commissary operations. The main problem is that the building may not have the size or features required to make it compatible with the Service's operating procedures and density of shoppers. In the case of Ft. Sheridan, the building was inexpensively constructed in a minimum of time, but lacked adequate administrative, food processing and receiving areas. These are the areas that are normally very limited in a commercial supermarket. This method of design and construction eliminates any chance of standardization. AFCOMS has a study presently under contract to compare the Bolling AFB design-build project with a similar project constructed using Plans and Specifications. The study will not be finalized until completion of the Bolling project in the early part of 1990.

The design-build procedure can be used to expedite construction when the design and

construction of a project would be managed by the Corps of Engineers. It could also, reduce legal claims often resulting from controversies between the construction contractor and the designer. The procedure should be modified to provide the design-builder sufficient guidance to get a design of a building that will have the features and size necessary for it to operate as a commissary.

The times required in procurement, design and construction phases are as reflected in Table 8-2 and Figure 8-2.

Method	Procure RFP	Design	Procure Contract	Const	Total
Design/Build					
TSA/AFCOMS	4	2		10	16
Plans & Specs					
TSA		15	3	24	42
AFCOMS		9	3	12	24
NAVRESSO		35	3	20	58

Note: Numbers indicate time in months

Table 8-2. Design and construction methods

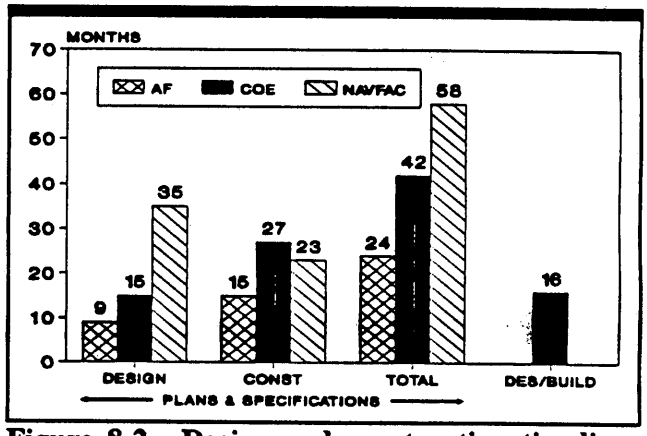


Figure 8-2. Design and construction timeline

With the design phase normally completed before the funding is available, comparable times are the times it takes to do the procurement of the design-build contract, and actual design-build time versus the time it takes to procure a construction contract using plans and specifications plus the construction time. The design build method (16 mos.) is only more efficient when compared against the TSA/CofE times using Plans and Specifications (27 mos). The cost comparison between the two methods are as reflected in Table 8-3 and Figure 8-3.

Procurement Method	Service	RFP Prep	Design	SIOH
Plans & Specs	TSA	-	5.4	4.7
	AFCOMS	-	4.8	2.0
	NAVRESSO	-	4.7	5.8
Design-Build	TSA	1.4	-	5.4
	AFCOMS	*	-	0.8
	NAVRESSO	-	-	-

Note: Figures show percent of construction contract
* Prepared by AFCOMS

Table 8-3. Design & construction mgt costs

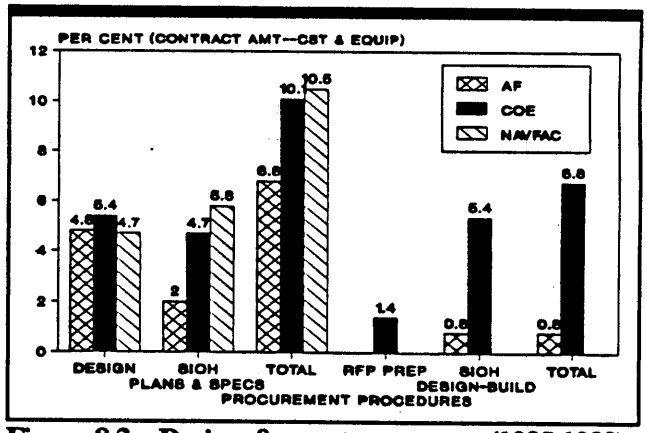


Figure 8-3. Design & const mgt costs (1985-1988)

A four-year average of Design-Build projects, one Air Force and three Army, is $108 per square foot. During this same period, 1985-1988, projects contracted for using Plans and Specifications averaged $95 or $80 per square foot using the Army average. The $13-$28 per square foot difference reflects a $2.5 to $5.3 million savings that could have been realized if Plans and Specifications procurement had been used by the Army in lieu of Design-Build. This amount could also be looked upon as the extra cost necessary to reduce the design and construction time for commissaries managed by the CofE. Figure 8-4 reflects the construction costs for CONUS replacement stores for each of the Services over the past four years.

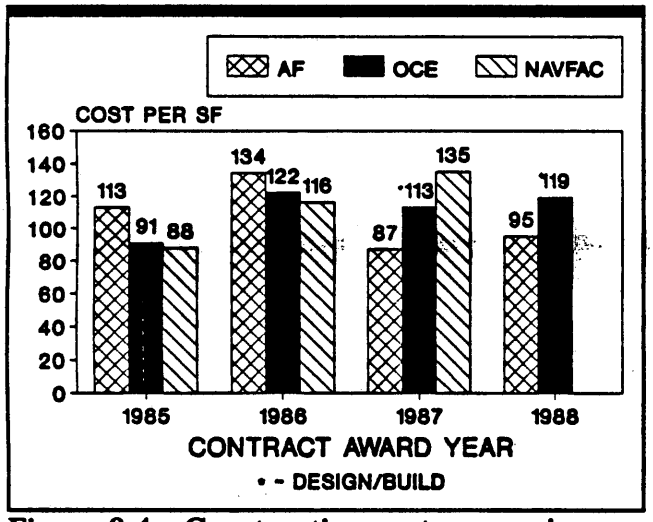


Figure 8-4. Construction cost comparison ((construction & CFCI equip)/com size)

One of the main concerns of the commercial design-build method is the contractor's cost of preparation of his proposal. This cost will range from $50-100,000 per project. After several unsuccessful attempts, contractors probably will stop participating in the process which will ultimately result in a reduction in competition and an increase in cost. Another concern is the lack of standardization in designs. Each store will be unique with new and different operating and maintenance problems.

PLANS AND SPECIFICATIONS

This procedure starts with the selection of an Architect-Engineering (A-E) firm who designs the commissary to meet the criteria that are given them. AFCOMS, through a contracting agent (normally Base Contracting), hires the A-E and reviews the design through all of its phases. The Corps of Engineers and NAVFAC hires the A-E and performs the design review for TSA and NAVRESSO respectively. AFCOMS averages three months for the A-E selection and allows six months for the design. CofE and NAVFAC will generally take twice the time. After a three-four month procurement process the construction will begin. AFCOMS construction will range from 9 to 14 months while CofE and NAVFAC takes 20-24 months. AFCOMS will normally hire the A-E that designed the project to do the construction management. Construction management and the procurement function for the Army and Navy are done by CofE and NAVFAC.

The average CofE design cost, using the Plans and Specifications Method, over the comparison period (1985-1988) has averaged approximately one half of one percent more than AFCOMS and NAVFAC.

The CofE and NAVFAC construction management fee averaged 2.7 percent to 3.8 percent more than the AFCOMS management fee during the 1985-1988 period. Not included

in the AFCOMS costs are the procurement costs. When the local Air Force Base contracting office cannot manage an AFCOMS commissary contract, an overhire position is normally funded by AFCOMS. It is estimated that the addition of one-two percent to the AFCOMS cost would compensate for the difference. With an annual $100 million construction program, the savings realized by not using the CofE and NAVFAC for construction management would be $.7 to $2.8 million.

The Plans and Specifications furnished to the Contractor to bid on must be accurate. Any changes will require expensive change orders to the contract. Errors in the plans and specifications can prove expensive and offer reasons for legal claims. This method provides the best way to obtain the most competitive price for a project because it is a tried and proven procedure that all contractors are familiar with and incurs the least cost in bid preparation.

STANDARDIZING DESIGNS

Establishing standard sizes and developing an architect/engineer (A-E) package for each size would simplify the consultant's work and reduce the design fees. Standardizing store sizes would also provide the opportunity to standardize interior structural column locations which, in turn, would standardize gondola layouts and to a very substantial degree, the entire floor plan arrangement. If this information were developed in a way to assist the architect and reduce his design time, the architect fee could be reduced. The standard floor plans with column locations could be put on a computer. This computer package could assist the A-E with compatible computer capabilities to expedite his design package. The basic floor plan would standardize the interior space allowing the architect to site-adapt the plan and use his creative talents to design the building for compatibility with its surroundings. Many of the specifications sections of the contract documents could be standardized, computerized and furnished to the A-E for editing.

As previously discussed, the Services should have four or five standard store sizes which could be site-adapted regardless of service affiliation.

RECOMMENDATIONS

8.4.a. As long as the Corps of Engineers and NAVFAC continue to be the construction agent for the Army and Navy, the Design/Build procurement procedure is the most viable. The time saved and the reduced charges of the construction agent are reason enough to use the Design/Build. AFCOMS has more latitude in the methods it uses. Either the Design/Build format or a Plan/Specification method can be used effectively. If there is insufficient time to have designs completed before the funding is available, then the Design/Build would be the most expedient. It remains to be determined if the Design/Build method will lessen legal claims, which are becoming more of a significant factor. A procedure that allows the efficient use of the procurement procedure using plans and specifications is the

most cost effective and timely. As previously stated, millions of dollars of patrons surcharge funds could be saved each year by reducing management fees and by using optimum design and construction methods.

8.4.b. Recommend TSA and AFCOMS perform an assessment of the commercial design-build method. Their assessments should be presented to the DOD Board of Directors, who in turn will decide if this method is appropriate for all Services and if this method provides the patron a satisfactory facility. Board action should occur before the end of FY 1990.

8.5 ENGINEERING AND CONTRACTING ORGANIZATION

The AFCOMS engineering organization (Figure 8-5) is authorized 26 engineers, architects and technicians who validate construction and equipment replacement requirements; size and site new stores; program requirements; select and manage A-E design contracts; and act as project monitors for construction projects that are directly managed by A-Es and/or Base Engineer personnel. The current salary cost for AFCOMS engineering including clerical help and equipment specialists is $1,235,100. AFCOMS/DE is increasing use of equipment maintenance and repair contracts with the Headquarters providing guidance and quality assurance assistance. The AFCOMS annual construction program has averaged $60 million over the past five years, with a high of $83 million in 1987. The contracting of design and construction contracts has been provided by Base Contracting or by the 3303rd Contracting Squadron, located at Randolph AFB.

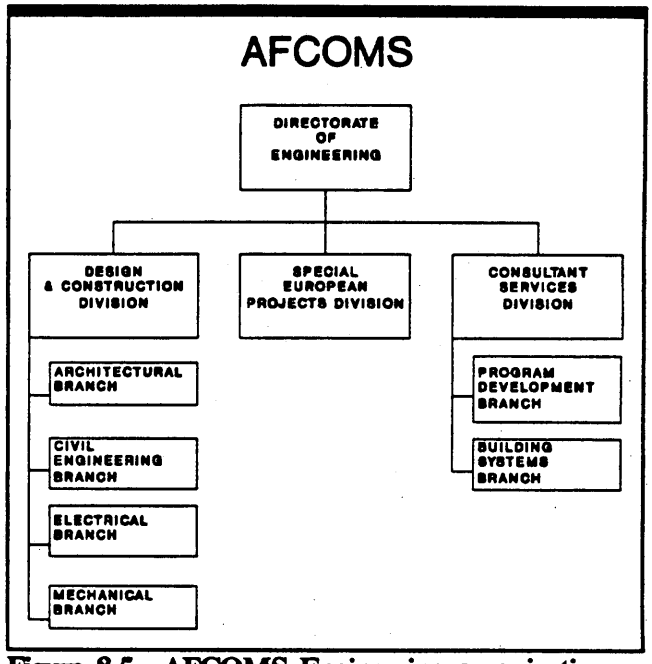


Figure 8-5. AFCOMS Engineering organization

The NAVRESSO engineering organization (Figure 8-6) is responsible for both Exchange and Commissary construction. It is manned with NAF personnel with assistance provided on a reimbursable basis from appropriated funded (AP) personnel. The Headquarters centrally controls and monitors equipment acquisition. For the sake of comparison, the NAF and AP salaried cost is $396,000 ($185,000 NAF, $211,000 AP) for personnel dedicated to commissary facility construction. Two NAF man-years are devoted to the equipment function. NAVFAC, either at the Base Public Works Office or one of their seven regional field divisions, acts as the agent to get projects designed and constructed. NAVFAC is responsible for the contracting function. Their annual construction averages $15 million annually.

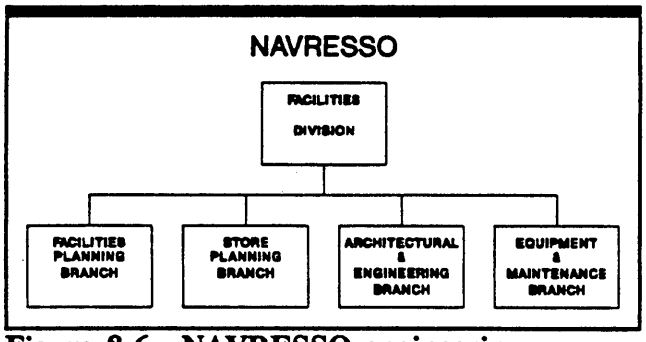


Figure 8-6. NAVRESSO engineering organization

TSA Directorate of Engineering and Material (DEM) (Figure 8-7) serves as the staff office responsible for the planning, programming, construction and equipping of not only commissaries but other troop support facilities such as dining facilities and troop issue subsistence as well. The Engineering and Design Division provides conceptual design and functional guidance to the Corps of Engineers who is the design and construction agent. Similar to AFCOMS they provide project management by providing oversight to CoE in design reviews, reviews and approval of commissary equipment submittals, and identifying deficiencies and initiating change orders when required during construction. The Facilities and Material Management Division provides the budgeting and functional requirements for commissary support equipment. In addition to the equipment responsibility, this division is responsible for providing technical advice and assistance for the master planning and programming of commissaries. Of the 2 military and 50 civilians authorized in the Directorate, approximately 60 percent of its time is devoted to commissaries. The cost of personnel within the Directorate dedicated solely to commissaries is $1,142,512 annually. In addition, there are engineers at CONUS and the European Regions that add another $559,000 in annual engineering salaries.

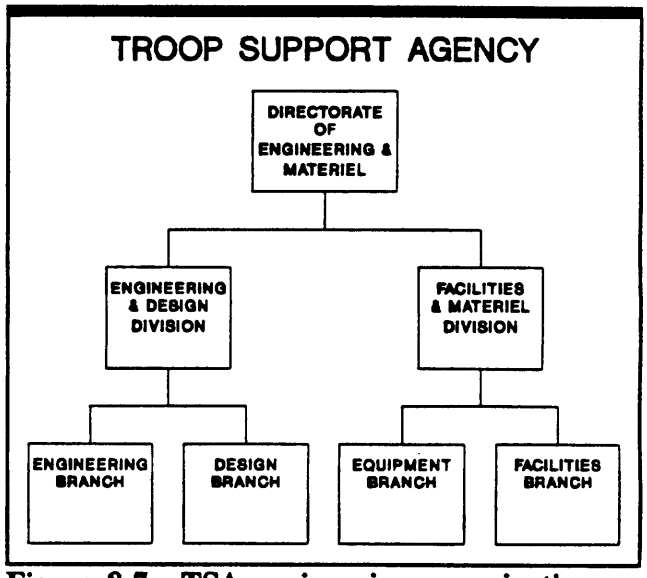


Figure 8-7. TSA engineering organization

8.5. a. RECOMMENDATIONS

The "Ideal" Engineering Organization. The engineering function would need to be organized as a joint-service agency. It could be attached to a single Service, attached to a joint-service organization, or operate totally independent of any one Service. The organization's goal would be to plan and program the modifications to existing commissaries, the construction of new and replacement commissaries, and provide means to maintain and repair associated equipment. The function would be responsive for executing a construction program that is prioritized and approved by a joint-services board. New and replacement equipment, construction of new and modification of existing commissaries would be funded from a combined fund generated from a portion of the 5 percent surcharge from all of the

Services. The organization would have a dedicated contracting capability function that would contract for A-E as well as maintenance and repair services , administer construction contracts, and procure equipment. To provide "arms length" from the engineering organization, the contracting function could be accomplished on a reimbursable basis with the 3303rd Contracting Squadron or the Corps of Engineers. In the case of the Air Force, this would relieve the Base Contracting of this responsibility (indirect cost) while it presently is being done by CofE and NAVFAC for TSA and NAVRESSO as a direct cost. The effectiveness of the Contracting function could be greatly enhanced by having enabling legislation to reverse the Comptroller General decision, Fortec Contractors (B 188770, dated February 24, 1978) that decided commissary construction procurement must be treated like appropriated contracting actions. If allowed to operate as a NAF entity, the FAR could be waived. Like AAFES, more streamlined procurement procedures can be followed. A more responsive contracting function would shorten the advertising and announcement times required by the FAR. A dedicated contracting function would also reduce contractors legal claims which are based on nonresponsive contracting actions.

CONUS projects would be designed by A-E firms with the construction managed by A-E firms, overhire civil service inspectors, or by the CofE/NAVFAC reimbursed with CTRF funds. Contract administration would be the responsibility of the procurement agency tasked with the contracting responsibility. New store construction would be based on the site adaptation of standard designs.

A-E fees could be reduced with the use of Computer Aided Design (CAD), standardized designs, construction details, and commercial specifications. To ensure the greatest amount of competition, plans and specifications would be the standard procurement method. Design/build, with sufficient guidance to ensure a standard design, would be used in CONUS to provide sufficient lead time to develop plans and specifications. New and replacement equipment buys will be combined and acquired at the best competitive price available. Indefinite quantity/delivery type contracts would be used to maximum extent. Standardization will occur for items not affected by rapid state-of-the-art changes, i.e., work tables, grocery carts, shelving, meat slicers, etc.

The "ideal" organization could look like Figure 8-8. The organization could have 62 positions including a European Region engineering/equipment staff (9). The other regions could have an engineering/equipment staff when and if the larger regions are established under a combined commissary service. Figure 8-8 reflects a proposed organization with manning sufficient to perform the entire engineering responsibility of all the Services. Listed under each function are areas of responsibilities that would be covered by the function. The grades of the positions were proposed primarily for costing purposes and were determined using similar engineering organizations within DOD as a guide. The contracting function is presently being performed by the CofE, NAVFAC and by Air Force appropriated funded procurement offices. A contracting function, patterned after AAFES, would require approximately 16 people. The funding of the proposed function would be offset by savings in both appropriated and non-appropriated funds.

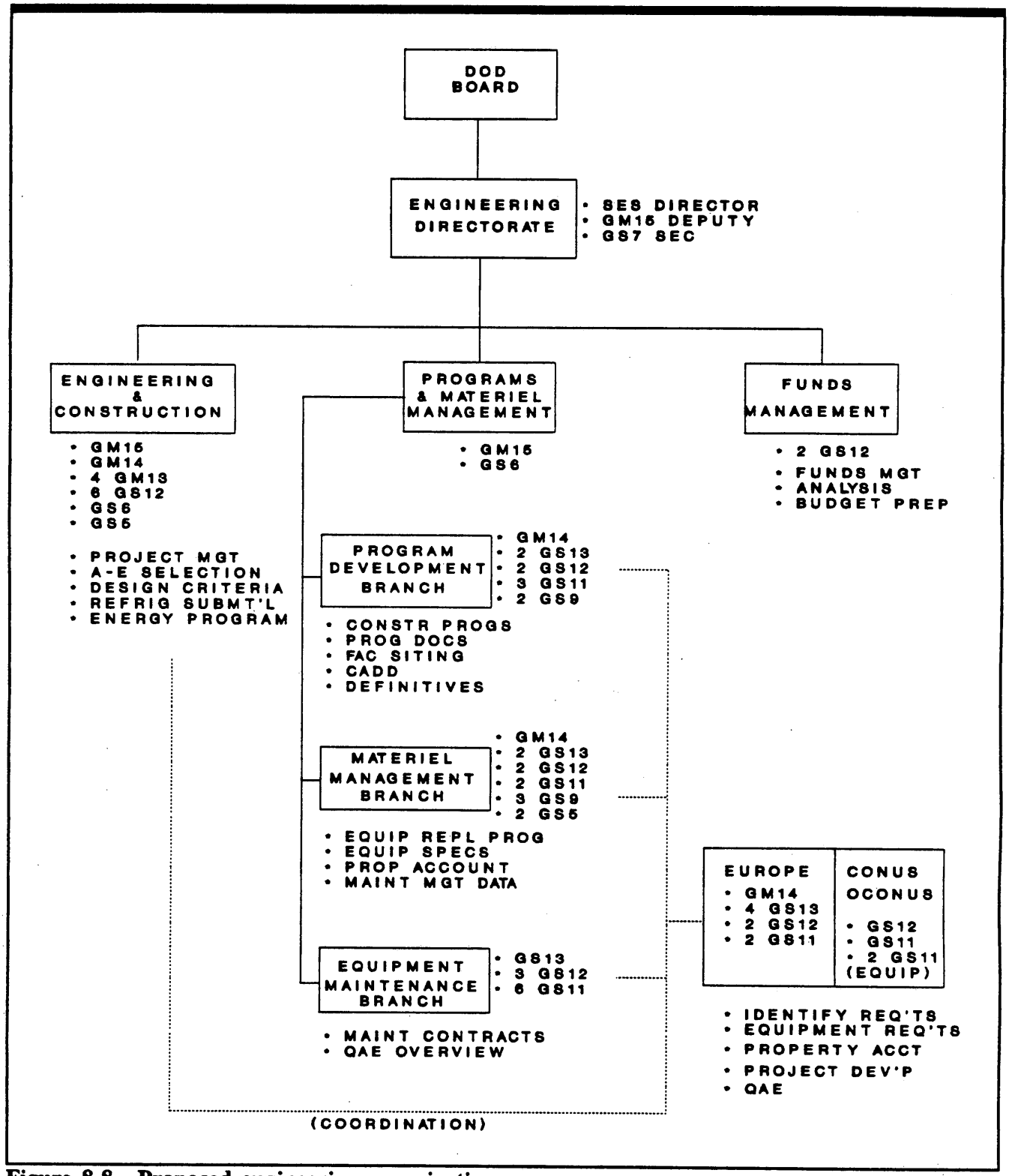


Figure 8-8. Proposed engineering organization

Location of the engineering organization will be determined by the DOD Board of Directors.

The consolidation of the engineering function would save approximately $1 million in salaries. Table 8-4 gives a cost breakout of the existing and proposed organization. The savings generated using the more efficient design and construction methods would more than pay for the consolidated engineering organization.

Categories	Costs ($)
Army	
TSA/DEM	$1,142,500
TSA/EURCOR	432,000
TSA/REGIONS	127,000
Army subtotal	**1,701,500**
Navy	
NAVRESSO (APR)	211,000
NAVRESSO (NAF)	184,900
Navy subtotal	**395,500**
Air Force	
AFCOMS/DE	1,068,600
AFCOMS/DEO (Europe)	90,500
AFCOMS/DO (Equip)	76,000
Air Force subtotal	**1,235,100**
Total current payroll costs	**3,332,500**
Proposed organization	**2,363,700**
Anticipated savings	**968,800**
Proposed contracting division	**530,500**

Table 8-4. Personnel Cost Comparison ($)

8.6 BASE REALIGNMENT AND CLOSURE

The Defense Secretary's Commission on Base Realignment and Closure (BRAC) recommended realignment and closure actions on 145 installations. Of this number, 86 are to be closed fully, five are to be closed in part, and 54 will experience a change, an increase or a decrease, as units or activities are relocated. The recommendations have been approved, and the Services are presently developing implementation plans. Title II, P.L. 100-526, requires that realignment and closure actions be initiated no later than September 30, 1991 and completed no later than September 30, 1995, except that no such closure or realignment may be initiated before January 1, 1990.

The total impact on the commissary system has not been determined. The Services are working the numbers continuously in an effort to determine the overall cost impact, particular in the personnel arena. The clearest picture that can be drawn to date is the one affecting sales and subsequently commissary facilities. Tables 8-5 and 8-6 reflect the impact on commissary facilities when the realignment and closure actions are fully implemented. The Navy and Marine Corps have determined that the impact of realignment and closure actions is minimal or no impact at all. The Navy has determined that sales increase resulting from other Services' realignment and closure actions can be absorbed within their present system. The Marine Corps anticipates little if any impact on sales from other Services BRAC actions.

Of the nine installations and bases scheduled for closure, six reflect a surcharge investment of $34.6 million dollars (undepreciated value). Particularly significant are the $16.9 million dollars invested in the construction of the Ft Sheridian and Presidio commissaries. Ft Sheridan opened in April

Location	Impact	Remarks
Ft Sheridan	Closure	$4 mil new store Apr 89 TRF funded
Presidio	Closure	$12.9 mil new store Sep 89 TRF funded
Cameron Station	Closure	
Lexington Blue Grass	Closure	$1.5 mil new store Jun 87 TRF funded
Ft Belvoir	Sales inc	Second store req'd FY 91 prog $16 mil
Ft Meyer	Sales inc	New store req'd FY 92 prog $11 mil
Ft Ben Harrison	Sales inc	Expansion req'd FY 92 prog $1 mil
Ft Devens	Sales inc	Project scope inc
Ft Leonard Wood	Sales inc	Project scope OK
Ft Jackson, Ft Carson, Ft Knox Ft Lee, Ft Lewis, Tobyhana Depot	Sales inc	Stores adequate
Ft. Huachuca, Ft Bliss, Ft Meade, Ft Monmouth	Sales dec	No impact

Table 8-5. Commissary impact--Army

Location	Impact	Remarks
Chanute AFB	Closure	$4.9 mil, 1981 TRF
George AFB	Closure	$1.1 mil, 1972 APR
Mather AFB	Closure	$3.1 mil, 1980 TRF
Norton AFB	Closure	$8.2 mil, 1987 TRF
Pease AFB	Closure	$0.9 mil, 1972 APR
Beale AFB	Sales inc	Proj scope inc FY91
Bolling AFB	Sales inc	Inc waresg req'd
Cannon AFB	Sales inc	Add/alt $3.3 mil req'd FY93
Grissom AFB	Sales inc	Sales area exp req'd FY92
Keesler AFB	Sales inc	Sales area exp req'd FY92
March AFB	Sales inc	New store req'd $19.4 mil FY93
McClellan AFB	Sales inc	Add/alt req'd $7.93 mil FY93
Mountain Home AFB	Sales inc	Add/alt req'd $3 mil FY93
Bergstrom, Carswell, Davis-Montain, Eaker, Edwards, Fairchild, Goodfellow, Hanscom, Kirtland, Lowry, McChord, Scott, Sheppard, Travis, Wurtsmith AFB	Sales inc	Stores adequate

Table 8-6. Commissary impact--Air Force

1989, and Presidio is scheduled to open in late 1989. Thirty four Army and Air Force commissaries will be able to absorb the increase in sales without facility expansion. Beale AFB, Grissom AFB, and Kessler AFB have projects programmed which will absorb the projected sales increases. AFCOMS is studying the possibility of expanding the warehouse of the new Bolling Commissary (currently under construction) to handle the anticipated patron volume resulting from the closure of Cameron Station. Three Army installations (Ft Ben Harrison, Ft Belvoir and Ft Myer) and four Air Force Bases (March AFB, Cannon AFB, McClellan AFB and Mountain Home AFB) will require significant expansion of existing commissaries. TSA has determined that the most economically and operationally feasible approach at Ft Belvior is to build a second store and expand the warehouse at the existing store. TSA plans to use the expanded warehouse to support both Ft Belvior stores, Ft Myer and provide limited support to Walter Reed and Ft McNair commissaries. Expansion of the Ft Myer commissary is not considered reasonable, and the most prudent solution is to replace the existing store. Due to site constraints, AFCOMS concludes that a replacement

commissary at March AFB is the most reasonable approach. Table 8-7 lists the installations/bases requiring significant construction requirements. The table shows the percentage of cost contributed to base realignment and closure (BRAC) and to the Trust Revolving Fund (TRF). The project scope of work for the new Ft Devens commissary has been increased to address the projected sales increase resulting from the closure of Pease AFB and the projected increase in assigned military and civilian personnel. The percentage of cost numbers under BRAC reflect what TSA and AFCOMS expect the Department of Defense Closure Account to contribute.

Army	Scope	Cost ($M)	BRAC (%)	TRF (%)	Prog (FY)
Ft Ben Harrison	Add/alt	1.0	57	43	92
Ft Belvoir	2nd store	12.9	62	38	91
Ft Belvoir	Add/whse	3.1	55	45	91
Ft Myer	Replace	11.0	39	61	92
Ft Devens	Scope inc	13.0	15	85	89
Air Force					
March AFB	Replace	19.4	63	37	93
Cannon AFB	Add/alt	3.3	10	00	93
McClellan AFB	Add/alt	7.9	10	00	93
Mt Home AFB	Add/alt	3.0	10	00	93
Navy & Marines					
None					

Table 8-7. Commissary construction

RECOMMENDATIONS

8.6.a. Recommend that the DoD Resale Executive Board conduct a thorough review of each commissary service's assessment of BRAC actions and their respective proposed courses of action. The purpose of the review is to ensure that the full impact of BRAC actions on the patron base is identified and properly addressed.

8.6.b. Recommend that the DoD Board of Directors, speaking as one voice, seek through appropriate channels support in recouping patrons surcharge monies invested in commissaries now scheduled for closure.

SUMMARY OF RECOMMENDATIONS

The consolidation of the engineering efforts should be done as soon as practical regardless of whether or not any other aspect of the commissary function or services merge. A single engineering effort can best focus its attention if dedicated solely to commissaries and not exchanges, troop issue, and dining facilities. Standardization of equipment and commissary designs, and the related savings, can only be achieved if one organization is charged with the execution of the program. The expertise is already available within the Services. Eliminating the dependency on outside agencies

whenever possible, i.e., Corps of Engineers, NAVFAC, Air Force Base Engineering and Contracting, will greatly improve the efficiency and effectiveness of an engineering function.

The combining of the construction funds with a prioritized consolidated construction program will best spend the patrons' funds in correcting the most urgently needed requirements. Parochialism in the construction program does not serve the best interests of the patrons that contribute to the fund.

The regionalization of stores concept will reduce the unwieldy construction backlog and effectively reduce operating costs. The application of this concept is essential to prudent management of the commissary system.

The "ideal" engineering organization can operate well within the direct costs presently being expended by the Services. The indirect appropriated funded costs, in the case of the Air Force, and the nonappropriated salary costs of the Navy would be savings, but the greatest saving would be in the construction dollars which belong to the commissary patrons.

Chapter 9

HUMAN RESOURCES

OVERVIEW

The total DoD Direct Appropriated Fund commissary expense for FY 1988 was $724,703,000. Of this amount, $559,414,000, or 77.2 percent, funded payroll costs. How payroll dollars are managed in the future will be critical to the success of the military commissary system and possibly offers the single most important opportunity to improve commissary efficiency.

This chapter analyzes the existing incentives, training, career management, recruitment efforts, employment programs, position descriptions, work plans, and military authorizations now utilized; and it provides a cost benefit analysis of the non-appropriated versus appropriated systems.

9.1 INCENTIVES

BACKGROUND

One of the primary purposes of this program is to motivate employees to increase productivity by rewarding those whose job performance is substantially above the normal job requirements. The incentive awards program must be adequately funded in order to comply with the spirit of the law and the Services' policies on civilian performance and productivity. Each Service is responsible for budgeting approximately 1 percent of the organizational funds necessary to meet the requirements. This money must come from

store operational budgets and be available at the end of the various rating cycles.

DISCUSSION

All Services follow the Federal Personnel Manual and provide cash incentives based on performance. These awards include the Sustained Superior Performance Award, the Merit Pay Cash Award, the Quality Step Increase, and the Special Achievement Award. Additionally, Services are authorized to develop other award programs based on individual needs. The Services need to increase their efforts to design programs that recognize and reward exceptional performance.

Jointly, the Services could pursue a productivity enhancement program such as salary-plus-bonus incentives for front-end and meat departments. One Service has recently begun a productivity cash incentive program on a test basis for the sales store checkers, measured by increased personal productivity.

DoD approval could be obtained allowing the use of surcharge monies for cash awards. When this is accomplished, the Services could establish various awards based on productivity to recognize outstanding performance.

RECOMMENDATIONS

9.1.a If the productivity incentive test program shows that checker productivity and customer satisfaction are enhanced, all Services should implement.

9.1.b Obtain DoD approval for use of surcharge monies. With O&M dollars decreasing, surcharge dollars are the only way to support a viable incentive program.

9.2 TRAINING

BACKGROUND

Formal training in the Services' commissary programs started, in all cases, from a totally decentralized base-level effort. The training procedures of each service have been examined.

DISCUSSION

All of the Services currently pursue training to different degrees, and each participates in the Joint Executive Management Course. The Navy has no centralized training effort at the headquarters level but rather delegates this to local installations. The commissaries mostly perform on-the-job training (OJT) with some classroom and correspondence course training available. Functional training is used as necessary. No internship or career development programs exist.

Similarly, the Marine Corps has no formal training program. Emphasis is placed on OJT along with functional training obtained through Army and Navy channels. Correspondence courses are available. No internship or career development programs exist.

The Army Troop Support Agency is in the process of assuming some functional training responsibilities from the Quartermaster School. TSA now conducts training in commissary management and will soon have courses for

produce and grocery department personnel. The training office at Fort Lee is responsible for, and has developed, OJT videos which are distributed to each commissary. They pursue correspondence courses and some other federal and non-federal training sources. TSA also administers intern and cooperative education programs.

The Air Force has a centralized training effort and has recently completed a state-of-the art training center at Kelly AFB, TX. Classroom training is available for clerical and technician level personnel in all functional areas. Department manager courses are available, as well as store manager and commissary officer instruction. Local commissaries offer hands-on training to supplement classroom instructions. AFCOMS administers an intern program, makes full use of training quotas from the Air Training Command, and pursues other government sources along with university and private industry development.

The Services need to examine the training requirements for their managers. As the stores become larger and more efficient, the manager will be responsible for overseeing an operation with more customers, higher sales volume and greater product diversity. These managers will need greater education and training. Their jobs will be training intensive and more analytical. This training should emphasize both the nuts and bolts of management techniques and the development of leadership skills.

Employee training is critical for a stable, career-oriented work force. In view of the fact that two Services already have sophisticated training organizations, it would be comparatively easy for them, cooperatively, to formulate generic courses to meet the needs of all Services. Service unique requirements could be addressed either with modules developed by that Service or by the lead Services from input supplied by the Service with the unique requirement.

RECOMMENDATION

9.2 Short of total consolidation, TSA and AFCOMS, with input from NAVRESSO and the Marine Corps will be tasked jointly to develop functional training courses to meet the needs of all commissary personnel. Oversight will be provided by a joint committee such as the DOD Board of Directors (Chapter 11).

9.3 COMMISSARY CAREER MANAGEMENT PROGRAMS

BACKGROUND

Commissary Career Management Programs are centrally managed civilian personnel staffing functions that issue promotion and reassignment certificates for all GS-1144 positions in a particular Service. Additionally, Personnel Specialists and Commissary Management Specialists work together as a team to provide career counseling, Individual Development Planning, Intern Training Plans and similar services to a cadre of professionals in the commissary career field.

DISCUSSION

The Army and Air Force have centrally managed career programs for GS-1144 positions. This insures that a pipeline of management expertise is developed to satisfy future needs. The Air Force uses signed mobility contracts to add the maximum degree of flexibility to its career program. The Army does not.

In AFCOMS, Promotion Evaluation Patterns (PEPs) have been developed for each job. These plans reflect the knowledge, skills and abilities required to perform the jobs. Automation of the AFCOMS work force's personnel data system allows management to identify qualified employees for a vacancy by searching this data base through the PEP screen or TEMPLATE. A PEP development panel meets annually to evaluate the PEPs and recommend possible improvements.

The Navy and Marine Corps don't have centrally managed career programs, but the Navy does utilize mobility contracts for GS-1144 personnel at the GS-9 level and above. The Marine Corps system is so small that an individual career program may not be feasible.

RECOMMENDATIONS

9.3.a Short of total consolidation, each service should continue its own career management program. If consolidation is achieved, a new career management program will be created utilizing the best of each service's respective programs.

9.3.b All services should implement the use of signed mobility contracts for commissary management positions at the GS-9 level and above. This provides the maximum degree of flexibility in managing a career program.

9.4 RECRUITMENT

BACKGROUND

Because the recruitment and retention of executive personnel are of vital importance to the military system, the methodology of each service was examined.

DISCUSSION

Currently, AFCOMS has an examining office which is responsible for recruitment of commissary management personnel for the Air Force, Navy, and Marine Corps. This office accepts, reviews, evaluates, and refers external candidates for GS-1144 positions throughout the three services. Eighty-five percent of the external recruits have a bachelors degree in business, food management, or related subjects. TSA has the same recruitment authority delegated from the Office of Personnel Management and externally recruits for commissary management positions. The traditional career path of working up through the ranks has served the commissary system well, and it is reasonable to expect it to continue. However, the expertise needed to manage future stores may reduce the number of qualified internal candidates. A successful recruitment program must be established for colleges and universities using special recruitment techniques to get the most promising candidates. By consolidating the

recruitment authority under one service, efficiency will be achieved by eliminating a duplication of effort and broadening the candidate pool.

RECOMMENDATION

9.4 Each service should continue current recruitment efforts. If consolidation is achieved, a merged staffing function will be established. If consolidation is not approved, the DOD Board of Directors will appoint a lead service to control the recruitment function centrally.

9.5 PART-TIME AND INTERMITTENT EMPLOYMENT PROGRAMS

BACKGROUND

Part-time and Intermittent programs are special employment programs designed by the Office of Personnel Management (OPM) to offer agencies the option of filling positions in a more economical fashion than the standard 40 hour week, full benefits situation. Employers that have seasonal and other cyclical fluctuations, i.e., paydays, in their workload are ideal candidates for using such programs. Typically, a part-time employee works 16-32 hours per week while an intermittent employee may work up to 39 hours per week with no set schedule.

DISCUSSION

The use of part-time and intermittent employees offers management flexibility to staff a commissary according to patron demands. This insures that payroll dollars are spent most economically. However, in some competitive labor markets, it is extremely difficult to fill such positions. Prospective employees are in a position to hold out for full-time positions with benefits. In such labor markets the use of part-time and intermittent employees can be self-defeating because of high vacancy and turnover rates. All four services currently use these employment programs, but their success depends on local labor conditions.

RECOMMENDATION

9.5 The four services should use part-time and intermittent employees to the maximum extent possible, but individual commissary officers and store managers should be given some flexibility in deciding how thoroughly to use these programs since local labor markets vary considerably throughout the country and overseas. The services should strive to reach the private industry mix of 60/40 (60 percent part-time and intermittent vs 40 percent full-time employee). This mix could be measured on an Agency-wide basis to allow for local deviations.

9.6 UTILIZATION OF MILITARY PERSONNEL

BACKGROUND

To provide a review of the assignment and utilization of military personnel within the commissary system, Table 9.1 depicts the number of authorized military billets in the

commissary systems of each of the four military Services.

	Air Force	Navy	Army	Marine Corps
Officers	53	0	43	0
Enlisted	890	1021	185	2
Total	943	1021	228	2

Table 9-1. Authorized military (FY 1988)

Of the total DoD commissary budget for FY 1988, 75.2 million dollars (13.4 percent of the total APF personnel costs) were spent for military payroll costs.

DISCUSSION

Military personnel have been a part of AFCOMS since the beginning. In 1976 the Air Force commissaries were withdrawn from the Major Commands and placed under a Separate Operating Agency (SOA), the Air Force Commissary Service. AFCOMS is tasked with providing Troop Issue Support during wartime and peacetime as well as running the resale commissaries. In 1984, Air Staff and OSD approved 332 additional military personnel authorizations to help meet AFCOMS readiness requirements to provide sufficient troop issue personnel and to provide subsistence to wartime/contingency forces. The military play an integral part in managing, ordering, warehousing, and distributing subsistence throughout all theaters of operation and in support of numerous operational plans. The military are trained in troop issue subsistence operations and participate in peacetime exercises and wartime deployments. Without the military, trained and ready to deploy, the Air Force would be unable to supply food to its deploying wartime forces. Military personnel are trained and exercised in peacetime to ensure proficiency necessary to perform their wartime mission. The use of uniformed military personnel in the commissary and troop issue function is vital to AFCOMS' wartime mission. Without these authorizations, AFCOMS' ability to provide the troop issue support needed during wartime/contingency operations would be seriously degraded.

These same military personnel also serve the Air Force Commissary Service during peacetime. Since there are not enough peacetime troop issue positions for all of the military personnel assigned to AFCOMS, they are used in resale operations while ensuring that they are fully qualified to perform their wartime jobs. This gives a three-fold benefit: it reduces the requirement for civilian personnel; it allows military members to be placed in meaningful management positions, giving them better career progression; and it makes available the resources necessary for a reasonable rotation base for overseas assignments.

Military personnel have been a part of the Navy Commissary Program since its inception. Prior to 1985, both officer and enlisted personnel were assigned to commissaries, which were under the command of the Navy Resale System. In 1985, commissaries and exchanges were consolidated into Navy Resale Activities commanded by officers and petty officers in charge. At the same time, as part of a directed manpower reduction, all officer billets in the Commissary Program were eliminated. In 1987, command and control of Navy Resale Activities was transferred to local

base Commanding Officers, with primary support and technical control provided through the NAVRESSO chain of command. The Navy Commissary Program has undergone a major reduction in enlisted billets in recent years, from 1202 in FY 1985 to 845 projected for FY 1990. To ensure the most efficient use of these remaining billets, a major reallocation was directed in 1985 with three primary goals: to ensure adequate numbers/grades of military personnel at each activity; to provide a greater degree of military manning at overseas and remote CONUS activities while reducing military billets at major CONUS areas of fleet concentration where sufficient civilian labor resources exist; and to ensure military personnel were utilized in supervisory positions in key and sensitive areas appropriate to their military specialties.

The vast majority of the enlisted billets currently authorized are at or above the E-5 level and consist primarily of Ship's Servicemen, the Navy's specialists in retail and service operations. They are utilized in a wide variety of sensitive functions, including commissary management, cash collection, receiving, loss prevention, quality inspection and store security. Other ratings include Storekeepers, who administer appropriated funds and manage distribution centers; Mess Management Specialists, used in meat and produce areas; and Machinist's Mates, utilized in managing maintenance.

Military personnel are utilized in the Commissary Program for three major reasons: to ensure effective executive control and essential command supervision; to provide adequate manning at locations where qualified civilians are not readily available; and to provide opportunities for career progression and training ashore in support of sea/shore rotation policies when such training is not available elsewhere. The assignment of enlisted personnel to commissary billets is vital. The incumbents receive essential training in areas functionally related to their Navy mission which they could not obtain at other activities ashore. The absence of commissary billets would significantly reduce the level of professional expertise and degrade an already unsatisfactory sea/shore rotation pattern. In addition, enlisted personnel in the Commissary Program are afforded valuable leadership and career development experience. They are often required to make decisions involving substantial commitments of resources (money, manpower and material), to be responsive for trends affecting their operation, and to interface with senior military at the local command level and higher echelons.

Both officer and enlisted soldiers are a vital part of the Army Commissary System. Military personnel are valuable assets in both CONUS and overseas commissaries, although the majority serve in the latter where maximum military presence is essential. Soldiers serving in overseas theaters provide liaison and coordination with local community commanders and higher headquarters. They provide essential continuity by remaining in place if hostilities erupt and serving as military points of contact for commanders. Qualified middle management civilians are not always available or willing to accept employment at remote locations in Europe or Korea where some commissaries are located. Also, lack of facilities for civilian employees and higher than normal turnover make soldiers even more necessary to the system as they staff these commissaries. The vast majority of the enlisted soldiers serve at the E-6 and above

level and consist primarily of Commissary Officers, Deputy Commissary Officers, Store Managers, Department Managers and Foremen. This ensures the military personnel are utilized in a supervisory capacity in key areas appropriate to their military specialties. The absence of military personnel in the Army Commissary System would significantly reduce the level of professional expertise. Soldiers gain required career development expertise while providing valuable leadership. Interface with the local commander and higher level personnel is an important part of their career ladder. Enlisted soldiers in the Army Commissary System evaluate the effectiveness and efficiency of commissary operations; determine necessary corrective actions to resolve irregularities/deficiencies; and advise and assist the commissary region commander in performing numerous other military related functions. Another area of expertise is the ability to provide maintenance and serviceability of commissary equipment, a critical area in the commissary system.

The professional skills and management abilities of the military personnel, coupled with an understanding of the needs of service personnel and their families, are necessary to ensure the highest levels of service and support. Commissaries are perceived by the military community as a tremendous benefit, and it is essential that customers be reassured of Defense Department support for this vital program. The visibility of military personnel in the commissary provides a strong signal of the priority placed on the benefit and is a source of confidence for patrons. An absence of military personnel in any of the service commissary programs would adversely impact the quality of life and morale of the military community and seriously impact retention efforts.

RECOMMENDATION

9.6 Continue to utilize military personnel throughout the DOD Commissary System.

9.7 CONVERSION OF COMMISSARIES TO NONAPPROPRIATED FUND STATUS

BACKGROUND

Conversion of the commissary work force to nonappropriated fund status would appear to result in significant savings in personnel costs, but the savings would not be immediate, and might not be enough to offset the disadvantages.

DISCUSSION

Utilizing the criteria issued by each service for the staffing of their stores, the commission developed models estimating the cost of filling billets with both appropriated and nonappropriated fund employees. The staffing standards were applied to three stores for each service; large, medium and small.

The data was then aggregated to arrive at an overall estimate. Based upon this method, it was determined that the difference in wage levels between nonappropriated fund and appropriated fund staffing was approximately 33 percent. In dollar terms, this would amount to $161.4 million. Factoring in benefits, the difference came to a still-significant 21percent. The difference

decreased because the nonappropriated fund benefits package, at an estimated 35 percent of payroll, includes the cost of the employer's share of retirement plan. On the appropriated fund side, because retirement annuities under the Civil Service Retirement System (CSRS) are paid out of the U.S. Treasury's current revenues, Agencies do not contribute an employer's share to the fund. As a result, the cost of the appropriated fund benefits package, as a percent of payroll, is lower than the NAF package.

The major benefit which would accrue from the conversion of commissary employees to nonappropriated fund status would be the reduction in payroll, the largest single expense of doing business after the cost of goods sold. Commissary employees would then be on a parity with other DOD employees engaged in resale activities. Commissary managers could also benefit from the greater flexibilities in the nonappropriated fund personnel system, since NAFIs are subject to few of the statutory appeals procedures applicable to appropriated fund employees, and exempt from the onerous hiring and career protection regulations which hinder appropriated fund activities from responding quickly to changing business environments.

Although conversion to nonappropriated fund status would bring significant benefits, these would not be achieved without cost. Unless the current civil service work force is reassigned to other appropriated fund positions within the government (an unlikely possibility, given current funding constraints), payroll savings would not be immediately achieved. Because of existing salary protection legislation applicable to appropriated fund employees, those civil service commissary employees would have their current wage levels "saved". Payroll savings would therefore accrue only as the current staff attrits and is replaced by lower-paid NAF employees. A nonappropriated fund work force, paid at lower wage levels, would also experience a significantly higher turnover rate. As current NAF experience suggests, higher turnover results in higher "overhead" costs, as recruitment and training efforts are intensified. Further, the addition of approximately 22,000 employees to the current NAF work force of 175,000 would generate pressure to modify the current NAF wage survey base in the retail, wholesale, services and recreational industries. Addition of retail and wholesale food establishments to the current NAF survey base would result in higher wage lines. A study done by the DoD Wage Fixing Authority in 1981 estimated the impact at 9.1 percent, a figure which would be higher today, given the wage caps which have been imposed on the Federal work force in recent years. Utilizing a 10 percent impact figure, the NAF wage bill would therefore rise by approximately $167 million. Finally, conversion of the current work force to NAF status would, in all likelihood, result in a significant loss of experienced employees. Despite a "grandfathered" pay status, many would perceive that their futures would be limited under the lower NAF pay scales.

RECOMMENDATIONS

9.7.a The commissary work force not be converted to nonappropriated fund status. The eventual commissary payroll savings of $161.4 million would not outweigh the negative consequences of the conversion, which could include an increase in NAF payroll levels of approximately $167 million.

9.7.b Another topic which must be addressed in the event of a consolidation is the status of NAF employees currently working in the Navy commissary program. Those employees in the Navy's commissary system currently paid from nonappropriated funds who wish to transfer to a new consolidated commissary system should be allowed to do so, retaining their current benefit and seniority level.

9.8 STANDARDIZATION OF POSITION DESCRIPTIONS

BACKGROUND

Standardized position descriptions can effectively be used when a group of positions with similar duties and responsibilities exists within an organization. The Office of Personnel Management (OPM) encourages the use of these descriptions whenever possible. The overall benefit of using standardized descriptions is that they promote, to the maximum extent possible, the concept of "equal pay for equal work." This concept originates from title 5 of the United States Code.

DISCUSSION

Currently, the Air Force and Army Commissary Systems use standardized position descriptions for most positions at store level where they are most applicable. Management can thereby insure that positions are structured in the most economical fashion throughout the system. Deviations are allowed when locally justified.

The Navy uses standardized descriptions for Commissary Officer and Store Manager positions but not for the lower level occupations. The Marines Corps does not use standardized position descriptions but relies on local management to develop unique descriptions.

RECOMMENDATION

9.8 All services use standardized position descriptions to the maximum extent possible. Because store level positions are very similar regardless of service, most positions should be standardized as to duties and responsibilities; and, as a result, the title, series, and grade will be the same. The Army and Air Force could share their position descriptions with the Navy and Marines Corps for implementation at store level. This would relieve local management from the burden of developing individual descriptions and allow them to utilize their time in more beneficial ways while promoting a high degree of classification consistency required by title 5, United States Code.

9.9 STANDARDIZED PERFORMANCE PLANS

BACKGROUND

Standardized work plans could be beneficial throughout the commissary system.

They insure that positions with the same duty requirements have similar performance requirements. Standardized work plans could promote a quality of fairness throughout the Commissary system that may not otherwise be found when individual performance plans are developed.

DISCUSSION

Currently, the Air Force and Army use centrally developed, standard work plans for most store and region level positions. The Army has such work plans for most GS-1144 positions and many other occupations. In both cases, the use of these standard work plans is optional. The Navy and Marine Corps use standardized work plans to a very limited degree.

RECOMMENDATION

9.9 All services should use standardized work plans to the maximum extent possible. High quality work plans are a necessary ingredient for a good performance management program and can help insure that employees with the same level of performance receive similar ratings and consideration for awards. A lead service should be designated by the DOD Board of Directors to develop standardized work plans for all store level positions. Then all services should be tasked to implement throughout their systems.

SUMMARY OF RECOMMENDATIONS

Our review of current human resources policies and procedures has shown a number of ways in which these areas could be improved. In the area of incentives, for example, a productivity program for sales store checkers, currently under test within AFCOMS, should be adopted by the other services, if it proves successful. In addition, the current reluctance to fully utilize existing incentive awards programs because the dollars must come from O&M (payroll) accounts would be overcome if cash awards were to be funded by surcharge revenues.

In the area of recruitment and staffing, money could be saved by the consolidation of the recruitment function for GS-1144 management personnel and interns. Accordingly one service should be designated to take the lead. Also building upon the current strength of TSA and AFCOMS in the training and development area, those services should be tasked to operate and administer a centralized career management program, including training, for all services. The other services could assist by aiding in the definition of program needs, sharing costs, and requiring mobility for all positions in GS-9 and above. At store level, the services should make maximum use of part-time and intermittent employees (subject to local labor market conditions), and continue to utilize the military personnel currently assigned within the systems in the key billets they now occupy. Additionally, all services should utilize standardized position descriptions and work plans for store level positions.

Finally, the civilian commissary work force should remain appropriated fund civil service, since the negative costs of conversion would outweigh the benefits achieved with lower nonappropriated fund wage levels.

Chapter 10

AUTOMATED INFORMATION SYSTEMS

OVERVIEW

Army, Navy, Air Force and Marine Corps Commissary services have a responsibility to insure that the Automated Information System Program established in their organization is of a quality that assures accountability, efficiency, continuity of operations, and provides information that facilitates worldwide commissary operations and management. Inherent in this responsibility is the obligation to meet Department of Defense and/or other government agency standards for automated data processing hardware, software, communications and documentation, as well as keeping pace with technological advances made in the retail grocery business. Also inherent is providing for an organizational structure and a blend of automation information skills that enable compliance with regulatory direction while at the same time permitting the exploitation of technology.

CURRENT SYSTEMS

GENERAL INFORMATION

STANDARD AUTOMATION INFORMATION SYSTEMS

The four major military resale activities utilize one version or another of NCR Interactive Checkout Systems (ICS) and the Total Reporting Accounting and Communications Systems (TRACS). ICS combined with TRACS is a data processing system designed specifically for a large retail store operation. It consists of a mini-computer controlled checkout system linked to a second general purpose computer for system backup and user batch processing. Each computer has its own set of peripherals and software. Tables 1 and 2 show a functional feature analysis of hardware and software for each of the Services.

FEATURE	AFCOMS	TSA	USMC	NAVY
1255 Terminal	Y	Y	Y	N
- modular	N	Y	Y	Y
- unified	N	Y	N	N
- alpha display	N	Y	Y	N
- 2nd cash drawer	N	Y	Y	N
- NCR scaleN		Y	N	N
- NCR scanner	Y	Y	N	Y
- NCR scanner/scale	N	N	Y	N
Check verification (pre-sale)	N	Y	N	N
Portable Data Entry Device	N	Y	N	N
Processors				
- 9020	Y	Y	N	N
- 9150	Y	Y	Y	Y
- 8258	N	N	N	Y
- Processor Memory				
- 128KB (Pri/Sec)	N	N	N	Y
- 256KB (Primary)	Y	Y	Y	N
- 512KB (Second)	Y	N	N	N
- 768KB (Second)	N	N	Y	N
- 1MB (Second)	N	Y	N	N
- SCSI link	Y	N	N	N
Back-Office Processor				
- 9300 Classic	Y	N	N	N
- 93IP	Y	N	N	N
CRT (KVDT)				
- 7910	Y	Y	N	N
- 4920	Y	Y	Y	N
Printer				
- 6411 (dot matrix)	Y	Y	Y	N
- 6421 (dot matrix)	Y	N	Y	N
- P-300 Printronix	Y	Y	Y	N
Personal Computer				
- PC6	N	Y	N	N
- PC710	N	Y	Y	Y
2126 POS scanning system	N	Y	Y	Y

Source: NCR

Table 10-1. Feature Function Analysis for Service Commissary Systems--Hardware

SOFTWARE	AFCOMS	TSA	USMC	NAVY
Front End Scheduling	Y	N	N	N
Labor Management				
- Check History	Y	N	N	N
- Labor scheduling	N	N	N	Y
Receiving point (application)	N	Y	N	N
Shelf Label	Y	Y	Y	Y
- Auto apply	N	Y	Y	N
- Unit Price	N	Y	Y	N
Automated Financial Report (707)	N	Y	Y	N
Monthly Item Movement	N	Y	N	N
Report (MIMAR)	N	Y	N	N
Store Options Maintenance				
- Version 1	Y	N	N	N
- Version 2	N	Y	Y	N
Action Code Security	N	Y	Y	Y
Secondary Operating System				
- IMOS III	N	N	N	Y
- IMOS V 3.1 (9020)	Y	N	N	N
- IMOS V 4.2	Y	Y	Y	N
Primary Operating System				
- ICS 4.3	N	N	N	Y
- ICS 7.2	Y	Y	Y	N
Quick PLU extract	Y	Y	N	N
AC21 Print active media only	Y	N	N	N
No sale security	N	Y	Y	N
Extended error tone	N	Y	N	N
Communications				
- Remote Batch Subsystem (RBS)	Y	N	N	N
- Standard file Exchange (SFX)	N	Y	Y	N
- Bi-directional Comm (BDC)	N	N	N	Y
- ADCOM	N	N	Y	Y
Voluntary Price Reduction (VPR)	N	Y	N	N
Data Collect	Y	N	N	Y
Military TRACS	N	N	N	Y
Standard TRACS	N	N	N	Y
Expanded Totals	Y	Y	Y	N
Expanded Check message				
- 2126 (SCER)	N	Y	Y	N
- 2127	Y	N	N	N

Source: NCR

Table 10-2. Feature Function Analysis for Service Commissary Systems--Software

The Military version of NCR extended TRACS (MILTRACS) consists of two generally independent systems. The first is the "primary" or front end, which is responsible for the point-of-sale (POS) functions. Item entry is controlled by scanner input of bar coded labels which automatically return the price from the primary processor. Sales are recorded to specific departments and surcharge is calculated on the total of the sale. Security of cash is of foremost responsibility in the ICS software. The system maintains a current record of each type of media (cash, checks, coupons, etc.), the amount of each type that is in the store office, and in the till of each register.

The other half of MILTRACS is the "secondary" system. This is the system that runs user COBOL applications and NCR provided programs. These programs may be directly related to front end activities (price lookup, file maintenance, financial reporting, etc.), or they may be totally unrelated (payroll, etc.). The secondary system has several other responsibilities, the most notable of which is to serve as a backup processor to control the front end if the primary processor fails. Other secondary responsibilities include backup of the primary's files, performing maintenance on files shared by both processors, and transferring data from one storage medium to another; e.g., disk to tape files.

The hardware used for the secondary is similarly configured to the primary. The major differences between the two systems are the input/output (I/O) devices. The primary has point of sale (POS) terminals, and the secondary has display terminals. Additionally, the secondary usually contains more memory than the primary because of its functionality in running COBOL programs.

The primary and secondary systems are joined by a high-speed communications link, referred to as a processor-to-processor or "P2P" link. This permits the secondary to monitor the primary's operation so that it can alert the operator if the primary fails. The operator can then transfer responsibility for the checkout system over to the secondary. The P2P link also enables the secondary to have access to the primary's safe area, which thus becomes a data base for reports generated by the secondary. During normal operation, the secondary system is the center of activity for MILTRACS. Instructions are entered on the display terminals and output is delivered to the terminal or line printer.

The Army, Navy, and Marine Corps have smaller stores and annexes which utilize NCR 2126 point-of-sale cash registers interfaced to a personal computer running 3rd party software purchased from Bass, Inc. The Bass BX-2126 System using the NCR disk operating system (DOS), maintains a Master Price Look Up (PLU) file on a 30 megabyte (MB) hard disk drive. Each PLU record contains forty (40) information fields which include the standard 2126 fields plus inventory, cost, and vendor related information. The BX-2126 allows full control over pricing to accurately track store sale items, and to reduce labor costs associated with item maintenance. This unit also analyzes scanning data at store level which results in more intelligent merchandising decisions. This system will produce reports on a NCR 6411 dot matrix printer which are similar in nature to those produced by MILTRACS, including shelf label printing. The U.S. Air Force has recently entered into a contract with NCR and will be using a similar system at their small stores.

The following is a list of reports that can be produced from NCR-provided software for operational and managerial use, and is available to all the Services:

- Commissary Dollar Report
- Daily Activity Report
- Daily Department Sales
- Commissary Sales Report
- Daily Checker Performance Report
- Daily Store Activity Report
- Report of Deposits
- Transmittal of Merchandise Coupons
- PLU records by Department and Sub-department
- Pull File Report
- Pull File-Shelf Label Report
- Master Pull File
- Expanded Check/Change Authorization
- Zero Item Movement Report
- PLU by Item Movement
- Select PLU Item Range/Commodity Movement
- Report Code and Mix/Match Code
- Monthly Item Movement Analysis Report

Until recently, the Services have been constrained in accessing information contained in the NCR front-end processor. However, with the advent of the NCR 9150, data files have been successfully transmitted using a commercially available software package. Now also available is a software package that permits file transfer from an NCR 9020. The Marine Corps has NCR 9150 equipment and will be exercising some of the advantages of this technology enhancement and software at their two complex headquarters. The software, called Advanced Distribution Communications (ADCOM), is designed to be used within a distributed data processing environment. This environment allows the Electronic Point of Sale Equipment (EPOSE) and Electronic Cash Registers (ECR) to collect financial and sales data for a period of time and then to transfer the data to a central computer system via communications lines for consolidation and data analysis. The Marine Corps also will be using a Remote Batch Subsystem (RBS) software which provides a variety of communication protocols.

SERVICES-UNIQUE COMMISSARY AUTOMATION INFORMATION SYSTEM

Currently, unique systems used by the Services are not of an optimum quality. The following information provided by the Services describes each of the service-unique systems/subsystems, and also highlights recognized deficiencies.

U.S. ARMY (TROOP SUPPORT AGENCY--TSA)

Automated System for Army Commissaries (ASAC). The *Automated System for Army Commissaries* (ASAC) processes requisitions/inventory control actions and supports document history, Voucher Register General Control (VRGC/general ledger), and Standard Army Financial System (STANFINS) interface processing at each of the five commissary regions. ASAC is a batch-oriented system that has been modified to provide error correction capability in Europe at the region and district levels. It also interfaces the District Oriented Store System (DOSS) and Defense Personnel Support Center (DPSC). In CONUS, ASAC primarily provides VRGC and STANFINS interface support.

District Oriented Store System (DOSS). The *District Oriented Store System* (DOSS) is an ordering, receiving and inventory management system currently installed in all six districts in Europe. DOSS runs on Honeywell hardware under two operating systems: GCOS 3.1 in Frankfurt and Geissen Districts, and the HVS in the Bamberg, Stutgart, Munich, and Heidelberg Districts.

Meat Room Controller/Central Meat Pricing (MRC/CMP). *(MRC/CMP)* systems manufactured by Toledo are being installed in CONUS stores that meet dollar sales criteria and have a meat market. The Toledo system passes information on weights and cuts of meat to the region over dial-up phone lines to a region Personal Computer (PC) which provides pricing information to the meat system. The Southeast Commissary Region (SECOR) is testing a prototype central meat pricing system that prices meat by zone (vendor). If successful, meat will be controller priced at all CONUS regions using the MRC, and software developed for the test.

Standard Automated Voucher Examination System (SAVES). The *Standard Automated Voucher Examination System* (SAVES) is a commercial accounts system now in operation at two CONUS regions--Midwest Commissary Region (MWCOR) and Northeast Commissary Region (NECOR). SAVES maintains contract and vendor information for all products sold in the commissary. Invoices are matched to receipts and discrepancies are reconciled manually. (Automated System for Army Commissaries (ASAC) transactions are generated automatically as well as the disbursing and accounting information for Standard Army Financial System.) SAVES runs on the Sperry 5000/80 using UNIX operating system with an ORACLE data base management system and COBOL.

Other systems. TSA also utilizes other automated information systems which reside either on microcomputers or reside on large scale Standard Army Management Information Systems.

DEFICIENCIES IN CURRENT COMMISSARY INFORMATION SYSTEMS--TSA

On 27 May 1986, TSA received a final report on an Information Architecture Plan (IAP) Study conducted by the Technology Management Corporation, Alexandria, VA. The study provided an overall architecture, defined an organizational structure, and recommended priorities as well as various alternatives to integrate both troop support information and office automation systems. It also included an evaluation of the current system as well as systems under development or projected e.g., District Oriented Store Systems (DOSS) and Meat Room Controller System (MRC). Deficiencies were classified into five major categories: interoperability, responsiveness, dependability, efficiency, and interface capability. The study became the baseline for all ongoing TSA automation information systems initiatives to eliminate deficiencies/enhance operations, and for future long range AIS planning.

Significant accomplishments by TSA, to correct deficiencies have been reported as follows:

- TSA reorganized EURCOR into districts and began to modify the existing ADP system to support in-store requisition

processing, addressing two of the more serious problems in EURCOR: lack of control over 86 commissaries, annexes, as well as CDCs and lack of timely information to support requisitioning.

- TSA has implemented the District Oriented Store System (DOSS) in all of six European districts.

- TSA installed the first front-end scanning system at Fort Ord, CA., in 1985. Today over 75 percent of sales in Army commissaries are recorded through scanning using Electronic Point-of-Sale Equipment (EPOSE)/Electronic Cash Registers (ECR)

- Standardized software and hardware for commissary support at HQ region, district and store levels.

- Procured standard software and hardware for four CONUS regions, and changed existing processes to meet the standards.

- Procured standard programmable terminals/personal computers for CONUS and OCONUS stores.

- Implemented a quick payback program to share software among activities for an immediate return on investment of personal computers.

- Developed a Standard Voucher Examination System (SAVES) at CONUS regions, providing an automated interface to Finance and Accounting Offices for disbursing and accounting information.

U.S. NAVY (NAVY RESALE AND SERVICES SUPPORT OFFICE--NAVRESSO)

Automated Commissary System (ACS). The *Automated Commissary System* (ACS) is a CONUS inventory control system divided into a series of subsystems as follows:

Stock List Price Catalog Subsystem. *Stock List Price Catalogs* (SLPC) are computer printouts which describe items in the region and identify those stores in the region authorized to carry those specific items. The SLPC is used by stores for pricing and the region office for reviewing total stock assortments. The SLPC is created from records stored in the Item Master File of the Master Warehouse of a region.

Merchandise Transfer Subsystem. The *Merchandise Transfer Subsystem* utilizes data generated and processed at the stores, the region offices, and at NAVRESSO to determine requirements on portable electronic order entry devices and transmission of the data to the NAVRESSO computer. The information is picked up by the order entry device by scanning a "bar coded" shelf label for the catalog number or by key entry of the data. The computer processes the requirements against its master files, and provides transfer documents and picking labels for each warehouse.

Sell Price Change Subsystem. The *ACS Sell Price Change* (SPC) subsystem is a computerized method of processing sell price changes in commissary stores. Through this system the computer generates documents identifying the old and new sell price and the Sell Price Change Effective Date (SPCED).

In preparing these documents, the system automatically calculates a new sell price based on the new cost price rounded to the next higher cent.

Purchase Order Subsystem (Includes Inventory Control). The *Purchase Order* subsystem includes mechanized inventory control functions of calculating sales and adjusted sales (using NIS percent); identifying unusual sales; updating average sales (for 14-day sales cycles); determining replenishment order quantities and creating purchase orders for warehouse items. A Vendor Risk Report is created for those vendors where the minimum shipment order quantity is not met.

Direct Store Delivery Subsystem. The *Direct Store Delivery* (DSD) subsystem is concerned with those items delivered by vendors to branch stores in the region rather than to a central distribution point or warehouse. Purchase orders for DSD items are not generated by the computer. Deliveries of DSD items are made against region-issued Blanket Purchase Agreements (BPAs) or fixed period indefinite-quantity purchase orders which provide for multiple deliveries and summarized billing. DSD receipt data is encoded daily and transmitted to the NAVRESSO ADP center for processing.

Accounting Subsystem. The *Accounting* subsystem is a computerized method of processing receipts and adjustment actions to create the Journal of Receipts (JOR) and Journal of Adjustments (JOA). The JOR and JOA transactions then become part of the reconciliation of receipt files for matching by the computer to abstracted public vouchers and summarized invoice transactions.

Commissary Overseas Inventory Control Navy System (COINS). *COINS* is the OCONUS system to provide overseas commissaries with an automated means for performing various procurement, accounting, and inventory control functions. Over twenty separate operational and utility programs are used. The system is processed on an Apple IIe microcomputer.

Invoice Payment System (IPS). The *IPS* is an invoice system processed on a IV Phase Computer System located at NAVRESSO.

DEFICIENCIES IN CURRENT COMMISSARY AUTOMATED INFORMATION SYSTEMS--NAVRESSO

In early 1988, a Navy Strategic Information Systems Planning (SISP) Team was formed to develop a vision of what information systems should be providing in the 1990s and to develop a long range plan. The team was comprised of Navy experts and Arthur Young information systems planning consultants. In October 1988, the Commander NAVRESSO approved an Applications Transfer Study (ATS). The ATS is an IBM-developed technique to provide a customized information systems logistical road map. Utilizing the SISP study, NAVRESSO used the ATS methodology to establish resource requirements, develop an implementation plan, and formulate the organizational structure to support the next generation of information systems.

These studies involve not only the Navy commissary automated information system, but all systems supporting the NAVRESSO resale system mission; Navy Exchange, etc. Deficiencies highlighted by the studies directly or indirectly impact upon the commissary system which is dependent upon reimbursable

support from Navy Exchange AIS resources, which use resources described in the study as "a technology that is two generations behind the state of the art".

Major deficiencies are obsolete hardware, outdated software design philosophy, tape-oriented system, functionally unsatisfactory systems, non-standard operating systems at field activities and Field Support Offices (FSO), insufficient capability at store level, under-utilization of microcomputers, absence of technical skills, and inadequate systems capability at HQ NAVRESSO.

U.S. AIR FORCE (AIR FORCE COMMISSARY SERVICE--AFCOMS)

Automated Commissary Operations Systems (ACOS). The *Automated Commissary Operations System* (ACOS) is an AFCOMS developed system consisting of the following subsystems operating on NCR 9300 equipment:

Ordering Subsystem. This subsystem consists of three phases, *Suggested Order*, *Amend/Cancel*, and *Final Order.* The *Suggested Order* phase computes requirements based on the past 12 months consumption, the seasonal factor, sales trend factor, balance on-hand and quantity due-in. Since the process maintains an order history, abnormal orders for special promotions will not affect future orders. If excesses are detected during this phase, data is stored for the printing of an excess message. The *Amend/Cancel* phase allows the user to adjust quantities and prices of an order. After amendments are made, formal due-in records are created, and the *Final Order* is generated in the required form, either hard copy, AUTODIN, or EDI.

Receiving Subsystem. The *Receiving* subsystem processes Blanket Delivery Order/Blanket Purchase Agreement (BDO/BPA), Military Standard Requisitioning and Issue Procedures (MILSTRIP) and produces receipts. The receipts are processed by exception or by item. The operator has the capability to review the receipts and correct any discrepancy in price, quantity shipped or quantity received. After the information is verified, the General Ledger accounts are updated, and the information is posted for the Monthly Summary Report, and the Patron Savings Report. The subsystem allows prior receipts to be corrected, and makes appropriate changes to the General Ledger, Monthly Summary, and Patron Savings records. A Receiving Report is generated after the processing is complete, and contains the Routing ID, Department, Document Number, Item Description, Unit of Issue, Quantity Due-In, Quantity Shipped, Quantity Received, Price Per Item and Extended Price.

File Maintenance Subsystem (Region). ***Region File Maintenance*** allows the region item managers to update the data files, and have those updates applied at each store as required. Maintenance activities include building new item description records, and modifying existing ones. The item manager can add a new item for a single store, or for any number of stores within the region. If the item already exists at one store, the item manager can copy it to another store. Existing item description records can be modified, or flagged for deletion for any or all of the stores in the region. For each store with ACOS, the subsystem builds a file containing database changes. Region personnel can initiate a program that automatically calls each store, and passes the maintenance file to that store.

File Maintenance Subsystem (Store). This subsystem applies changes to the store database that are entered by the item managers at the region. Other types of changes may be made at the store such as:

- Immediate Price Changes
- Daily/Frequent/Direct Delivery Information
- Shelf Space Information
- Warehouse Locations
- Order Mode

MILSTRIP Subsystem. The *MILSTRIP* subsystem includes *MILSTRIP Status*, *MILSTRIP Delete*, *Shipping Status*, and *Follow-up*. *MILSTRIP Status* is received from DPSC for all requisitions submitted to them from AFCOMS. *Shipping Status* updates the Due-In record with the latest status and produces a listing of all due-in or billed-not-received items. All exception status, i.e., cancellations, substitutions, etc., are printed on the Billed Claims Receivable, and Claims Payable records from Due-In File. The system reads the *MILSTRIP Delete* information, and produces a listing reflecting the deletions. The *Follow-up* report is generated after reading the Due-In File to determine if any records require follow-up to DPSC. The reports generated by MILSTRIP contain the Document ID, the Document Number, the National Stock Number (NSN), Nomenclature, Quantity, and the Shipment Control Number.

Store-Day-End Subsystem. The *Store-Day-End* subsystem posts the item movement to the lot inventory data, month-to-date quantity sold, and current movement fields. It also updates the vendor performance data fields, and the month-to-date cost and sell totals for each department. It adds new items to the Price Lookup (PLU) File, and changes PLU item prices and descriptions. The *Store-Day-End* subsystem prints the Daily Receipts Register, Late Vendor Report, Vendor Performance Report, Out-of-Stock Report, Never-Out-Item Report, and the Price Change Report. There are also anomaly reports which highlight information about possible error conditions.

Store-Month-End Subsystem. The *Store-Month-End* subsystem carries out the steps necessary to close out one month processing. The items to be deleted are flagged by File Maintenance, the monthly totals are set to zero, the month's consumption history is posted to the appropriate fields, and procurement data is extracted for transmission to the region. The following are the outputs produced by this system: Summary Receiving Report, Local Patron Savings Report, Monthly Vendor Performance Report, copy of the General Ledger File MILSTRIP Open Item List which is in sequence by NSN, as well as the requisition date.

Charge Sales Subsystem. The *Charge Sales* subsystem allows an administrative clerk to price and extend a subsistence issue, a credit turn-in, or a correction by entering the NSN/UPC, and the quantity. The operator can display the month-to-date transactions for a customer account, or print a more detailed listing, as required. This subsystem updates general ledger accounts, inventory balances, month-to-date quantity sold and the monthly transaction file. The *Charge Sales* subsystem produces the Subsistence Issue Report, the Credit Turn-In Report, Subsistence Issue Correction Report, Customer Account Monthly Report, and Charge Sales Monthly Totals Report.

Interfund Bills Processing Subsystem. This subsystem processes the Accounting and Finance tapes that contain the billing information. These tapes are received via AUTODIN through the base data processing installation. Bills are checked for valid document identification, and the correct base code. Valid bills are processed against the Due-In File. If the bill is invalid, it is corrected interactively by the operator. Once the bill is verified as accurate, the General Ledger is updated. Outputs of this system are the Interfund Billing Transaction List, and the Interfund Billing Transaction Error List.

Region Month End Subsystem. The *Region Month End* subsystem consolidates data received from the store, applies file maintenance and produces reports. During file maintenance, items or vendors are flagged for deletion. Outputs produced by this subsystem are: The Decentralized Contracting Report, Monthly General Ledger Summary, Summary of DPSC Receipts, and Summary Receiving Report.

Troop Support Subsystem. The *Troop Support Subsystem* capabilities include the *Troop Price List*, *Troop Price Set* and *Inventory Accounting Voucher (IAV)*. *Troop Price List* is executed on the 25th of the month to compute low bid for local purchase troop items for the next month. The report contains NSN, Description, Case Pack, Unit of Issue, and the Low Bid Price. This report is forwarded to Food Service. *Troop Price Set* sets the sell price for the upcoming month for all Troop items. For MILSTRIP items, the price is the price that is effective on the first of the month. For local purchase items, the sell price is set to the low bid price computed by *Troop Price List*. The *IAV* (IAV) computes the change in the inventory value for items in the Troop warehouse based on the difference between the old sell price, and the new sell price. The General Ledger is updated to reflect the change in value. The report generated lists each item by NSN, item description, unit of issue, case pack, cases on hand, units on hand, current sell price, old sell price, amount of price change, extended value and extended change in value. Totals of extended value and changes in value are printed by Routing ID, and by store.

Warehouse Pull Sheets Subsystem. This subsystem is executed daily at each store. All items coded for the warehouse will be extracted, and printed on the pull list. A suggested number of cases to pull is calculated by multiplying the last available daily item movement times the daily factor. The daily factor can be adjusted by store personnel to compensate for special sale promotions, holidays, paydays, etc. The adjustment can result in either increased or decreased pull quantities.

Data Base Inquiry Subsystem. This subsystem provides capability for query of the store database by UPC, Locally Assigned Number (LAN), European Article Number (EAN) or vendor number. Outputs display the previous 12 month history, the requisitions due-in, the on-hand balance by lot, or the indicative information for that item. This information includes the cost and sell price, the inventory balance, due-in, quantity sold, and case pack information. Inquiries on vendor numbers display indicative data, i.e., vendor name, number of items, contract dates, etc. General ledger information can also be obtained through the subsystem. All accounts contained in the general ledger file can be displayed, or

only accounts that have balances other than zero.

Inventory Control Subsystem. The *Inventory Control* subsystem provides the capability to maintain a perpetual inventory of all items in the commissary, except meat and produce. The beginning inventory for each item is loaded into the computer before ACOS is implemented. After implementation, the receiving subsystem adds to the inventory. Inventory reductions are tracked by the scanners and the *Charge Sales* subsystem. Salvaged items, transferred items, and vet samples are tracked by using the *Inventory Control* subsystem to adjust the inventory. Corrections to inventory can be made after a physical count shows a discrepancy between actual item balance and inventory balance. The Inventory Control Report is produced after each transaction, and reflects the adjustment to inventory.

Utilities Subsystem. This subsystem is a compendium of programs that provide a variety of capabilities for store personnel. These include print routines, such as *Shelf Label, Price List*, and inventory listings; creation of system interface tapes; and the ability to control certain optional features through a table maintenance feature. *Utilities* also include *Vendor Cross Reference*, a subsystem that provides the means to list all vendors in the database, the number of items the vendor provides per base, and other contracting information. The listing can be provided by Vendor Number, Vendor Name, BDO/BPA Number, Item Manager, Expiration Date, or Procurement Date.

AFCOMS Region File Maintenance System. The File Maintenance System, maintained on the NCR 9300 Classic/9300IP at the CONUS regions, supports the troop issue and resale missions. The system automates the labor intensive tasks of controlling and managing: (1) the vendors from which the commissaries are authorized to purchase commodities, (2) the commodities the commissaries are authorized to purchase from these vendors, and (3) the not-to-exceed price that commissaries are authorized to pay for these commodities.

The Commissary Automated Management Network (CAMNET). CAMNET interconnects all AFCOMS units and supports all aspects of the AFCOMS worldwide mission. Wang VS100s and a VS85 at the headquarters, linked via the Defense Data Network (DDN) to Wang VS100s/VS85s and personal computers at region and store level throughout AFCOMS, support electronic mail, word processing, centralized data bases, and applications program capabilities. Five regions have a Wang VS100, while four have a Wang VS85. Each store has two personal computers for their use which will interface with Wang VS100s/85s utilized by the Work Information Management System (WIMS) or the Services Information Management System (SIMS) (designated by a particular base), which will in turn serve as a host interface with the DDN. Currently, some stores are directly connected to the DDN node, but this condition will change as WIMS/SIMS sites acquire DDN support.

DEFICIENCIES IN CURRENT COMMISSARY INFORMATION SYSTEMS--AFCOMS

The Air Force Commissary Service has two systems which were fielded for different

purposes at different times. The initial system is a sophisticated ordering and receiving system (Air Force Commissary Operations System (ACOS)), and the later system (Commissary Automated Management Network [CAMNET]) is a management system that provides word processing, electronic mail, centralized data base applications and programming capabilities. According to planning documents, the following deficiencies have been recognized:

- Data applications on each system duplicate or complement information on the other system, suggesting integration.
- ACOS is not user-friendly. Programming changes are complex and require inordinate amounts of time to initiate. There are approximately 94 different programs in this system.
- CAMNET is not meeting DOD standards for interoperability.
- CAMNET does not have the capability to entirely support new applications that are being developed, which are bi-products of the Commissary Automated Information Requirements Study (CAIRS).

U.S. MARINE CORPS (FACILITIES AND SERVICES DIVISION)

Commissary Management Information System (CMIS). The *Commissary Management Information System* (CMIS) supports information processing for the Marine Corps commissary complexes utilizing Sterling Software's Distribution IV applications. These applications support processing of store orders to the warehouse, invoicing of these orders, with integrated data flow to a receivables system, a general accounting system, and an inventory management system. Processing of data is a combination of on-line interactive, batch, and overnight modes.

On-Line Systems (OLS). These subsystems are so-named because data submitted by the user is processed as soon as the data is received at the mainframe. Output is returned to the user's mailbox within two to ten minutes, depending upon the volume of data submitted.

Order Processing System (OPS). The main entry point to Distribution IV is through the *Order Processing System*, where customer orders are entered into the processing stream. This system performs user-selected options such as customer credit checking, order limit checking, wholesale and retail pricing, validation of restricted merchandise such as drugs, private labels, inventory allocation of merchandise, case rounding, merchandise substitutions, and freight and additional non-merchandise charge calculations. Output from OPS are multiple reports, all of which are user-definable to best meet the production and management needs of the organization.

Customer Invoicing System (CIS). This process produces an invoice for the customer as well as other management and control reports. Invoices remain on the *Order Suspense File* until end-of-day, at which time information from the invoice is passed to the *Distribution of Invoices System* for subsequent processing. The invoices are then purged from the *Suspense File*. Orders that have not been triggered into an invoice remain on the *Order Suspense File*.

File Maintenance System (FMS). This subsystem provides the ability to maintain the master files used by the *On-Line System* subsystems in their processing. These files include the following files:

- Item File
- Customer File
- Vendor File
- Salesman File
- Terms Table File
- Order Discount Routine File
- Freight Routine File
- Shipping Assortment File
- Contract Catalog File

Batch Inquiry System (BIQ). This subsystem allows the user to receive a printed copy of a record or records from the item, customer, vendor and contract catalog files.

Distribution of Invoices (DIS). This system runs during overnight processing by the Sterling Data Center. It takes customer and invoice data and passes it to the *Accounts Receivable System*. It also checks accounts receivables, and processes sale items as well as accounting information.

Inventory Management System. The *Inventory Management System* maintains a three year base of data on each item active in the distribution center. In addition, IMS retains specific information regarding the last ten receipts of each item (cost, quantity, date received, etc.). Receipt information is posted to IMS on an overnight basis. Inventory journal entries are automatically posted to the General Accounting System. This system also forecasts item movement and calculates inventory replenishment requirements, which result in Suggested Order Quantities (SOQs) for the coming week. Additionally, it provides item analysis reporting capabilities.

Purchase Order Write (POW). This subsystem provides the ability to maintain the temporary purchase order created during the IMS weekend processing. Items may be added, deleted, or quantities and costs changed. Similar to the order processing and invoicing techniques, once all maintenance has been done to the purchase order, it must be triggered. The triggering process produces a printed purchase order which is available to the user the following morning. The overnight processing also creates journal entries for the General Accounting System for all triggered purchase orders.

Merchandise Management Reporting (MMR). This subsystem provides management with replenishment and merchandising oriented information. Sales and purchase information is passed to MMR from the DIS and IMS systems. Three rolling years of history provide comparison capabilities for period or yearly analysis. Multiple standard reports allow the user to analyze inventory performance by vendor, buyer, item, or various product classifications such as fine line class, department number, etc. This subsystem also supports user-defined reporting capabilities.

Physical Inventory System (PHY). This subsystem provides the ability for the user to count all merchandise in the distribution center and validate the physical presence of the merchandise with system inventory counts.

Accounts Payable System (APS). This system maintains the current payables liability position and schedules cash requirements. The user inputs vendor invoices and credit memos.

APS is an open item system, tracking each invoice and credit memo from its entry until it is paid or is deducted from a payment. The system will calculate appropriate discounts and will produce checks for all accounts due during a user-requested check run. The system selects invoices also for payment based on the due date recorded for the invoice and contention status. Manual checks are also supported in this system and these are additional features which update the general accounting systems.

Purchase Reconciliation System (PRS). This subsystem monitors the receipt of merchandise and the processing of the corresponding vendor's invoices to assure that the receipts are made and properly costed in the inventory. The system is designed to automatically write off receiver/invoice differences of minor amounts as specified by the user in the APS Subscriber File. Adjusting journal entries are created for the *General Accounting System.*

Accounts Receivable System (ARS). This system tracks the receivable position of the organization to provide credit granting and cash receipt information. Sales to customers are automatically posted in ARS during the overnight processing, producing sales and credit memos, journals and error and audit reports. Adjustments and payments are entered directly into the Accounts Receivable System.

General Accounting System (GAS). This system is a double entry accounting system, fully integrated with the other *Distribution IV* systems for accurate maintenance of the general ledger. Automatic journal entries are created by the *Distribution of Invoices System*, the *Accounts Receivable and Payable Systems*, the *Inventory Management System*, and the *General Payroll System.* Manual journal entries may be entered to record accruals, amortization and depreciation, and other miscellaneous entries and adjustments. Budgets and statistical amounts may also be recorded by manual entry. Both horizontal and vertical proration is available.

Data Base System (DBS). The *Data Base System* is an integrated system that provides long-term storage of data generated by other *Distribution IV* systems. It enables the user to selectively retrieve data for reporting and analysis purposes.

Detail Data Base (DDB). This data base provides detailed analysis by item, customer, territory, salesman, gross margin, sales dollars, and multiple other criteria that is most meaningful to management. This data base also contains cash and paid ARS information, tax data, and all IMS transactions.

DEFICIENCIES IN THE CURRENT COMMISSARY AUTOMATED INFORMATION SYSTEM--USMC

- Equipment for the current system requires upgrade.
- Application programs need to be standardized for use at both the East Coast and West Coast complexes.

NOTE: Work is currently in progress to implement the system in conjunction with Informatics General Corporation (Sterling Software, Inc.) Columbus, Ohio.

FUTURE SYSTEMS

All the Services are involved in the development of short, intermediate and long range plans. The planning efforts are driven by the various Services' regulations on planning, results of special studies, internal recognition of system deficiencies requiring correction, modification or termination, and by the ever-advancing state of the art.

STATUS OF SYSTEMS IN PROGRESS OR PROPOSED

U.S. ARMY (TSA)

Army Commissary Automation System (ACAS).

Objectives and Strategies. The Army Commissary Automation System (ACAS) is a TSA initiative to consolidate current commissary automation initiatives with a distributed data processing capability. The primary objective is to have a single world-wide commissary system to facilitate systems support and maintenance; interface with other standard Army and DOD systems; provide data entry validation as the data are entered; provide machine-to-machine communications and interface communication among the TSA headquarters, commissary regions, districts and stores; and to obtain efficiencies in commissary operations at all organizational levels. This system will eventually replace the following existing systems: Automated Systems for Army Commissaries (ASAC), Electronic Point of Sales Equipment/Electronic Cash Registers (EPOSE/ECR), District Oriented Store System -Modified (DOSS-O for OCONUS), Meat Room Controller/Central Meat Pricing (MRC/CMP), and microcomputers.

Short term initiatives (FY 1990-1991).

- Upgrade operating systems of two European Districts.
- Transition remaining region processes to standard hardware and software.
- Develop second phase of region bill paying system.
- Adapt the Europe system to a central distribution environment.
- Adapt a modified Europe system to the CONUS environment.
- Discontinue ASAC operations in the CONUS.
- Complete scanning implementation activities.
- Interface the scanning system to DOSS.

Long range planning (5-10 years) (FY 1992-2000).

- Develop automated interface to vendors for ordering.
- Create "paperless" environment.
- Integrate automation modules/subsystems into an overall commissary system.
- Exploit technology.

- Employ configuration management techniques.

- Continue to enhance support through opportunities of new technological advances.

Service Center System (SCS).

Objectives and Strategies. The Service Center System (SCS) is an automated function currently decentralized in CONUS regions. The center will receive and process large volumes of data, most of which will be orders and receipts from stores, catalog data from DPSC and bills from vendors. Interfaces to STANFINS-R for disbursement and to STANFINS-R/STARFIARS for stock fund accounting will be automatically generated. The system will replace the SAVES System and will be operated on a UNISYS 5000/80 upgraded to a UNISYS 5000/95.

Short Term Initiatives (FY 1990-1991). Move the following decentralized functions to the Service Center System:

- Voucher examination
- Contracting of Resale Subsistence
- Property Management
- Cataloging

Long Range Planning (FY 1991-2000).

- Enhance hardware and software to support TSA Service Center in an integrated environment.

- Establish Service Center's communications link with vendors, DPSC, TSAMIS, regions and their subordinate elements.

- Enhance and expand the range of functions performed in the Service Center System.

Troop Support Agency Management Information (TSAMIS).

Objectives and Strategies. The TSAMIS is a system initiated by TSA to automate manual labor intensive processes by using data bases to support centralized business planning, control program management and execution, resource management, personnel management, facilities and equipment information management, research and development, support and administration and managerial decision making and oversight. Hardware utilized will be UNISYS 5000 utilizing a UNIX operating system and ORACLE as the database management system (DBMS). This system will be the backbone for local area networks, and long line communications with HQDA, Regions, districts, stores and other agencies.

Short term initiatives

- Continue the conversion, development, redesign of functions identified in the Troop Support Agency Information Architecture Plan.

- Continue to implement local area networks which allow sharing of personal computer software and data and provide access to minicomputer applications and databases.

- Establish HQ TSA communications link with HQDA, commissary regions, districts, stores and other agencies.

Long Range Planning

- Complete development of TSA corporate data base and functional support applications.
- Automate the command publications process and interface with ISC for publication printing support.
- Establish a formal executive support/decision support system.
- Implement an automated forms production and distribution system.
- Minimize papers and hard copy reports.
- Continue to enhance support through opportunities provided by new technological advances.

U.S. NAVY (NAVRESSO)

Automated Commissary Accounting and Procurement System (ACAPS).

Objectives and Strategies. The Automated Commissary Accounting and Procurement System to run on minicomputers at the headquarters and in the field, combines four commissary system applications. The Automated Commissary System (ACS) and IV Phase Invoice Payment System will be merged into ACAPS. Two manual systems, the Invoice Payment System (IPS) and Direct Store Delivery will be automated and also merged into ACAPS. Plans to improve support for the commissaries are based upon automated systems already supporting the Navy Exchange. Plans are also being made to utilize EPOS data collected at cash registers to track item movement for store replenishment and perpetual inventory purposes.

Short term initiatives/accomplishments.

- ACAPS Procurement and Accounting File Maintenance Program (phase 1) completed at FSO Jacksonville and implemented Jan 1990.
- Phase II Down-load Program projected for 4th quarter, FY 1990.
- Program specifications for the Invoice Payment System completed.

U.S. AIR FORCE (AFCOMS)

Commissary Automated Management Information System (CAMIS).

Objectives and Strategies. The Commissary Automated Management Information System is an AFCOMS initiative to merge and streamline three major systems (ACOS, CAMNET, Scanning) currently being used. This merger also incorporates the outgrowth of the Commissary Automated Information Requirement Study (CAIRS) now called STARS which provides a macro as well as micro view of overall AFCOMS functions. In conjunction with this major development effort, AFCOMS plans to acquire 4th generation hardware and software to facilitate a long range objective of having one AFCOMS system.

Short term initiatives--1989-1990

- Exploit the results of a recent top-down Study (CAIRS).

- Acquire Air Force or other government standard hardware and software systems.
- Link all AFCOMS organizations via DDN.

Long term objectives--1990-1995

- Establish one communications--computer system to support AFCOMS.
- Install a symmetric hardware/software configuration AFCOMS-wide.
- Establish a near paperless operation by 1998.

U.S. MARINE CORPS (FACILITIES AND SERVICES DIVISION).

Commissary Management Information System (CMIS).

Objectives and Strategies. The Marine Corps in conjunction with Informatics General Corporation (Sterling Software, Inc), has been engaged in an on-going effort to enhance, integrate and standardize all aspects of the current system. These enhancements will provide sufficient information for general ledger financial control, improve ordering/receiving functions at stores and central distribution centers, improve productivity through exploitation of technology, give direct access to accounting and purchasing specialists, as well as provide for better management information.

Short term objectives. (1 to 2 years).

- Complete current EDI initiatives
  - •• Maximize participation in electronic invoicing.
  - •• Implement Electronic Funds Transfer at ECCC (scheduled for 4th Qtr FY 1989).
  - •• Complete communication link from ECCC to Camp LeJeune Disbursing Office to retransmit invoices for EFT.
  - •• Implement EFT at WCCC (scheduled for 4th Qtr FY 1990).
  - •• Initiate totally "paperless" transactions at ECCC, i.e., electronically transmitting orders, receiving invoices, retransmitting invoices, and transferring funds. (Scheduled for FY 1990).
- Initiate "Automated Shelf Management".
- Initiate Debit Card Test at Cherry Point, NC.
- Accept enhanced CMIS (scheduled for 2nd Qtr FY 1990).

Long Range Planning (3 to 5 years)

- Upgrade NCR Scanning System.
- Refine CMIS requirements for year 2000.
- Develop RFP for needed system changes for FY 1995 budget cycle.
- Maximize "Paperless" transactions.
- Coordinate with the other Services for the development of a standard automated system to support retail operations.

OBSERVATIONS

Although these plans show the individual commissary services are programming for system enhancement/change, the resources to implement the initiatives will be scarce. Consequently, the separate Services should be reviewing alternatives that are realistic in view of these shortfalls. To illustrate, if the approach to enhance a system is directed at centralization, the communication costs involved should be addressed vis a vis a decentralized approach. Using EDI/EFT at store level to satisfy a bill paying function might be a more viable option than centralized bill paying. The use of the Defense Data Network (DDN) should also be of prime consideration as opposed to commercial communications support. Presently, DDN circuits are in short supply relative to the demand, but all the Services are trying to solve this problem by sharing these circuits through the use of concentrators which will reduce the cost to the user. Finally, all planning and initiatives should emphasize an open systems architecture, transportable software and communications protocols that permit interoperability. All the Services are aware of these requirements, but there needs to be more emphasis in the planning documents.

INTEROPERABILITY

All Services use NCR 9020/9150 mini-computers as well as Electronic Cash Register Equipment (ECR) for scanning, but also use a variety of other equipment. TSA utilizes DPS6 and Sperry 5000 minicomputers with a variety of microcomputers. NAVRESSO uses a large mainframe Burroughs B6900 centrally located at NAVRESSO with files updated by stores and Field Support Offices (FSOs) via hand-held devices and work stations. AFCOMS is using NCR 9300 minicomputers, WANG VS 100/85 minicomputers and microcomputers, while the Marine Corps is using DPS6 equipment and is buying computer time from Informatics Corporation, Inc. who utilize a large Amdahl mainframe. Three Services use NCR 2126 ECRs and the Air Force will be using NCR 2127 ECR equipment. Additionally, a variety of operating systems are being used, and each Service has a variety of application programs in support of ordering, receiving, inventory management, bill paying, procurement, file maintenance, day end processing, month-end processing, charge sales, troop support, merchandise management, financial, case labeling, etc. Whether the application programs developed and used by one Service could be used by another Service depends upon a number of factors requiring analysis/research by Automation Information Systems personnel who specialize in program development, personnel who have detailed knowledge of the specific applications program, or who are subject matter area specialists in the specific function addressed, i.e, ordering, receiving, bill paying, etc. From a communications aspect, it would appear that the separate Services could interface their unique systems provided (1) hardware is capable of using software compatible with IBM binary synchronous protocols such as

2780/3780, (2) have similar operating systems, (3) or share a common communications protocol. Table 10-3 shows how interoperability might be achieved with existing hardware, but this interoperability would provide only for the passing of files at this time if a network between all Services was to be established.

SYSTEM	OPERATING SYSTEM	EQUIPMENT
AT&T 3B2/600G	UNIX	EMULATION PORT
BURROUGHS 6900	MCP	NETWORK SUPPORT PRCSR
HONEYWELL DPS 6	ULTIMATE PICK	MULTI-LINE CONTROLLER
NCR 9300	ITX	NONE REQUIRED
SPERRY 5000	UNIX	621 COMM CONTROLLER
WANG VS100	VS	6554 TELECOM IOP WITH 64K COMM CONTROLLER

Note: All systems use 2780/3780 bisync communications protocols.

Table 10-3. How Interoperability Might Be Achieved

CONCLUSIONS AND RECOMMENDATIONS

10.1 OPTIMIZE AUTOMATED INFORMATION SYSTEMS (AIS)

BACKGROUND

Front end scanning equipment from the same manufacturer is currently available in all the commissary stores of the various Services. This is not the case for the other Automated Information Systems (AIS) currently employed by the commissary systems. The unique applications found in Automated Data Processing Equipment (ADPE) and communication support as well as the varying degrees of emphasis placed on the functions being supported are particularly noteworthy.

Each of the separate commissary systems are also looking to improve present systems. The improvements being contemplated are of a nature that may no longer be appropriate. Upgrading AIS may be uneconomical or unfeasible given emerging and future technology.

To illustrate, one should look to the commissary systems operated by the Services in the 1970s. Operating procedures consisted of clerks maintaining labor intensive records (handscribed) on inventory status, item movement and stock status. Warehousemen conducted physical inventories periodically which were also manually transcribed to the various accounting records. Punch card technology was used to reduce the labor intensity but the recording function remained.

As emerging technology drove systems away from punch cards, the systems became more sophisticated but they were still driven by the previously required manual information in the areas of accounting and inventory control. With the implementation of front end scanning, commissary systems must be redirected to accommodate this technology.

DISCUSSION

The commercial grocery industry has made great strides in exploiting and using software systems which complement scanning, and which allow capture/manipulation of data resident in scanning system processors. When such off-the-shelf software is available, and can be modified to satisfy commissary service major requirements, it should be acquired provided it is cost effective and meets DOD AIS standards. This is not to be construed that "one software system" can fit the requirements of all the Services, but it does suggest a joint service research of the market-place to take advantage of the benefits to be gained from a "quantity buy." There are other advantages to an across-the-board acquisition, but of major importance is the Services working together, taking advantage of off-the-shelf systems, to eliminate the duplication of effort now being experienced in developing in-house systems.

Most grocery chains use mainframe computers at region complexes to manage inventory and distribute products to stores. The industry is driven by front end scanning systems. Commissary systems have the capability of adapting those industry scanning driven systems during their proposed upgrades. Chapters 5 and 11 provide organizational structures that can optimize these industry procedures.

The Marine Corps commissary system is an example of how industry equipment and practices can be adopted for government use. Particularly noteworthy is the effort they have expended in implementing state of the art technology such as Electronic Data Interchange (EDI) and Electronic Fund Transfer (EFT). Their efforts are on the verge of making the Marine Corps system a "paperless" environment. Provided EDI/EFT is deemed cost effective, this effort must be exported to the other Services to reduce operating costs, preclude duplication of effort and remain in step with the private sector.

The process for commissary AIS procurement also needs standardization. As previously mentioned, all of the Services currently use front end scanning equipment from the same manufacturer. While the equipment has different features with software producing different management reports, the operating systems and major components are standard.

The Services procured their scanning systems over a fourteen year period. Although many factors caused this prolonged procurement, a planned joint acquisition could have eliminated a tremendous duplication of effort and provided economies of scale in the procurement process. For example, a five million dollar acquisition could result in a thirty-five percent discount from the General Services Administration (GSA) schedule but a twenty million dollar acquisition should realize at least a fifty percent discount.

The Navy and Air Force are currently reviewing the possibility of using self-scanning equipment in commissary stores. Self-scanning is a relatively new concept which allows

customers to scan their own purchases and reduces the need for checker personnel. This is a prime opportunity for a joint service procurement of commissary AIS equipment. As the other Services begin following up on the work spearheaded by the Marines in EDI and EFT, additional joint procurement opportunities might be considered in this area.

RECOMMENDATIONS

10.1a. Until such a time as a consolidation of the Services may be effected, the DOD Resale Executive Board appoint a joint services task force to test initiatives (such as self-scanning and EDI/EFT) and provide procurement recommendations, if proven cost-effective, and in compliance with applicable government standards. (See also para 6-14a and b).

10.1b. That the DOD Resale Executive Board establish a standing AIS committee to periodically review and share AIS programs, goals and objectives. That this committee establish procedures with oversight authority to insure adherence to standards prescribed by the committee.

10.1c. Until such time a consolidation of the separate Services may be effected, the DOD REB appoint a joint service task force to research and recommend a state-of-the-art, off-the-shelf proven chain store inventory management system that meets DOD standards. DOD REB immediately advise the separate Services that until such time as guidance can be furnished, and a task force established, unilateral action (new starts) to design/develop a major in-house system, or acquire a major commercial system resembling the system described in Chapter 5 will be held in abeyance. (This does not apply to approved, existing development programs, or efforts to update hardware to meet DOD standards).

SUMMARY

The Services, with Department of Defense oversight, need to exploit technology, make sure certain AIS standards are adopted, and share AIS initiatives. Centralizing procurement of AIS resources where feasible will eliminate duplication of effort and facilitate integration of state of the art grocery industry Automated Information Systems into the commissary system.

Chapter 11

COMMISSARIES IN THE FUTURE A MODEL FOR SUCCESS

OVERVIEW

The commissary store of the future must be a modern, efficient structure providing the non-pay entitlement to a more demanding clientele. It will be neat, clean, well-stocked and safe. The military force structure will be married and technically oriented during the next decade with the majority of military families in the two-income category. If the military plans on retaining the force structure it spent so many dollars to equip and train, it will have to cater to the needs and wants of these sophisticated shoppers. The key factor in commissary store success will be convenience both in store shopping hours as well as in prepared food product lines. If we plan correctly, the commissary shopping experience will become a family event with a commensurate improvement in the perception of this non-pay entitlement by our active duty and retired soldiers, sailors, airmen and marines.

The commissary system will have to undergo some drastic changes as it moves into the next century. All agree that commissary support to overseas families is a responsibility of our government and should be supported by appropriated funds. That same support,

understandably on a smaller scale, should be available to patrons at isolated locations such as the soldier near the demilitarized zone in Korea or the sailor at Thurso in northern Scotland. The appropriated fund support for the bulk of our business in the United States is not as fixed and will come under ever-increasing scrutiny during the next few years.

During this current period of relatively peaceful and prosperous relations with our traditional rivals, the government is continuously looking at reducing expenditures on defense. If this trend continues, the level of appropriated fund support will remain constant at best with the possibility of funding reductions looming in the future. Should this occur, alternative funding options may require the commissary patron to share in some of the cost burden of providing the commissary benefit. On the other hand, as responsible leaders, we owe the customer the benefit of the doubt in proving that the commissary system is as efficient as possible before we require our patrons to share in the cost burden of operating the system.

This chapter will provide the results of our efforts to build a better commissary system. It will look into the commissary store of the future and outline a viable distribution and management support system to ensure that the future commissary store is successful in meeting the needs of its target population while making the commissary an exciting place to shop.

THE FUTURE COMMISSARY STORE

Our future commissary will be much larger than today's store. Item selection will be greater than ever as commissary management strives to serve more demographic groups: the young, single soldier, the older married airman, the traditional Navy family of four separated from the sponsor due to sea duty, and the retired marine. In addition, the ethnic tastes of the clientele will shift as the force structure becomes more black, hispanic, and oriental with a strong leaning toward european and regional preferences.

The shift from canned products to fresh, frozen or shelf-stable items will continue and will generate additional items to be carried. Patrons will no longer settle for traditional TV dinners; they will demand pre-made entrees in a chilled state for quick preparation after work for the family dinner. Mothers and grandmothers may have bought flour in five and ten pound bags, but the working mother of the future will demand convenience when she bakes for her children. She'll buy cookies and cakes in a fresh, chilled or frozen state.

The grocery department will be the heart of the store, with service departments occupying the perimeter. In-house services will include bakeries, delis, fish markets, pre-made salad outlets, as well as pizza, ice cream and frozen yogurt parlors. Revenue generating services operated by the exchange or by contractors will provide other one-stop services to include film processing, video rentals, child care, shoe repair and banking. Beer and wine will also be available. Revenue generated will be used to improve facilities or provide

unusual services such as home delivery to the infirm. Commissaries will be focal points for ecological programs offering pickup points in front of the store for old newspapers, various recyclable wastes and old clothing for the needy.

Produce will be highlighted as will so-called health foods. The emphasis will be on products low in cholesterol and fat, high in fiber and low in calories. Pre-made exciting cold foods will provide the military family with alternatives to traditional meat and potato fare.

The dwindling labor resources will drive commissaries into automation in a big way. Store meat cutters will be replaced by pre-priced, precut and pre-wrapped case-ready red meats, in the same manner fresh chicken is marketed today. Self scanning will be commonplace, requiring customers to scan their purchases and use a central collection point for the payment, similar to a self-service gas station. Payment will be made electronically with a debit card and coupons will be automatically credited. Paper coupons will become obsolete.

A renewed emphasis on energy conservation will require climate control by computers, heat recycling from compressors, and chilled air reallocation from refrigerated cases to building cooling systems. Floors will be cleaned and shined with space-age chemicals, not wax.

Just-in-time delivery from distributors and manufacturers will be common place. Item movement will generate orders to a central distributor who will make delivery in hours not weeks. The mission of warehouses behind commissaries will be completely revamped towards storing large quantities of items purchased by region buyers from vendors at exceptionally low prices in the same manner commercial grocery chains use forward buy techniques. Electronic shelf labels will update prices throughout the store at the push of a button. Distribution will be efficient, simple, timely and responsive to the store manager.

The manager of the futuristic store will be an ambassador of good will. He will be college educated, computer literate and professionally trained. He will have the ability to use automated reports to identify economic and market trends and adjust his equipment and work force to insure he meets the needs of his patrons. He will drive the system.

ORGANIZATION AND MANAGEMENT PHILOSOPHY

The commissary organization of the future will be vastly different from what it is today. It will use state-of-the-art technology to order its product, manage its inventory and pay its bills. It will be reorganized to reduce redundant headquarters and paper producing administrative functions. It will use the private sector to perform functions that can be performed better in that arena, but will have the ability to move tasks back into in-house operations when it is economically advantageous to do so.

The system will safeguard government property without excess controls but will pin responsibility on a single individual to avoid conditions conducive to failure. It will provide that individual with an organization that can be successful if properly managed. The current system operates within a framework of six separate Department of Defense activities and thus will not meet the ever-changing requirements envisioned in the next century. The current system success, despite the organizational obstacles, is directly attributable to the hard-working dedicated employees and leaders of the current system. The system will capitalize on this dedication during the transition to a more efficient organization.

The time has come for the military commissary system to be consolidated into a Defense Commissary System. The organizational strategy in chapter 5 provides options for a transition to this system. If a target implementation date was set and an implementation plan approved, all Services could target actions toward the occurrence. The Defense Commissary System is envisioned as follows.

11.1 DEFENSE COMMISSARY SYSTEM (DECS)

BACKGROUND

A consolidated commissary system has been most recently studied on two occasions: the Bowers study in 1975 and a follow-on study in 1979. The Bowers study had the greatest impact in that it centralized the Services' commissary systems and provided a springboard for the explosive growth of the commissary system during the past decade. Generally the study accomplished what it set out to do: reduce layers of command, concentrate commissary technical skills, and provide total control of commissary assets and personnel resources.

The system was not ready for total consolidation during the 1970s. Computers were mostly ineffective for the task at hand and the communications grid would not have effectively controlled the organization. The system in 1975 would not have provided a cost benefit labor savings nor could it have been accomplished in the self-imposed time constraints of the study.

DISCUSSION

The commissary system of today is in a much different situation. It has breezed through the 1980s picking up momentum with sales now surpassing the $5.45 billion mark. Many of its stores are modern and remarkably almost 100 percent have point of sale scanning equipment. With sales indexed to industry margins, this organization is the sixth largest grocery chain in the United States. The healthy budget years provided the funds to increase services which generated greater surcharge revenue. This revenue built new stores which brought the cycle full circle.

The current state of detente in world politics has closed the loop. Commissary

patrons have come to expect ever-increasing levels of service funded by increased appropriations from Congress. The outlook for an increase in appropriations to fuel growth is bleak. The commissary system must look to generating revenue or maximizing efficiencies if it is to survive.

BUILDING A BETTER SYSTEM

The Jones Commission has devoted much time and energy to examining the current system while simultaneously reviewing the operations of commercial grocery distributors and chains. Mike Wright, the President and Chief Executive Officer of Super Valu Foods, put his finger directly on the problem when he said "the commissary system is where private industry was 20 years ago." The system, with the exception of the Marine Corps, is driven by paper and warehouses tacked on to stores. The Marine Corps has implemented a central distribution system similar to the one proposed and modeled after commercial grocery chains. In the other Services, automation does not meet the requirements of the times and they do not trust computers to do the work they are capable of doing. The defense commissary system, as currently organized, does not optimize the automation, transportation grid or distribution techniques available in the private sector.

It is not too late. With a streamlined functional organization, the commissary system can use private industry to centrally distribute product at an estimated cost of as little as 1.8 percent of sales generated, as outlined in Appendix J, Central Distribution Center Information and Costs. The Marine Corps' system has proved this concept with an in-house system that accomplishes the task at 1.46 percent of sales with 32 percent of these costs paid by vendors for various distribution allowances. The net cost of central distribution at the Marine West Coast Complex is $.26 per case or 1.0 percent of sales.

With a much larger volume of sales, a central distribution center for all DOD commissaries within a region should obtain equal or better distribution allowances from vendors. If the system continues to own its inventory and use the same off-the-shelf computer hardware and software used by its civilian industry counterparts, the remaining segmented costs of central distribution can be offset by forward buys and reduced inventory levels without increasing prices to the patron. Industry measures itself by the same standards.

ORGANIZING FOR THE FUTURE

The revamped organization would reduce administrative overhead in commissary warehouses and control sections at stores by 75 percent immediately and it is conceivable that they could be totally eliminated at some point in the future. If receipts were centralized at the central distribution center, administrative bill-paying functions at regions could also be reduced by over 75 percent or a total of $83.5 million. Organizational changes could reduce an additional 1449 spaces generating $49.3 million in appropriated fund offsets or a total of over $132.8 million in savings. These savings could be directly applied to the customer service issues discussed in chapter 5 to cover the $39.5 million shortfall in commissary store support, a net savings of $93.3 million to the U. S.

taxpayer. Using offset funds to bring all shelf stocking back in line as a governmental function (except for direct daily delivery items as in the commercial sector) while providing additional commissary employees to increase hours of operation, could provide a short-run impact on the service levels needed to meet the changing force demographics outlined in chapter 4.

The Defense Commissary System (DECS) headquarters is listed at Figure 11-1 with a proposed staffing model of 300 personnel. This headquarters would replace four headquarters currently staffed with 759 personnel.

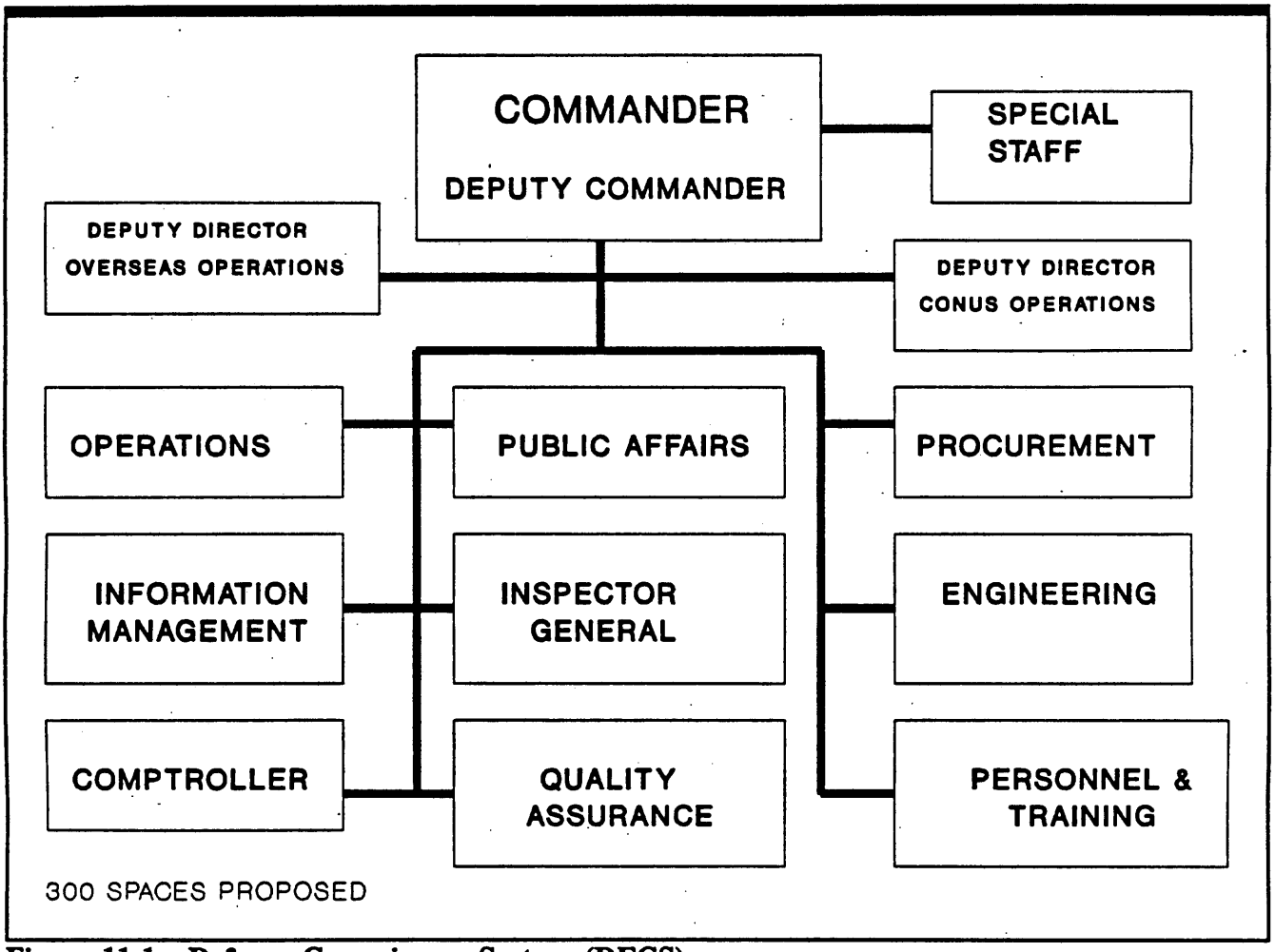


Figure 11-1. Defense Commissary System (DECS)

The separate military commissary systems currently utilize 2228 personnel at various intermediate headquarters performing area command, control, and operational functions. Many of these functions, particularly in the finance and accounting arena, could be consolidated, redefined, or eliminated if the system was organized in line with a commercial grocery chain. The system as envisioned would have 7 regions and 22 districts requiring 920 positions worldwide. This proposal would offset 1449 positions system-wide. Figure 11-7 provides a summary of savings through system consolidation. Figure 11-2 outlines the proposed commissary region with a staffing of 100 spaces, and Figure 11-3 shows the proposed commissary district with a staffing of 10 spaces.

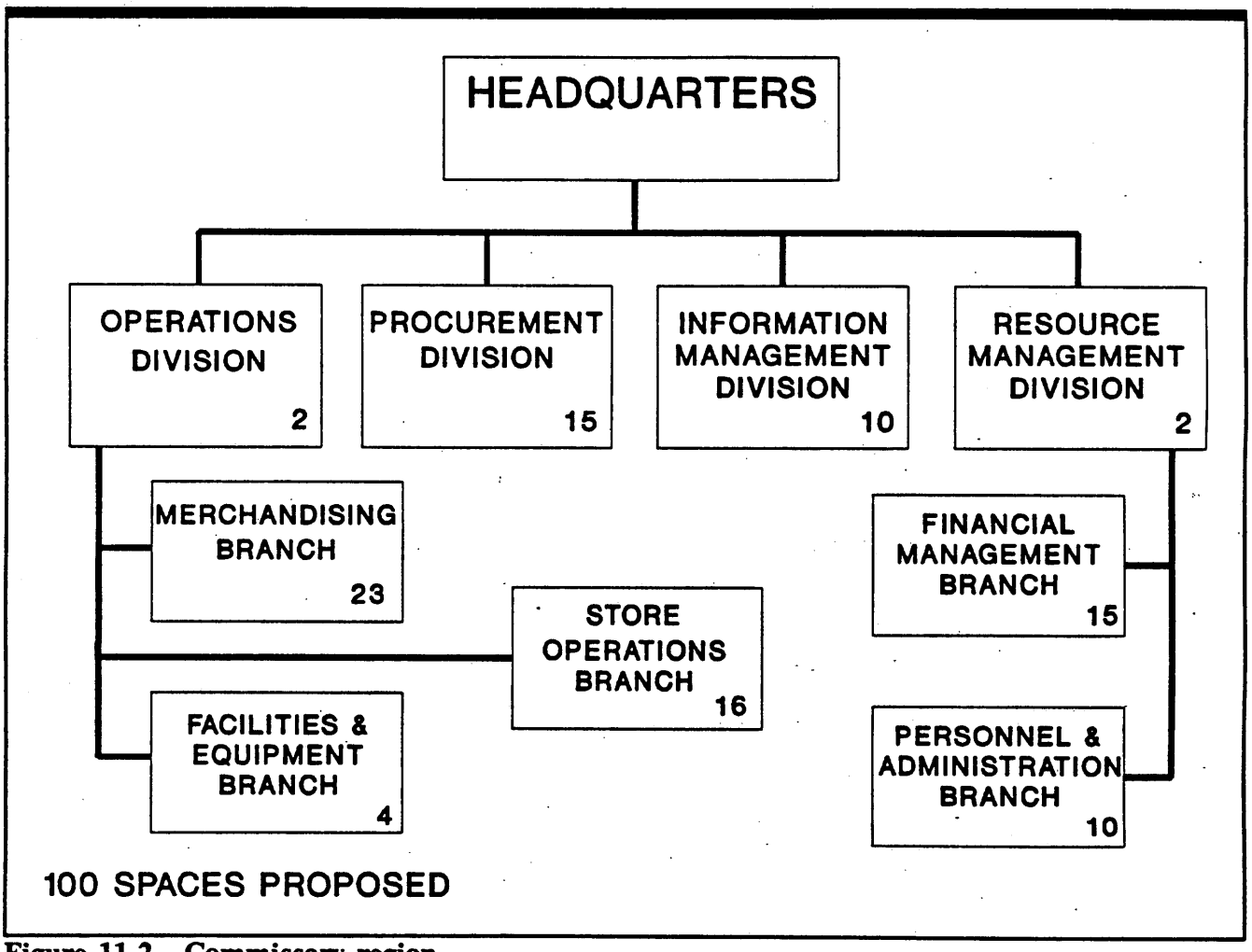


Figure 11-2. Commissary region

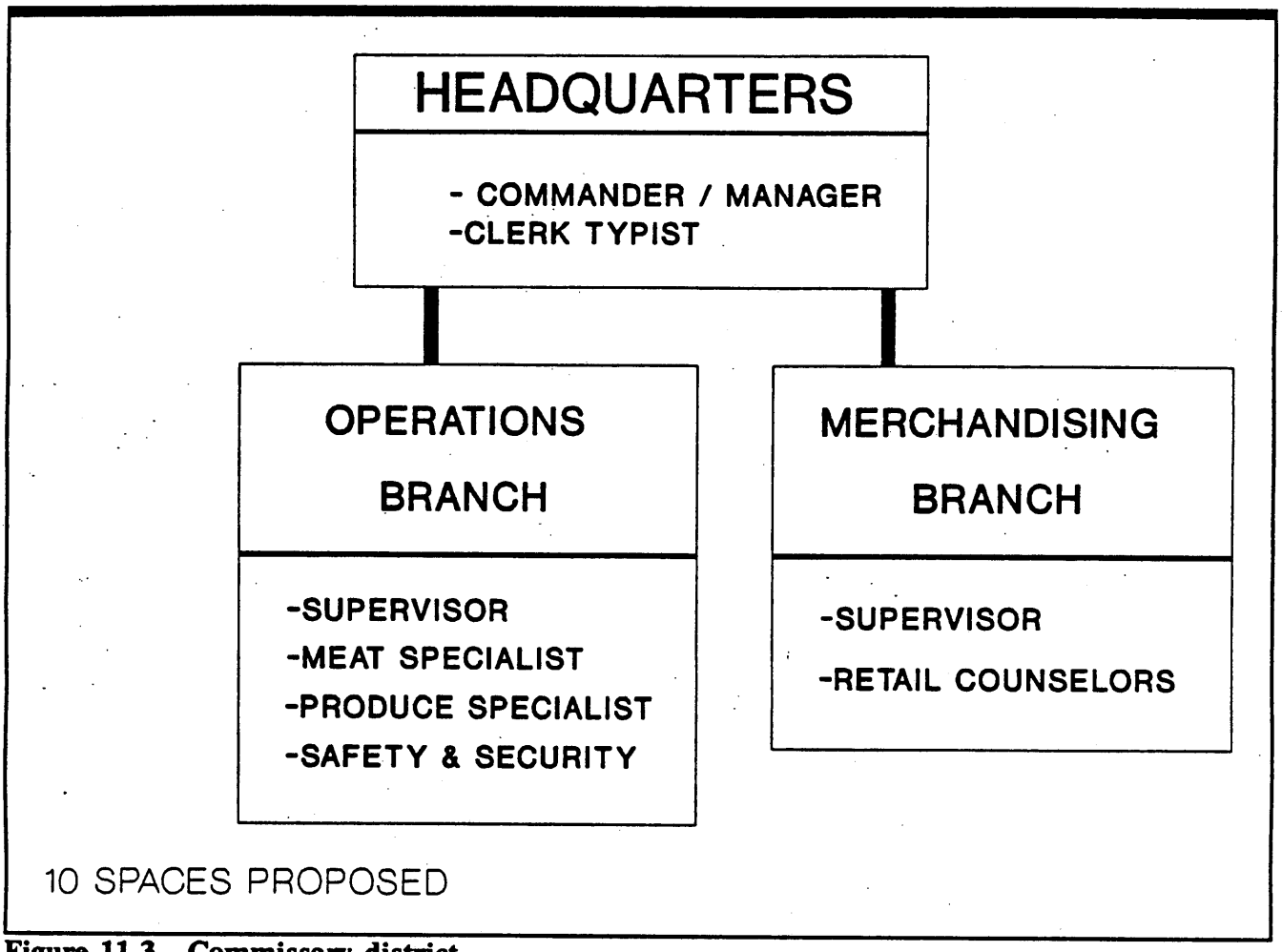


Figure 11-3. Commissary district

The proposed organization would report to a board of directors. The board, as envisioned, will establish Defense Commissary System policy within the authority and guidance provided by the Secretary of Defense. The board will review financial status of the commissary system and provide direct guidance on plans and programs. The objective is to enhance patron service and insure that a financially solvent, responsive system is maintained for the benefit of the authorized patron.

The board would need to be established immediately, meet at least quarterly and guide each Service's commissary system transition to the new system. During the transition period, the Department of Defense Resale Executive Board would be subordinate to the DECS Board of Directors and would implement the broad policy guidance emanating from the Board. Figure 11-4 lists the members of the DECS Board of Directors.

Chairman	Deputy Assistant Secretary of Defense (Military Manpower & Personnel Policy)
Members	Deputy Assistant Secretary of Defense (Installations), OASD (P&L)
	Deputy Assistant Secretary of Defense (Management Systems), OASD (C)
	Deputy Chief of Staff, Logistics; Army
	Deputy Chief of Naval Operations, (Logistics); Navy
	Deputy Chief of Staff, Logistics and Engineering; Air Force
	Deputy Chief of Staff, Installations and Logistics; Marine Corps
	Commander, Defense Commissary System (DECS)
	General Officer, Unified Command representative (rotated annually)
	Sergeant Major of the Army
	Sergeant Major of the Marine Corps
	Master Chief Petty Officer of the Navy
	Chief Master Sergeant of the Air Force

Figure 11-4. Board of Directors, Defense Commissary System (DECS)

COMMAND AND CONTROL

The Defense Commissary System (DECS) will have command, control and direction over the worldwide system of commissary stores. In addition to DECS headquarters, the organization shall consist of seven regional offices, 22 districts and 443 stores worldwide. DECS would be established as a separate command under the jurisdiction of the Assistant Secretary of Defense, Military Manpower and Personnel Policy. A board of directors, representing the Department of Defense and each of the Services, would be responsible for directing the operations of the DECS.

DECS would provide policy guidance and direct the plans and programs of the worldwide commissary store system. In addition, DECS would review the financial status of the system and assure that it is responsive to the needs of the authorized patrons.

Executive direction of DECS would be provided by a Major General (0-8) Commander to be rotated among the Services. The Vice Commander of DECS would be a Brigadier General equivalent (07) rotated among the Services. Technical executive direction would be provided by two Senior Executive Service officers serving as the Deputy Commander for US Operations and the Deputy Commander for Overseas Operations. Figure 11-5 is the proposed organizational configuration for DECS.

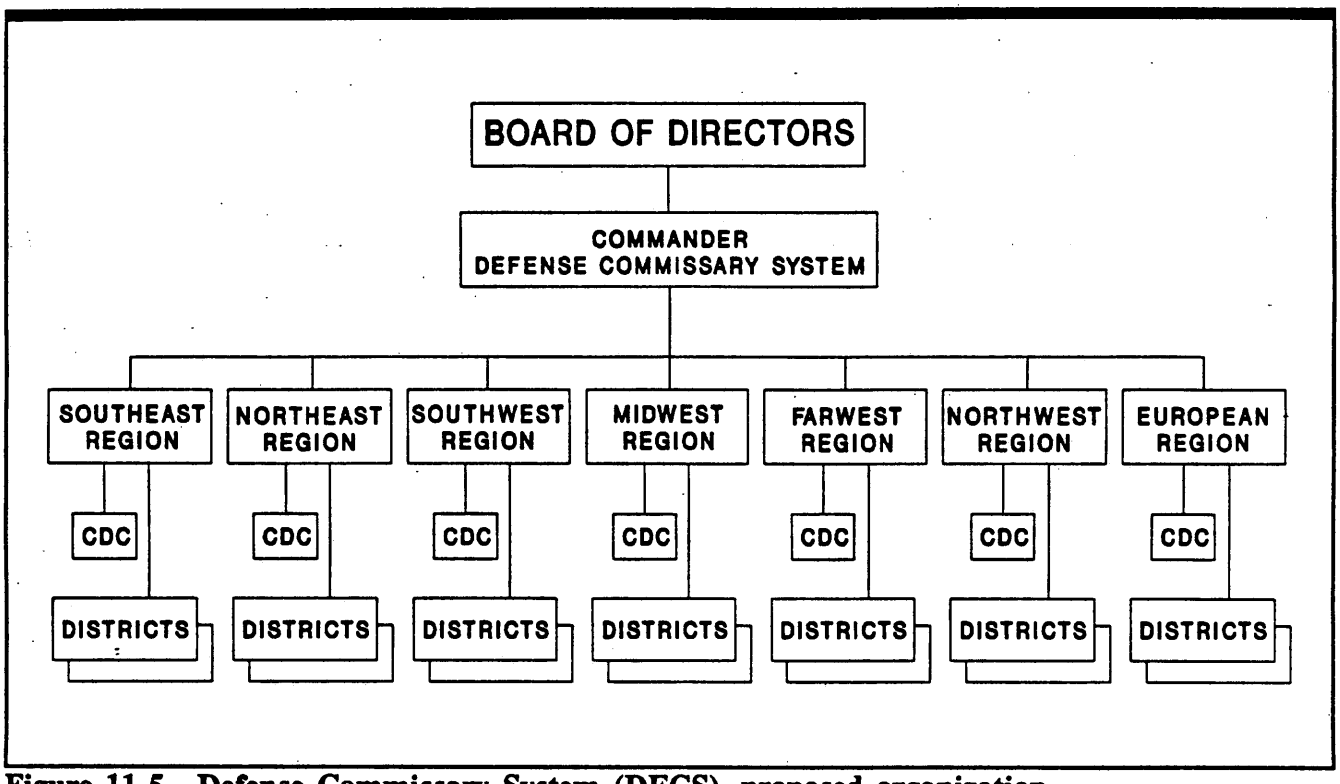


Figure 11-5. Defense Commissary System (DECS)--proposed organization

THE COMMISSARY REGION

DECS regions would provide command, control and direction through districts to the commissary stores within each region. Regions would also perform operations functions such as procurement, accounting, information management and administrative support for the commissary stores.

Executive direction of the European region would be provided by a Brigadier General (07) rotated between Army and Air Force assets. The remaining six CONUS regions would receive executive direction from Colonel (0-6) equivalent commanders or Civil Service GM-15 managers. Figure 11-6 outlines the proposed region configuration.

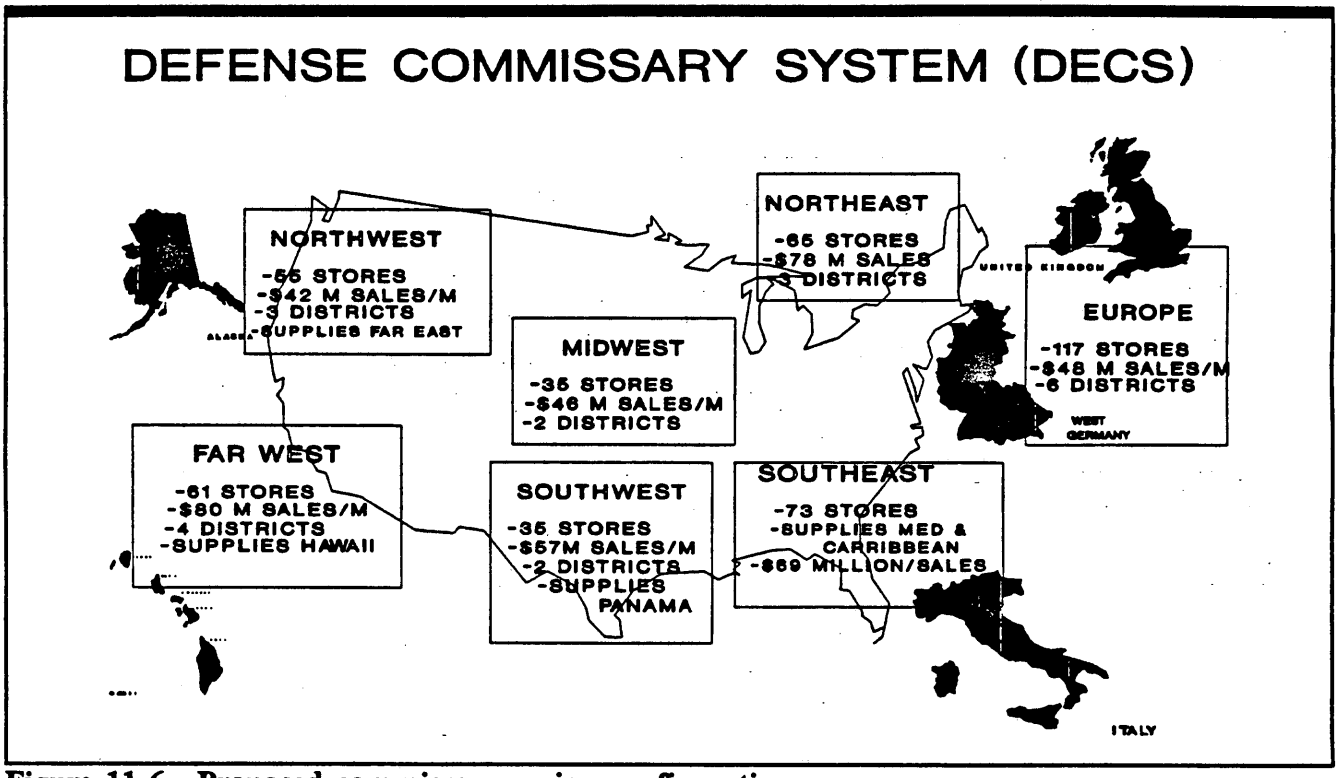


Figure 11-6. Proposed commissary region configuration

Regions would direct operations through retail counselors located in each district. These individuals would assist commissary officers by coordinating merchandising programs, product movement and overall commissary store operations. Central distribution is an integral part of the region mission. Buying product to replenish storage, negotiating price, and vendor bill paying are also included in the mission.

Each Region would have its own contract Central Distribution Center and would be responsible for supplying all commissaries within its subordinate districts. An exception would be the Mediterranean District which would be under the command and control of the European Region but would receive its product from the Southeast US Region CDC. Ship sailings from Charleston make this an economically favorable alternative. The operating cost of the contract central distribution center would be paid by a combination of stock fund surcharges, distribution allowances and forward buys. Volume purchases should provide the commissary patron with prices equal to or better than current commissary prices.

The seven proposed commissary regions are dispersed around the world. The Southeast Region, as proposed, would have two districts, 48 stores, and support the Caribbean as well as stores in the southeastern United States. Its central distribution center would support 20 stores in the Mediterranean District. Its center of mass is located in Atlanta and its contract central distribution

center will probably be located in that city. Atlanta is currently a commercial distribution hub and one local warehousing corporation has indicated a strong interest in providing contract central distribution service to our proposed system. Southeast Region stores are depicted at Table 11-1. (Tables 11-1 through 11-7 are printed in sequence, starting on page 11-14.)

The European Region would be the most difficult to support. It would have six districts, 117 stores and provide commissary support in Central Europe, the United Kingdom and the Mediterranean area to include Southern Europe, the Middle East and North Africa. Contract central distribution could be provided from multiple sites in contrast to the CONUS concept of using one CDC per region. One contractor has the capability to provide support from four contract warehouses in West Germany and one in the United Kingdom. As per the business strategy, cost avoidance from missions being transferred from the Defense Logistics Agency to DECS could be used to cover most of the costs of the contract central distribution mission. The European Region allocation of stores and districts is arrayed at Table 11-2a/b/c.

The Northeast Region would encompass an area from North Carolina to New England. Center of mass is the Baltimore area and a military installation in that vicinity may be the logical choice for the region headquarters. Central distribution could be provided from any number of locations from Tidewater Virginia to the Philadelphia area. The region, as proposed, has three districts, 66 stores, and supports commissaries in the northeastern and mid-atlantic states. The only foreign support is a single truck biweekly to a Navy facility in Argentia, Canada. Northeast Region districts and stores are arrayed at Table 11-3. of Oakland; however, the two United States ocean flag carriers, Sea Land and American President Lines, both sail from Seattle and Tacoma to the transit point in Japan in the same number of days as the Oakland sail. The Far West Region is the largest volume region and this proposal would equalize the workload of the two west coast CDCs. The headquarters should be on a military installation in the Seattle or Tacoma area. The Army Western Commissary Region is located at Ft. Lewis and provides command and control to Asia from that location. The contract central distribution center should be within the drayage range, normally 50 miles, of the ports of Seattle and Tacoma. This would provide the mechanism for weekly shipments to commissary stores in the Far East and Alaska and could cut order ship time by 80 percent. Using Sagamihara, Japan as an example, the current 120 days order ship time could be cut to 25 days. Equal results are attainable to all Far East stores. Table 11-6 provides an outline of the stores and districts in the Northwest Region.

The Southwestern Region would have 38 stores, two districts and provide support to Panama. Panama shipments could be weekly combining monthly and weekly sailings from New Orleans and Lake Charles, La. Although the majority of stores are in Texas and Oklahoma, commissaries on the fringes of New Mexico, Arkansas and Louisiana are included in the region. Center of mass is between Dallas and San Antonio. One of the military installations in San Antonio would be the logical headquarters site while contract central distribution could be accomplished from either Dallas or San Antonio. Table 11-4 outlines the region stores allocated by district.

The Midwest Region covers the largest geographical area with stores from Ohio to Colorado. Kansas City is the center of mass. Proctor and Gamble, one of the largest commissary vendors, currently uses only four distribution centers to support all commissaries in the entire United States. They are located in Atlanta, Cincinnati, Kansas City, and Oakland. Under the Proctor and Gamble Scenario, a contract central distribution center in Kansas City could distribute to all commissaries in the Mid-America segment. The Midwest Region has two districts, 38 commissaries and supports no overseas stores. The region headquarters should be centrally located at a military installation in Kansas or Nebraska. The districts and stores of the Midwest Region are at Table 11-5.

The Northwest Region, as proposed, would support the Far East, Alaska and the northwest United States. Traditionally, the Far East has received shipments through the port of Oakland; however, the two United States ocean flag carriers, Sea Land and American President Lines, both sail from Seattle and Tacoma to the transit point in Japan in the same number of days as the Oakland sail. The Far West Region is the largest volume region and this proposal would equalize the workload of the two west coast CDCs. The headquarters should be on a military installation in the Seattle or Tacoma area. The Army Western Commissary Region is located at Ft. Lewis and provides command and control to Asia from that location. The contract central distribution center should be within the drayage range, normally 50 miles, of the ports of Seattle and Tacoma. This would provide the mechanism for weekly shipments to commissary stores in the Far East and Alaska and could cut order ship time by 80 percent. Using Sagamihara, Japan as an example, the current 120 days order ship time could be cut to 25 days. Equal results are attainable to all Far East stores. Table 11-6 provides an outline of the stores and districts in the Northwest Region.

The Far West Region is the largest region in sales volume due to the large concentration of military installations in Southern California. The Region, as proposed, covers California, Arizona, Nevada, Utah and Hawaii. Center of mass is between Los Angeles and San Francisco, so either city could be used for central distribution. A military installation in California near a major airport would be the best choice for the region headquarters. Hawaii was added to this region because the United States flag ocean carriers have weekly sails to Guam via Hawaii. The contract central distribution center should be in a close proximity to the ports of Oakland or Long Beach to provide the best support to the Hawaii District. The Far West stores and districts are outlined in Table 11-7.

SOUTHEAST REGION
DEFENSE COMMISSARY SYSTEM (DECS)
DISTRICT STORES AND FY88 MONTHLY SALES

SOUTHEAST DISTRICT #1

COMMISSARY	LOCATION	SALES	COMMISSARY	LOCATION	SALES
AVON PARK	FL	117651	MACDILL	FL	4862769
PATRICK	FL	3048201	MOODY	GA	921124
CHARLESTON AFB	SC	2347436	MYRTLE BEACH AFB	SC	910604
SHAW AFB	SC	1319398	HOMESTEAD	FL	2372190
JACKSON	SC	2434788	STEWART	GA	1409332
GORDON	GA	2112970	HUNTER	GA	1021651
BUCHANAN	PR	2031435	PARRIS ISLAND	SC	635482
KINGS BAY	GA	347146	KEY WEST	FL	405078
NWS CHARLESTON	SC	928217	JACKSONVILLE	FL	2427859
ROOSEVELT RDS	PR	713854	BERMUDA	BM	292230
CHARLESTON	SC	750823	NEX LS-BERMUDA ANX	BM	59624
GUANTANAMO BAY	CU	537178	MAYPORT	FL	980586
CECIL FIELD	FL	521011	ORLANDO	FL	1762770

SOUTHEAST DISTRICT #2

MAXWELL	AL	2007815	COLUMBUS AFB	MS	820007
EGLIN	FL	2884335	GUNTER	AL	904951
ARNOLD AFB	TN	338016	KESSLER AFB	MS	2767980
ROBINS	GA	1545994	TYNDALL	FL	1763567
HURLBURT FIELD	FL	1063755	REDSTONE	AL	2038298
FORT BENNING	GA	3429698	RUCKER	AL	1893702
GILLEM	GA	2010296	MCPHERSON	GA	427593
MCCLELLAN	AL	1486508	MERRILL	GA	25918
MCLB ALBANY	GA	479267	WHITING FIELD	FL	322776
GULFPORT	MS	446645	ATHENS	GA	209178
MERIDIAN	MS	330364	PENSACOLA	FL	2071200

Table 11-1. Southwest Commissary Region

EUROPEAN REGION
DEFENSE COMMISSARY SYSTEM (DECS)
DISTRICT STORES AND FY88 MONTHLY SALES

COMMISSARY	LOCATION	SALES	COMMISSARY	LOCATION	SALES
GIESSEN DISTRICT					
SOESTERBERG	NE	431554	OSLO	NW	108348
Hessisch-Oldendorf	WG	116909	FLIEGERHORST	WG	82615
GIESSEN	WG	1031800	BERLIN	WG	1186125
MUENSTER	WG	49477	GIEBELSTADT	WG	79556
SCHINNEN	NE	475100	HELMSTEDT	WG	14254
WILDFLECKEN	WG	262739	KIRCHGOENS	WG	99412
HANAU	WG	1567237	Osterholz-Scharmbeck	WG	341882
BAD NAUHEIM	WG	314565	RHEINBERG	WG	122158
FULDA	WG	434430	FLENSBURG	WG	34599
BUEREN	WG	40424	GELNHAUSEN	WG	260090
Wildflecken Sub-Fac	WG	48206	SOEGEL	WG	35058
BUEDINGEN	WG	108344	BAD HERSFELD	WG	116976
BREMERHAVEN	WG	619783			
FRANKFURT DISTRICT					
LANDSTUHL POST	WG	0	FLORENNES	BE	83033
PRUEM	WG	44162	SPANGDAHLEM AB	WG	790874
RHEIN-MAIN AB	WG	1486937	TRIER	WG	12877
HAHN AB	WG	1076596	BITBURG AB	WG	822082
BABENHAUSEN	WG	158857	BAUMHOLDER	WG	832287
DARMSTADT	WG	550946	MAINZ	WG	428340
CHIEVRES	BE	719541	WIESBADEN	WG	1686031
NEUBRECKE	WG	58517	KING	WG	85060
MCCULLY	WG	32242	IDAR OBERSTEIN	WG	56127
FRANKFURT	WG	1618717	BAD KRUEZNACH	WG	428340
DEXHEIM	WG	83101			

Table 11-2a. European Commissary Region

STUTTGART DISTRICT					
RAMSTEIN AB	WG	2490337	VOGELWEH	WG	1483003
SEMBACH AB	WG	597985	PANZER	WG	2651
AUGSBURG	WG	980817	GOEPPINGEN	WG	221229
LUDWIGSBURG	WG	190666	ZWEIBRUECKEN	WG	537808
MANNHEIM	WG	1259450	KELLY	WG	335116
HEIDELBERG	WG	1514875	GERMERSHEIM	WG	41808
FISCHBACH	WG	19458	NEW ULM	WG	399597
NECKARSULM	WG	20655	PATCH	WG	666439
WORMS	WG	296670	PIRMASENS	WG	451836
HEILBRONN	WG	450121	KARLSCRUBE	WG	603424
ROBINSON	WG	978896	SCHWAEBISCHG	WG	221507
BAMBERG DISTRICT					
HOHENFELS	WG	113733	BAD AIBLING	WG	116909
VILSECK	WG	194092	BERCHTESGADEN	WG	99806
GARMISCH	WG	117633	MUNICH	WG	571618
KITZINGIN	WG	580280	SCHWEINFURT	WG	826010
ASCHAFFENBURG	WG	493738	AMBERG	WG	112163
FUERTH	WG	1592510	WERTHEIM	WG	148060
BAMBERG	WG	669206	BINDLACH	WG	130109
BAD KISSIGEN	WG	146484	ILLESHEIM	WG	229983
BADTOELZ	WG	125453	SCHWAEBISCHH	WG	110525
GRAFENWOEHR	WG	400334	ANSBACH	WG	654646
ERLANGEN	WG	201013	HERZO	WG	83490
CRAILSHEIM	WG	97595	WUERZBURG	WG	762020
REGENSBURG	WG	11905	SCHWABACH	WG	97229

Table 11-2b. European Commissary Region

MEDITERRANEAN DISTRICT

AVIARO	IT	422154	ROYAL OAKS	SP	67632
COMISO	IT	238236	IZMIR	TU	219404
DECIMOMANNU	IT	4119	INCIRLIK	TU	471404
LAJES, AZORES	PO	455587	IRAKLION	GR	164912
TORREJON	SP	883637	HELLENIKON BRANCH	GR	323239
NEA MAKRI	GR	63864	SAN VITO	IT	299855
ANKARA	TU	249966	ATHENS	GR	176934
ZARAGOZA	SP	246602	DHAHRAN	SA	84649
CAIRO	EG	153644	RIYADH	SA	214902
LIVORNO	IT	319605	VICENZE	IT	599135
NEX LS-GAETA	IT	52970	LAMADDALENA	IT	89474
NAPLES	IT	705919	ROTA	SP	622619
SIGONELLA	IT	428084	KEFLAVIK	IC	382809

UNITED KINGDOM DISTRICT

RAF SCULTHORPE	UK	43375	RAF Greenham Common	UK	380789
RAF MILDENHALL	UK	147108	RAF LAKENHEATH	UK	1495246
RAF FAIRFORD	UK	269530	RAF WETHERSFIELD	UK	95108
Mendith Hill Station	UK	180002	RAF UPPER HAYFORD	UK	990305
BURTONWOOD	UK	20050	RAF ALCONBURY	UK	711387
RAF CHICKSANDS	UK	261192	RAF BENTWATERS	UK	799292
HOLY LOCH	UK	207403	NEX LS-BRAWDY	UK	44630
EDZELL	UK	116789	NEX LS-LONDON	UK	18945
NEX LS-Machrihanish	UK	14987	NEX LS-WEST RUISLIP	UK	142459
NEX LS-THURSO	UK	23036	NEX LS-ST. MAWGAN	UK	22477

Table 11-2c. European Commissary Region

NORTHEAST REGION
DEFENSE COMMISSARY SYSTEM (DECS)
DISTRICT STORES AND FY88 ANNUAL MONTHLY SALES

NORTHEAST DISTRICT #3

COMMISSARY	LOCATION	SALES	COMMISSARY	LOCATION	SALES
LANGLEY AFB	VA	3301847	FORT FISHER AFS	NC	26031
SEYMOUR-JOHNSON AFB	NC	1274991	STORY	VA	255203
MONROE	VA	654067	FT LEE	VA	1754457
FORT EUSTIS	VA	1460125	DEF GEN SUPPLY	VA	441961
MALONEE VIL SUB-FAC	NC	763301	BRAGG	NC	3865240
POPE AFB SUB-FAC	NC	96146	CAMP LEJEUNE TARAWA	NC	1300888
MCAS CHERRY POINT	NC	1441637	CAMP LEJEUNE HADNOT	NC	1088592
NEW RIVER	NC	304937	YORKTOWN	VA	258373
PORTSMOUTH	VA	1146270	OCEANA	VA	2395020
LITTLE CREEK	VA	3325523	NB NORFOLK	VA	1703038

NORTHEAST DISTRICT #4

DOVER	DE	1652711	BOLLING	DC	1751684
ANDREWS	MD	2836107	MYER	VA	1760359
VINT HILL	VA	653272	KELLY	PA	595732
CAMERON	VA	2573841	NEW CUMBERLAND	PA	532505
ABERDEEN	MD	963602	EDGEWOOD	MD	530549
ARDEC	NJ	238216	RITCHIE	MD	558401
CARLISLE	PA	872516	WALTER REED	DC	1815513
MCNAIR	DC	349701	BELVOIR	VA	5360454
MEADE	MD	3889360	QUANTICO	VA	1824216
PHILADELPHIA	PA	775546	LAKEHURST	NJ	240101
PATUXENT RIVER	MD	664807	DAHLGREN	VA	93826
ANNAPOLIS	MD	680577			

NORTHEAST DISTRICT #5

PEASE AFB	NH	1675880	MCGUIRE AFB	NJ	4317364
HANSCOM	MA	1538513	GRIFFISS AFB	NY	1259381
BANGOR	ME	201977	PLATTSBURGH AFB	NY	993414
LORING	ME	783251	DEVENS	MA	1395098
DRUM	NY	1056405	TOBYHANNA	PA	466636
WEST POINT	NY	726425	MONMOUTH	NJ	1517845
SENECA	NY	214897	STEWART	NY	347875
HAMILTON	NY	783893	WINTER HARBOR	ME	48293
MITCHEL FIELD	NY	607002	NEWPORT	RI	1076575
SCOTIA	NY	308435	CUTLER	ME	50423
BRUNSWICK	ME	752947	NEW LONDON	CT	1794232
ARGENTIA	CN	63641			

Table 11-3. Northeast Commissary Region

SOUTHWEST REGION
DEFENSE COMMISSARY SYSTEM (DECS)
DISTRICT STORES AND FY88 MONTHLY SALES

COMMISSARY	LOCATION	SALES	COMMISSARY	LOCATION	SALES
			SOUTHWEST DISTRICT #8		
SHEPPARD AFB	TX	1570513	VANCE AFB	OK	396152275
TINKER AFB	OK	3179275	ALTUS AFB	OK	845867
BARKSDALE	LA	2972924	ENGLAND	LA	1052651
CARSWELL AFB	TX	4021377	EAKER	AR	679186
LITTLE ROCK	AR	2385119	POLK	LA	1769552
SILL	OK	2613188	NEW ORLEANS	LA	762987
MEMPHIS	TN	1509158	COROZAL	CZ	1901337
ESPINAR	CZ	310125	HOWARD	CZ	627584
			SOUTHWEST DISTRICT #9		
CANNON AFB	NM	723682	KIRTLAND AFB	NM	2775724
BROOKS AFB	TX	530931	BERGSTROM AFB	TX	2848371
GOODFELLOW AFB	TX	724329	RANDOPLH AFB	TX	3463624
REESE AFB	TX	585319	HOLLOMAN AFB	NM	1170697
LACKLAND AFB	TX	3627075	DYESS AFB	TX	1356775
KELLY AFB	TX	636636	LAUGHLIN AFB	TX	435730
Sam Houston Sub-Fac	TX	367183	HOOD SUB-FAC	TX	408414
BLISS	TX	4424149	HOOD	TX	4765482
WHITE SANDS	NM	320140	SAM HOUSTON	TX	2687875
KINGSVILLE	TX	154575	CORPUS CHRISTI	TX	569273
BEEVILLE	TX	166871			

Table 11-4. Southwest Commissary Region

MIDWEST REGION
DEFENSE COMMISSARY SYSTEM (DECS)
DISTRICT STORES AND FY88 MONTHLY SALES

MIDWEST DISTRICT #6

COMMISSARY	LOCATION	SALES	COMMISSARY	LOCATION	SALES
K.I. SAWYER	MI	757895	WURTSMITH AFB	MI	735867
WRIGHT-PATTERSON	OH	3689956	GRISSOM	IN	798553
CALUMET	MI	25022	SCOTT	IL	2575880
PORT AUSTIN	MI	21372	CHANUTE	IL	1164838
BEN HARRISON	IN	1546434	CAMPBELL	KY	3315741
LEXINGTON-BLUE GRASS	KY	294723S	SHERIDAN	IL	689009
GRANITE CITY	IL	1201668	ROCK ISLAND	IL	366850
KNOX	KY	2859046	SELFRIDGE	MI	1113665
CRANE	IN	46298	GREAT LAKES	IL	1292403

MIDWEST DISTRICT #7

DICKINSON AFS	ND	36247	LA JUNTA	CO	0
ELSWORTH AFB	SD	1220018	AF ACADEMY	CO	1273781
GRAND FORKS AFB	ND	875553	LOWRY	CO	2973792
MINOT AFB	ND	795750	POWELL AFS	WY	30821
OFFUTT AFB	NB	2736131	F.E. WARREN AFB	WY	990326
PETERSON	CO	2644797	BELLE FOURCHE AFS	SD	7937
WHITEMAN AFB	MO	838408	MCDONNELL	KS	1377940
RILEY	KS	1821048	CARSON	CO	2710806
LEAVENWORTH	KS	1865471	FITZSIMMONS	CO	857248
LEONARD WOOD	MO	1697248			

Table 11-5. Midwest Commissary Region

NORTHWEST DISTRICT
DEFENSE COMMISSARY SYSTEM (DECS)
DISTRICT STORES AND FY88 MONTHLY SALES

COMMISSARY	LOCATION	SALES	COMMISSARY	LOCATION	SALES
JAPAN DISTRICT					
CAMP FOSTER	JA	1787114	KADENA AFB	JA	2218495
MISAWA	JA	1095530	CAMP COURTNEY	JA	110831
YOKOTA	JA	1287123O	KINAWA WAREHOUSE	JA	514677
SAGAMI	JA	23602	KURE	JA	3602
SAGAMIHARA	JA	567286	ZAMA	JA	114456
IWAKUNI	JA	301579	ATSUGI	JA	304134
YOKOSUKA	JA	855087	NEX LS-HARIO	JA	6028
NEX LS-NEGISHI HGTS	JA	123774	SASEBO	JA	143889
EXMOUTH	AU	55022			
KOREA DISTRICT					
KUNSAN	KR	264737	OSAN	KR	1796669
CLARK	PI	2515326	HUMPHREYS	KR	81978
CARROLL	KR	134584	STANLEY	KR	185368
EDWARDS	KR	91347	PUSAN	KR	249762
YONGSAN	KR	2861812	PAGE	KR	40737
TAEGU	KR	576671	CASEY	KR	356582
SUBIC BAY	PI	1057144	CHINHAE	KR	46895
SAN MIGUEL	PI	107299			
NORTHWEST DISTRICT #13					
EIELSON AFB	AK	710338	HAYRE AFS	MT	15832
ELMENDORF AFB	AK	2181264	MOUNTAIN HOME	ID	941756
MAKAH AFS	WA	15913	CONRAD AFS	MT	7950
FAIRCHILD AFB	WA	2025346	MCCHORD AFB	WA	4330642
MALMSTROM AFB	MT	1024897	FORSYTHE AFB	MT	15899
LEWIS	WA	4147183	WAINWRIGHT	AK	848148
RICHARDSON	AK	1093678	GREELY	AK	189269
BANGOR	WA	1197032	BREMERTON	WA	738354
WHIDBEY ISLAND	WA	1189817	ADAK	AK	359986
SEATTLE	WA	1331189			

Table 11-6. Northwest Commissary District

FAR WEST REGION
DEFENSE COMMISSARY SYSTEM (DECS)
DISTRICT STORES AND FY88 ANNUAL MONTHLY SALES

FAR WEST DISTRICT #10

COMMISSARY	LOCATION	SALES	COMMISSARY	LOCATION	SALES
NELLIS AFB	NV	3236671	HOLBROOK	AZ	22228
GILA BEND	AZ	32958	WILLIAMS	AZ	1572798
INDIAN SPRINGS AFAF	NV	1703	DAVIS-MONTHAN	AZ	2670192
LUKE	AZ	2444965	YUMA	AZ	166987
HUACHUCA	AZ	1482115	MCAGCC TWENTYNINE P	CA	673568
MCAS YUMA	AZ	567825	EL CENTRO	CA	75219
NORTH ISLAND	CA	587985			

FAR WEST DISTRICT #11

LOS ANGELES	CA	959094	MARCH	CA	2381529
VANDENBERG	CA	1539998	NORTON	CA	2477334
EDWARDS	CA	1214351	GEORGE	CA	1332038
FORT IRWIN	CA	434161	CAMP PENDLETON ANEX	CA	375768
CAMP PENDLETON	CA	2077597	MCAS EL TORO	CA	1886356
MCLB BARSTOW	CA	307913	IMPERIAL BEACH	CA	2652395
SAN DIEGO	CA	751050	MIRAMAR	CA	4091358
CHINA LAKE	CA	232577	NS SAN DIEGO	CA	2759429
PT HUENEME	CA	1148389	POINT MUGU	CA	272132
LONG BEACH	CA	2000977			

FAR WEST DISTRICT #12

MCCLELLAN	CA	2569133	HILL AFB	UT	2006610
BEALE	CA	1214267	CASTLE	CA	1620372
MATHER	CA	2705190	TRAVIS	CA	3011349
DUGWAY	UT	130340O	AKLAND	CA	492863
SIERRA	CA	165583	ORD	CA	3106480
PRESIDIO	CA	1424813	TREASURE ISLAND	CA	270615
STOCKTON	CA	286306	NOVATO	CA	826046
ALAMEDA	CA	1838226	FALLON	NV	199361
SKAGGS ISLAND	CA	11190	LEMOORE	CA	739204
MOFFETT FIELD	CA	2156036	MARE ISLAND	CA	916369

HAWAII DISTRICT

ANDERSEN	GU	1559063	HICKAM AFB	HI	3526140
SHAFTER	HI	425726	SCHOFIELD	HI	2394239
KANEOHE BAY	HI	1013683	BARBERS POINT	HI	758136
PEARL HARBOR	HI	4147172	NEX LS-LUALUALEI	HI	45166
NEX LS-FORD ISLAND	HI	18544	GUAM	GU	1438659

Table 11-7. Far West Commissary Region

COMMISSARY STORE LEVEL OF SERVICE

To meet the changing demographics of the target population, stores with average monthly sales of over $800,000 would be open 6 days and at least 70 hours per week, closed one day midweek for stocking and general maintenance. Stores would be open until 10 PM during the week to accommodate the tremendous increase in single parents and two-income households in the military force structure. Vendor stocking not normally provided in the civilian market will revert to a governmental function, in-house or by contract. These and other increased levels of service will be paid for with savings generated from organizational efficiencies. Magnet stores will be used to provide the same level of service to smaller communities. A magnet store is a centrally located commissary with extended service hours. It can be a medium, large or super store but once labeled a magnet store it would receive priority for funding hours of operation and construction. These stores will be available within a reasonable commute (45 minutes) to provide a full level of support not available in the local community. As magnet stores gain in popularity, hopefully, the need for a full service local community commissary will be diminished and at some time in the future, the local commissary could be reduced in scope or closed.

COMMISSARY STORE REPLENISHMENT PROCEDURES

Replenishment will be conducted electronically by store personnel who will scan store shelves using PDEDs daily to determine appropriate order quantities. Output from point of sale scanning equipment will also be used when determined to be more efficient. The order will be electronically transmitted to the central distribution center by dial-up modem.

The electronic order will then be pulled from the Contract Central Distribution Center and shipped to the store the following day. The ordering cycle will be adjusted for smaller stores which can not accommodate daily delivery. Transportation will be optimized by using multistop shipments.

Accountability will be transferred from the CDC to the store by direct communications links between the CDC and region computer. Store receipts will be transmitted to the region computer by PDED for both CDC and direct vendor deliveries.

Price changes will be updated weekly by communications link from the region computer to the individual store. Store labels will be printed at the store on the EPOSE or ECR systems and put on the shelf by grocery department personnel.

These organizational changes will eliminate at least 75 percent of warehouse, control section and scanning/price maintenance related personnel. Table 11-8 provides an analysis of the estimated $83.5 million cost savings.

CENTRAL DISTRIBUTION

Central distribution to commissary stores will be a contract operation in close vicinity to a major food distribution hub. The contractor will receipt for government property in full container shipments, account for and store the product, and then issue and distribute the

Utilization by function
(in FTE)

Spaces Location	Army	Air Force	Navy	Marines	Total
Control	1095	592	62	0	1749
Region voucher exam	100	0*	49	7	156
Warehouse/Receiving	1218	1172	239	31	2660
					Total--4565

Analysis

Total spaces used 4565

Manning retained 1142
(25% of total spaces)

Cost avoidance in spaces 3423
(75% of total spaces)

Cost avoidance in $ $78,729,000
(@ $23,000 = 1 FTE)

* Air Force indirect cost
for bill paying $6,301,152

Air Force avoidance $4,725,864
(reduced by 75%)

TOTAL COST AVOIDANCE $83,454,864

Table 11-8. Organizational cost avoidance potential of central distribution procedures

product using its own organic or a contract truck fleet. The Contractor will store the commissary stock when required. The goal will be to schedule shipments to arrive within the two to five day cross-dock storage time frames. Super Valu normally buys product with morning vendor delivery for afternoon shipments to its Cub Food stores.

To further reduce storage requirements, large quantity forward buys will be stored in vacant warehouses behind commissary stores. Contractors will be required to back-haul product stored in the commissary warehouse space. This will accommodate forward buying without encumbering excessive warehouse storage costs.

The contractor will pack ocean container shipments for overseas commissaries designated to receive CONUS CDC support and deliver the containers to the applicable port for shipment. The contractor will guarantee loss of all product (no shrink authorized) except for acts of God; e.g., fire, storm, etc.

COST AND FUNDING

Current estimates point to a cost of approximately 1.9 percent of sales to provide the contractor portion of central distribution in the Continental United States. This is based on data developed by the Dornbush Group from a model designed to support all DOD commissary stores in the Southeast United States. The Dornbush Group is a bonded warehouse corporation which has provided support to major manufacturers such as Proctor and Gamble for over 60 years. The segmented cost estimate is $.1892 per case for warehouse handling, $.0292 per case for warehouse storage and $.2828 per case for transportation. The total cost estimate is $.5012 per case and the analysis uses an average case cost of $26.00.

The vast majority of these costs could be recouped from industry allowances such as slotting and distribution allowances. Receipt of product FOB origin vs FOB destination as well as a reduced dependence on frequent delivery should further decrease product costs. Indications are that vendors pay distributors up to $.65 per case to frequently deliver product to commissaries and price comparisons conducted by the commission point to 1.5 percent price variance between frequent delivered and regularly delivered product. These factors, added to volume purchasing and programmed forward buying, should negate any product cost increases and could even decrease prices paid by commissary patrons.

The Marine Corps in-house distribution system validates this offset in cost through vendor allowances. The Marine Corps operates its West Coast Central Distribution Center for a cost of $.38 per case or 1.46 percent of sales. With vendor distribution allowances, they have reduced their cost of operation to $.26 per case, a net 31.6 percent decrease in costs. Since the Marine Corps' West Coast Complex supports a mere 7 stores while achieving these efficiencies, this proposal should equal or better the cost saving percentages. As mentioned before, forward buying and other initiatives could negate the distribution costs.

A similar distribution scheme is proposed for Europe and the United Kingdom. The same contractor has proposed to perform the

mission in Europe from four warehouses in West Germany for $.9355. These costs break out to be $.2884 for the warehouse portion and $.6471 for second destination transportation. These costs could be directly offset from the second destination transportation funds currently spent to support commissaries in Europe plus the offset in funds realized from transferring the DPSC DICOMSS mission to the European Commissary Region. Appendix J contains a full analysis of cost estimates for warehousing and transportation provided by the Dornbush Group for the Southeast United States, United Kingdom and Central Europe. Appendix J also contains cost data for the Marine Corps Central Distribution Center.

REGION CENTRAL DISTRIBUTION OPERATIONS

The commissary region's computer will interface directly with the contract CDC inventory control system. The region will mirror the CDC inventory using an off-the-shelf inventory control system such as the Worldwide Chain Store Inventory System or the Arthur Anderson Inventory System. The region will also use an inventory forecasting and replenishment system such as IBM Inforum III to assist regional merchandisers in buying product to replenish stock. All ADP will be off-the-shelf, state-of-the-art software and hardware, used in the commercial supermarket industry. Information management will have to accomplish the following functions: Inventory Control, Inventory Forecasting and Replenishment, Purchasing and Bill Paying. All functions will be linked with electronic mailboxes to vendors to facilitate Electronic Data Interchange (EDI).

Paying bills for product received from a central distribution center will eliminate voucher processing transactions by the number of receiving points currently in operation in a region, e.g., one CDC times 1200 invoices per month in lieu of 50 stores times 1200 invoices per month. This contributes to the cost avoidance identified in the commissary store replenishment procedures. Region buyers will also use forward buying techniques to negotiate price with a goal of saving the patron money and reducing the amount of stock fund surcharge needed to cover distribution costs.

Region procedures to support overseas operations in central Europe and United Kingdom districts will be identical to procedures in CONUS regions. In all other overseas districts such as Korea, commissary stores will order product from CONUS CDCs. The scenario will be for a store to cut off its front end scanning movement accumulation on Monday and run a replenishment cycle on its EPOSE or ECR system (PDEDs could be used to perform the same mission). The order would be reviewed by a manager and then transmitted by dial-up modem to the supporting CONUS CDC on Tuesday. The CDC will pull the order and stuff a container for a ship sailing on Sunday.

Using inventory-in-motion techniques, the store would have one week of requirement being processed at the CDC, one week of product per sailing week in transit (Korea is an 18-day sail, thus 3 weeks in transit), and 4 weeks in the warehouse as a safety level. Inordinate demand could be adjusted by a phone call to the CONUS CDC. The stock fund inventory could be reduced from 180 days to 60 days per site, a tremendous savings to

the government. This would also reduce the order-ship-time from 150 days to 35 days, a tremendous asset in adjusting to demand patterns as well as increasing product freshness. The European region would order product directly from CONUS manufacturers, using the same techniques used in CONUS CDCs.

INTEGRATED INFORMATION MANAGEMENT

Computer hardware and software are the system multipliers in any inventory management model. During a meeting on 8 September 1989, representatives from Anderson Consulting of McLean, Va and IBM Federal Products Division of Bethesda, Md, provided computer sizing information to support the development of a computer system to support a regional Central Distribution Concept. The full information data array is at Appendix C. Although specific brand name information was used to develop cost estimates, the commission does not endorse or recommend any specific brand of computer hardware or software.

The data elements used to size the equipment were: 20,000 lines in the Central Distribution Center; 12,000 lines per store; 5,000 vendors providing products; 20 buyers plus 10 contracting representatives equal 30 on-line users per commissary region; 315,000 cases leaving the distribution center daily; and the average purchase order containing 150 lines. This data remained constant during all five sizing models used. The system was oversized to permit growth. The changing variable was the number of purchase orders issued daily. To insure the system had the capacity for unforseen growth, 2500 purchase orders daily was the upper limit researched. The lower range was projected at 100 purchase orders daily.

The full range of all purchase orders could be accommodated using the IBM 3090 series or equivalent mainframe computers. The same software used on the IBM 3090-100S can be used on the extremely large IBM 3090-600. Additional memory can be added as needed. Software was configured to perform the full range of tasks outlined in the scope above, as well as bill paying and NCR polling. The latter function is to be used to obtain store management data and down-load prices to front end scanning computers at the stores. All prices quoted in Appendix C are list prices. Government discounts, multiple site licensing agreements and volume discounts should obtain at least 35 percent reductions on high end machines and the reduced peripherals requirements should discount the low end quote by 40 percent. Based on this analysis, the high end fully installed system should run $73.1 million and the low end system should run $26.6 million.

Based on this information, an IBM 3090-150S was selected as the prototype system for cost projections. System configuration would include one mainframe at each of seven regions, one mainframe at the headquarters, core grocery management software such as Anderson's DCS/Logistics or Worldwide Chain Store System, INFORUM forecasting software, NCR POS polling software, miscellaneous application software, system software and peripherals. Installation and integration consulting services for the headquarters and 7 regions are also included. The cost estimate for this system is $49.8 million at list price or

$29.9 million with anticipated discounts. All costs are for planning only and should be verified by appropriate information management specialists from the government or through a consulting service. This cost can easily be offset by the various commissary systems initiatives in information management planned over the next 5 years.

HUMAN RESOURCES MANAGEMENT

Management theorists and "hands on" corporate executives have long been in agreement on one major issue: the most important asset in an organization is the people within it. This is especially true in the retail grocery industry, where the margin for success is razor thin, and a company must strive to differentiate itself from other businesses selling essentially the same products and services. It is, therefore, vital that the Defense Commissary System (DECS) have the authority to manage its work-force and develop policies specifically designed to attract, develop, motivate and retain service-oriented personnel.

To serve the human resources needs of the DECS, personnel management should be organized in three tiers: headquarters (HQ), regional office and store level. At DECS headquarters level, the human resources group should be responsible for the development, within the civil service framework, of policies specifically tailored for a retail grocery environment and designed to help achieve the goals of the organization.

HQ, DECS should also administer the career development program for all occupational series, GS-9 and above. This career development program, based upon examining authority delegated by the Office of Personnel Management, should include a comprehensive intern recruitment effort aimed at colleges and universities, a mobility requirement, as well as filling of all career vacancies system-wide by HQ, DECS. The DECS training and development staff should focus its efforts on executive development, functional training, and on-the-job training.

In the area of classification, HQ, DECS will produce standardized job descriptions for field use. The HQ, DECS labor and employee relations staff will coordinate collective bargaining issues and goals for those stores which deal with labor organizations, develop procedures relating to disciplinary matters, and design programs to recognize employee contributions and encourage suggestions.

DECS region personnel responsibilities will include assisting stores in the resolution of personnel problems and implementing the programs developed by HQ, DECS. The personnel specialists would perform training, career counseling, and liaison with the civilian personnel offices servicing the stores.

At store level, personnel responsibilities will consist primarily of administrative functions. This will include the day-to-day liaison with the CPO and the performance of routine tasks such as the preparation of SF-52s (personnel action). It is envisioned that these tasks will be done by an administrative clerk or secretary.

DECS will negotiate servicing agreements with local civilian personnel offices. These agreements will delegate authority to the CPOs for staffing of commissary billets below the

GS-9 level, for classifying within the parameters of the standardized position descriptions issued by HQ, DECS and for routine administration of personnel policy (e.g., within-grade step increases; performance evaluations, etc.).

These servicing agreements will require that CPOs adhere to personnel regulations promulgated by DECS HQ, Department of Defense or Office of Personnel Management, in lieu of service-specific, major command or installation regulations. This will insure uniformity of application across the system. With a structure as outlined above, the human resources function should be responsive to the needs of the Defense Commissary System and its employees.

IMPLEMENTATION COSTS

A strong case has been made for consolidation of the separate Services' commissary systems into the Defense Commissary System (DECS). Savings through this consolidation of $83.5 million from bill paying, accounting and warehousing are outlined in Table 11-8. These savings will be difficult, if not impossible, to achieve without a completely integrated organization to oversee and manage this revised function. The consolidated organization is also more cost effective as it operates with 1449 fewer spaces than currently utilized by the separate systems. Figure 11-7 outlines how these spaces are allocated to achieve an add-on saving of $49.3 Million. The combined savings of $132 million

CURRENT HQ MANNING	SPACES	SPACES
-HEADQUARTERS	759	
-INTERMEDIATE LEVEL	2228	
SUBTOTAL		2987
-LESS: CDC OFFSET (SEE-TBL 1-1)		**318
TOTAL		2669
PROPOSED HQ MANNING		
-HEADQUARTERS	300	
-REGIONS	700	
-DISTRICTS	220	
TOTAL		1220
SPACES AVOIDED		1449
COST AVOIDED	($34000 • 1 FTE)	$49.3 MILLION

**75% of NAVY/MARINE CDC (268); VOUCHER EXAM (156)

Figure 11-7. Cost avoidance through system consolidation

offset with $39.5 million to improve service levels still provides a $92.5 million saving to the taxpayer.

The new system will have some start-up costs. In a previous section, $30 million was projected as the cost of purchasing a new computer system to operate central distribution and the management function. This system could be procured with trust revolving funds if required. The current systems are currently spread across the globe and real estate currently occupied could be transferred to DECS to locate regions, districts and the headquarters. If this were done, only two districts at Ft Worth and Denver will require real estate and they can be accommodated on government property in the vicinity. No new brick and mortar is projected as a requirement for DECS management headquarters.

Personnel costs to cover permanent change of station (PCS) and severance pay are the only major identified cost expenditures. As previously discussed, locating headquarters at existing sites will save real estate fees and this approach will also save personnel costs. These costs were determined by developing a model of possible headquarters locations and then arraying costs associated with moving personnel to fill projected authorizations at these sites. Using this scenario, personnel transition costs, including transition team temporary duty costs, were estimated to be $6.6 million.

In summary, the model used $20,000 as the average PCS cost and $7,500 as the average severance pay should an employee be terminated due to lack of local placement. The model assumed that 25 percent of the existing regional work-force will need local placement or severance action, with 10 percent actually receiving severance pay. The model also offset a portion of the FY 1988 PCS costs since consolidation would offset a portion of the normal PCS rotation between the various separate systems headquarters. Tables 11-9a and 11-9b display the model and the associated cost estimates.

ESTIMATED TRANSITION COSTS
for Consolidation
using existing Commissary System Real Estate

HEADQUARTERS w/random sites	-PERSONNEL SPACES- O/H	REQ	DISPLACED	COST in APF $
SYSTEM HEADQUARTERS				
Ft Lee, Va/Kelly AFB, TX	429	300	0	$0
NORTHEAST- Ft Meade	112	100	0	0
Dist 1- Langley, VA	40	10	20	400,000
Dist 2- Newport, RI	40	10	20	400,000
Dist 3- Ft Meade, MD	10*	10	0	200,000
SOUTHEAST- Montgomery	40	100	30	600,000
Dist 1- Jacksonville	40	10	30	*a 0
Dist 2- Pensacola	40	10	20	400,000
SOUTHWEST- San Antonio	312	100	30	0
Dist 1- San Antonio	160	10	20	400,000
Dist 2- Ft Worth	0	10	10	200,000
MIDWEST- Omaha, Neb	40	100*b	20	0
Dist 1- Great Lakes, Il	10	10	0	0
Dist 2- Denver	0	10	10	200,000
FAR WEST- El Toro	40	100*c	40	800,000
Dist 1- Oakland	40	10	20	400,000
Dist 2- San Diego	40	10	20	400,000
Dist 3- Phoenix	40	10	20	400,000
Dist 4- Hawaii	40	10	10	200,000

Notes: * from Mechanicsburg
*a previously costed
*b from Pensacola, Norfolk, Newport
*c from Ft Sam Houston, Phoenix, Norton

Table 11-9a. Transition costs

HEADQUARTERS w/random sites	-PERSONNEL SPACES- O/H	REQ	DISPLACED	COST in APF $
NORTHWEST-McCord/Ft Lewis	110	100	0	0
Dist 1- McCord/Ft Lewis	40	10	20	400,000
Dist 2- Seoul, Korea	10	10	0	0
Dist 3- Kadena, Japan	10	10	0	0
EUROPEAN- Ramstein, FRG	140	100	0*d	0
Dist 1- Giessen, FRG	30	10	0	0
Dist 2- Frankfurt, FRG	30	10	0	0
Dist 3- Stuttgart, FRG	30	10	0	0
Dist 4- Bamberg, FRG	30	10	0	0
Dist 5- Lakenheath, UK	40	10	0	0
Dist 6- Mediterranean	40	10	0	0
TOTAL PCS COST DUE TO RELOCATION				**5,400,000**
add: SEVERANCE PAY FOR 10% OF 1100 WORKERS NEEDING LOCAL PLACEMENT (1100 X 10% = 110 X $7500= $825,000)				+825,000
less: PCS OFFSET (*e) (103 total AFCOMS certificates issued) (60% require PCS x 40% HQ/region certs (43) = 25% of annual PCS costs at region/HQ) ($1,237,500 PCS Cost (*e) x 25% = $300,000 x 2 (*f) = $600,000)				-600,000
add: Implementation team TDY costs (20 man-years in Washington, D.C.)				1,000,000
TOTAL PERSONNEL COSTS TO OFFSET				**$6,625,000 *g**

NOTES: *d from Zweibrucken & Ramstein
*e AFCOMS Career Management data
*f TSA allocation, Navy & Marines costs were negligible
*g includes costs for military

Table 11-9b. Transition costs (continued)

RECOMMENDATIONS

11.1a That the Defense Commissary System (DECS) be established by consolidating all assets of the separate commissary systems operated by the U. S. Army Troop Support Agency, Air Force Commissary Service, Navy Resale and Services Support Office and the Marine Corps Commissary System.

11.1b That all Defense Logistics Agency and Defense Personnel Support Center expenses currently used to support the commissary program be used to offset the cost of recommendation 11.1a. That an independent audit by the Defense Audit Agency be used to isolate those assets used to perform the semi-perishable DICOMSS mission and determine the commensurate availability of these assets. That the assets be transferred to DECS to perform the new mission.

SUMMARY

This chapter provides a program to improve support to commissary patrons through increased hours of operation while modernizing the entire commissary system. The $39.5 million cost to improve service can easily be offset by the estimated $132.8 million in savings proposed by consolidation and contract central distribution and still provide a $93.3 million savings to the U. S. taxpayers. Even the estimated $30 million cost to implement the state-of-the-art computer system and the $6.6 million in personnel transition costs can be offset by first-year savings. With state of the art computer systems, adaptable from the grocery industry, this system can look, feel, and act like the big business enterprise that it is. Commissary customers as well as the taxpayers deserve no less.

Chapter 12

SERVICE AND INDUSTRY COMMENTS

DEPARTMENT OF THE ARMY
OFFICE OF THE UNDER SECRETARY
WASHINGTON, D.C. 20310-0102

5 January 1990

FOR ASSISTANT SECRETARY OF DEFENSE (FORCE MANAGEMENT & PERSONNEL)

SUBJECT: DOD Commissary Study-Jones Commission Final Report

The members of the commission can be commended for the depth and viability of the study's recommendations. The tasking was enormous; however, the concepts articulated in the report are positive steps towards improving commissary support to our military families and ensuring continuation of a much needed and highly valued entitlement.

During this study, the Army position has been to consolidate the separate systems into one. While this is a bold move, the time has come to support fully this concept. Fiscal constraints will dictate a more efficient operation. Service consolidation is the vehicle to achieve these efficiencies while simultaneously providing improved support to soldiers and their families.

The Army continues to advocate full consolidation as the most viable system for protecting the commissary entitlement for the military family. To ensure a smooth transition into the new system, we strongly recommend that a single Service be designated Executive Agent . . . the Army is willing to serve as the Executive Agent. We envision this Agency would be jointly staffed and operate under a Joint Board of Directors composed of Logistics Chiefs from each of the Military Services.

JOHN W. SHANNON
Under Secretary of the Army

DEPARTMENT OF THE NAVY
THE ASSISTANT SECRETARY OF THE NAVY
(SHIPBUILDING AND LOGISTICS)
WASHINGTON, D.C. 20360-5000

5 JAN 1990

MEMORANDUM FOR THE ASSISTANT SECRETARY OF DEFENSE (FORCE MANAGEMENT AND PERSONNEL)

Subj: DEPARTMENT OF THE NAVY COMMENTS ON THE DOD COMMISSARY STUDY--JONES COMMISSION FINAL REPORT

Encl: (1) Additional comments

In response to your request for coordination, we have reviewed the subject report and support the alternative of consolidating the commissary systems into a single DoD organization subject to the following provisos:

- The major advantage offered by full consolidation is to establish improved patron service standards as shown in table 5-1 of the report. The Department of the Navy is extremely concerned that savings generated by the recommendations of the Jones Commission will not be applied to enhance servicemember benefits through increased operating hours and store modernization. We support the full consolidation alternative only if the improved patron service standards established in the Commission report are guaranteed.

- The commissary system is an important quality of life benefit and must be coordinated with those benefits supported by the Morale, Welfare and Recreation (MWR) programs. The installation commander is charged with the responsibility for the morale and welfare of assigned personnel and therefore must be given an active role in determining commissary policy at the local level. Specific areas of concern in this regard are the setting of specific hours of operation within funding constraints and decisions of items to be stocked.

We do not favor the alternative plan of less than full consolidation, the principal features of which are centralized distribution and bill paying without consolidation of the overall system management, for the following reasons:

- This alternative does not maximize potential cost savings and will jeopardize achieving the patron service level objectives.

- The Navy and Marine Corps systems are already organized around a system of centralized bill paying and centralized distribution. We stand to gain little from partial consolidation.

- As noted in the Commission Report, this option may not be feasible to put into practice.

Enclosure (1) addresses additional concerns we feel are important and must be given consideration as we move into implementation of the consolidated system. The Navy and Marine Corps are committed to the success of this effort and remain ready to assume an active role in all actions.

Frank Swofford

FRANK W. SWOFFORD
By Direction of the Secretary of the Navy

Additional Comments to the DOD Commissary Study

Jones Commission Final Report

A consolidated commissary system needs to formulate a method to define clearly a basis for closer cooperation between exchanges and commissaries. Both retail systems serve the military customer in a similar fashion. They are more similar than dissimilar when viewed from a patron standpoint. The absence of coordination currently manifests itself in two areas:

- In overseas areas within the Navy, combined exchange and commissary shopping facilities have evolved successfully. This concept offers improved convenience to the consumer and has the potential to provide significantly increased patron service. This is appropriate for small and isolated bases and appears to complement the scenario of developing "magnet" stores on a regional basis.

- Secondly, selling tobacco, soda, and other "nonessential" food items in the future commissary system is an important issue. This is a difficult and emotional topic. The Navy and Marine Corps have been better able to support their MWR systems financially by generally restricting the sale of certain product classes to exchanges. Although allowing their sale in commissaries would widen the income effect benefit, it would clearly have an adverse financial effect on MWR. As we move into the future, competing interests such as discussed here will require balanced evaluation and resolution. We remain committed against sale of certain product classes in the consolidated commissaries.

The report does not adequately describe the military organization which would be put in place once consolidation is completed, to provide for military stewardship for the Navy and Marine Corps enlisted personnel who would be assigned to the commissary system. We must give this important concern additional attention prior to implementation.

Enclosure (1)

OFFICE OF
SECRETARY OF DEFENSE

90 JAN 10 AM 8:03

SECRETARY OF THE AIR FORCE
WASHINGTON

JAN 0 8 1990

MEMORANDUM FOR THE DEPUTY SECRETARY OF DEFENSE (MR ATWOOD)

SUBJECT: Jones Commission Study of Commissaries - ACTION MEMORANDUM

I have just completed a review of the Commission Report of Commissaries and its recommendations as to modes of future operations. While the report is an accurate synopsis of the issues, it is an inadequate source on which to base a prudent decision on all of the questions at hand. It overlooks unavoidable costs, is optimistic on savings, and fails to adequately represent management options favored by the majority of the Services. With these shortcomings in mind, I would strongly recommend withholding the report until inaccuracies can be corrected and a funding profile included that defines our game plan in year-by-year budget detail. Nonetheless, the Air Force fully supports and is ready to pursue several of the major recommendations as presented:

a. Consolidation of buying, distribution and payment activities into a regional structure would indeed promote economies of scale in both operations and costs. Moreover, several options to accomplish regionalized distribution are available and should be tested. For example, the US has an extensive network of wholesale grocery distributors who service regional markets. In the face of this proven commercial capability, to develop a contractor-operated system as proposed may not be the most efficient method, although either approach could mean a change to our traditional, and perhaps unnecessary food broker arrangements. Although the Services agreed to test these options, this was not mentioned in the report.

b. Air Force management of all Commissary construction would take advantage of our planning, design, management and financial expertise in this area. Construction priorities could be jointly established by the Commissary Service commanders, and construction trust fund monies managed jointly beginning in 1994, after the Services' current upgrade programs have reached completion.

c. The Air Force feels strongly that the management of each Service's commissaries should remain a responsibility of that component. Command-level responsiveness to the needs of customers is paramount to ensuring that morale and retention payoffs are retained. Individual service operation is the best way to provide that responsiveness, and represents our preferred

00425

option. An alternative, however, would be to go beyond those steps outlined in a. and b. above, and assign executive agent responsibility for all DoD commissaries to the Air Force. Our program currently generates forty five percent of all commissary sales, is the Nation's ninth largest food chain, and enjoys acknowledged leadership in efficiency of operation, construction quality, automation, personnel management and financial health. Building on this track record would provide the benefits of consolidation through reduced overhead and economies of scale, but would still retain the commander's perspective on customer support. We would envision operation through a slightly expanded Commissary Service, guided by an Interservice Commissary Board. Commissary operations would remain responsive to each installation commander, regardless of Service, for such items as store hours and stock assortment, as is currently our Air Force operational philosophy.

It is our determination, supported by the study's findings and all but one of the Services that implementation of the steps in a. and b. above within a structure preserving Service management integrity would improve service and produce more than two-thirds of all potential savings. Over the last few years, the Air Force Commissary Service has had great success, measured in terms of both customer service and fiscal health. As such, if further steps must be taken, I feel the Air Force as the executive agent for all commissary operations is a far better alternative than a DoD-run operation, which over time would tend to become less responsive to service needs and customer support. Working-level discussions indicate that most, if not all the Services would support this approach, and if there are savings to be realized beyond those outlined in a. and b. above, they could be so attained. We stand ready to develop detailed plans to implement either of these approaches as you so direct.

Donald B. Rice

Dan,
After medical care, the troops care most about commissaries. Consolidation of buying, distribution, payment + construction will probably capture all the real savings. If we must have a single grocery business, keep it in the Services with AF as executive agent.
Dan

DEFENSE LOGISTICS AGENCY
HEADQUARTERS
CAMERON STATION
ALEXANDRIA, VIRGINIA 22304-6100

IN REPLY REFER TO DLA-O

02 JAN 1990

MEMORANDUM FOR ASSISTANT SECRETARY OF DEFENSE (FORCE MANAGEMENT AND PERSONNEL)

SUBJECT: DoD Commissary Study - Jones Commission Final Report

In response to your memorandum of 14 December 1989, the following comments are offered in connection with the cost and operational aspects of the Jones Commission recommendations:

a. An independent government audit organization should provide the Department of Defense/Congress a comprehensive cost-benefit analysis, comparing the cost of a restructured commissary system vice the current cost of the Defense Logistics Agency (DLA) commissary support.

b. The consolidation alternative ($93 million annual savings) should be implemented vice the common use central distribution and procurement system ($44 million annual savings).

c. If commissary support is restructured, the transition team should address the following areas:

(1) Potential duplication of overseas troop issue and commissary cold storage facilities for perishable support.

(2) The future of the Defense Personnel Support Center (DPSC) Indefinite Delivery Type Contract (IDTC) program. IDTCs are negotiated both in CONUS and overseas to allow customers to order directly from the contractor or through Defense Subsistence Region-Europe.

(3) Changes in mobilization, as a result of a restructured overseas commissary system, should be incorporated into DPSC's wartime planning. Also, war reserve levels may require increases to maintain the current level of readiness.

(4) A DPSC representative(s) should be on the transition team.

The opportunity to comment on the final report is appreciated. DLA fully supports initiatives to improve the quality of life of Service members and their families.

Charles McCausland

CHARLES McCAUSLAND
Lieutenant General, USAF
Director

Armed Forces Marketing Council
1750 NEW YORK AVENUE, N.W. • SUITE 340 • WASHINGTON, D.C. 20006

GEORGE R. ROWAN, JR.
Executive Vice President
Telephone: 202-783-8228

November 3, 1989

Colonel Richard J. Tessier
Staff Director - Jones Commission
1211 Fern Street (Rm. A-100)
Washington, D. C. 20310-0200

Dear Colonel Tessier:

In accordance with your letter of 28 October, 1989, the Armed Forces Marketing Council comments on the Jones Commission draft report are enclosed.

The Council sincerely appreciated having the opportunity to review the draft before the final report is prepared. Our comments address specific recommendations, and we hope you find them constructive as well as useful in the team's endeavor to move on to a final product and eventually to implementation.

We applaud the efforts of the study group for its thorough and objective review of the commissary program. We agree that the recommendations reflect forward thinking and innovative concepts. In the current budget environment these will be necessary to assure continuation of the cherished commissary benefit.

While we have addressed several issues, all of which we consider significant, we are particularly concerned that no move be undertaken to eliminate commissary procurement directly from the prime source. This would inevitably lead to privatization and the demise of the benefit.

Again, thanks for the opportunity to comment and please let us know if we can assist the group in any way.

Sincerely,

George R. Rowan, Jr.
Executive Vice President

GRR/bc

Enclosures

ARMED FORCES MARKETING COUNCIL
COMMENTS ON
JONES COMMISSION STUDY DRAFT REPORT

ITEM: Recommendation 5.4, page 5-14.

COMMENT: **Concur with reservation** that industry be specifically exempted.

DISCUSSION: Unless industry is exempted, many commissary officers will be tempted to seek other voluntary in-store services, possibly using coercive measures.

We suggest the specific exemption of industry from this recommendation, because shelf stocking, which began as a temporary, voluntary service, is still technically "voluntary"; yet in reality it is not. If a vendor wants any product authorized for vendor stocking on the shelves, he must put it there himself.

ITEM: Recommendations 5.5a and 5.9b, pages 5-18 and 5-36, respectively.

COMMENT: The primary goal should be the establishment of the most cost effective and efficient system which would assure the on time payment of bills using accepted industry practices, standards, and automation.

We have no recommendation as to which branch of service should perform this mission, or how the commissaries organize to pay their bills. The commissary services should aggressively pursue Electronic Funds Transfer based on Uniform Communication Standard (UCS) as the ultimate goal.

ITEM: Recommendation 5.6a, page 5-23.

COMMENT: Concur provided that "central distribution" means CDC's fully controlled by the commissary service.

DISCUSSION: Our position is that the commissaries should continue to procure directly from prime source, a practice that has enabled the commissaries to offer unparalleled savings to the men and women of the Armed Services for many years.

Central distribution centers as envisioned by the Jones Commission report would enable the commissaries to purchase their requirements directly from the manufacturer on a more efficient basis.

The points covered in the discussion under "Scope of Operation" should be incorporated into the recommendation. Specifically, it should be clearly stated that the region will be responsible for total system management; that the manufacturer will be responsible for delivery of goods and preparation of invoices; and that bills will be paid directly to the manufacturers.

ITEM: Recommendation 6.5, page 6-8.

COMMENT: Our position remains unaltered. The only categories that industry should be required to stock are those commonly stocked in the commercial grocery market.

DISCUSSION: Shelf stocking is a costly burden on the vendors. In many cases it has the effect of raising the price to the customer, and thereby lowering the compensatory value of the benefit.

We propose that commissaries assume that portion of vendor stocking mission not performed in the civilian grocery market. Pending this assumption, there should be no expansion of vendor stocking categories.

ITEM: 7.2a. page 7-19.

COMMENT: Paperwork efficiencies must be sought as long as the frequent delivery system exists; however other fundamental problems must be addressed.

DISCUSSION: This recommendation appears to assume that the most significant problems with frequent delivery lie in the area of paperwork and invoicing, and that frequent delivery is otherwise acceptable to all manufacturers. This is clearly not the case.

While there are recognizable benefits to both the services and industry, there are also recognizable detriments, such as out-of-stocks and increased costs which must be borne by manufacturers and brokers with the patron ultimately penalized.

Those manufacturers who have their own efficient and cost-effective delivery systems and who do not use distributors to transport their products to supermarkets or to commissaries should not be coerced into using a commissary-dictated delivery system.

It would be far more advantageous and cost effective for the commissary system to mirror the commercial supermarket industry and establish its own distribution system. The frequent delivery system should only be an interim solution prior to moving to a CDC, provided manufacturers are not coerced into using it.

ITEM: Recommendation 7.2b, page 7-19.

COMMENT: Non-concur.

DISCUSSION: The payment of one weekly bill to a distributor for all deliveries would require procurement from other than the prime source. We strongly oppose this move for the same reasons as spelled out in our discussion of recommendation 7.1d.

ITEM: Chapter 10.

COMMENT: Procurement and planning of an automated information system would encompass the ability to provide industry data on product shipments worldwide through central distribution centers to stores, on a monthly basis through electronic media in common industry format (UCS). We recommend establishment of a joint DOD/industry study panel to define the need for interactivity as it relates to management information required by industry to support commissary operations effectively. This panel should meet on a continuing basis to address changes and new developments as necessary.

ITEM: Recommendation 7.1d, page 7-13.

COMMENT: Non-concur.

DISCUSSION: Direct procurement from the manufacturer has been a fundamental, bedrock practice for many years. In our view, the perpetuation of this practice is absolutely indispensable to the commissary benefit.

Any procurement from other than the prime source will result in price increases and thus will reduce the benefit to the customer. It is economically infeasible for a wholesaler to pass a product from the prime source to the commissaries at the same cost. The commissaries can procure that same product directly from the prime source. Therefore, the commissaries cannot procure their requirements from commercial supermarket wholesalers/rack jobbers and continue to save the military patron anything approaching the 25% advantage they now enjoy. Major grocery chains procure directly from the primary source to obtain the lowest possible prices.

Procurement from commercial supermarket wholesalers or rackjobbers would sever the vital longstanding link between manufacturers and commissaries, and effectively eliminate military commissaries as a separate, identifiable market. No longer would manufacturers offer special military market promotion prices which are routinely far more lucrative than those offered the commercial trade. The element of competition among manufacturers that helps fuel these aggressive promotional pricing practices would be lost forever.

This type procurement would more than likely result in wide variances in products, prices, and services available from area to area. In essence it would make the commissary entitlement noticeably different by locale; whereas direct procurement from the prime source assures greater uniformity throughout the country.

Additionally, procurement from commercial supermarket wholesalers or rack jobbers precludes total system management by the commissary organizations. It moves control of procurement and the stock assortment to a commercial middleman. If the system strays from the fundamental practice of direct procurement from the manufacturers we believe that privatization and the demise of the commissary benefit will inevitably follow.

AMERICAN LOGISTICS ASSOCIATION
1133 Fifteenth Street, N.W. / Suite 640 / Washington, D.C. 20005 / (202) 466-2520
FAX: (202) 296-4419 / MCI Mail: 2459439 / Telex: 6502459439

Colonel Richard Tessier, USAF
Jones Commission
1211 Fern Street
Arlington, VA 22202

November 6, 1989

Dear Colonel Tessier:

Since your draft report titled, "DOD Study of the Military Commissary System", had to be reviewed, analyzed and positions prepared in only a few days, ALA used a representative task force to provide opinions and concerns; though we would have preferred discussion of the report with the entire membership.

Within ALA there is supporting consensus for standardization, uniformity and efficiency in government. However, there is no consensus for attempts to achieve efficiency through consolidation of the existing systems. The proposals in this report impact on every member of ALA that does business with the current commissary systems, and in some instances threatens to totally destroy their livelihood. Opinions range from total support for the Defense Commissary System concept, to consolidation without a central distribution system, to retention of the current system. It is not possible to obtain consensus on the two major issues of consolidation and contractor operated centralized distribution centers, nor is there a consensus supporting the plausibility of some of the assumed savings. There is already concern that consolidation to the Defense Commissary System will threaten the industry infrastructure that now supports the military resale business.

There is concern from another perspective as well. By creating the Defense Commissary System, you have put together the 8th largest grocery chain in the United States; within two years its sales should be close to $6 billion and DOD would then have the 6th largest supermarket chain. With a standard organization, procedures and distribution methods, you have made an even more inviting target for privatization which was the main issue in a recent TV broadcast by Jack Anderson and Peter Grace. The Department of Defense should develop a strategy to prevent the privatization of this essential military personnel recruiting and retention tool.

Whatever the final DOD decision, any new study groups formed to develop new procedures that interface with suppliers would be incomplete without suppliers participation. Experienced resources from industry in the fields of UCS/EDI, accounting, distribution, stock lists, and standard forms are all available as participants for any specialized studies.

ALA sincerely appreciates the opportunity to comment on this report.

A. Kolbet Schrichte
Executive Vice President

Enclosures: 2
(1) General comments
(2) Comments on 91 recommendations

COMMENTS ON THE JONES COMMISSION REPORT

1. Page 5-22 and 11-27. There is a great deal of rivalry for computer sales to the Federal Government and the competitors of IBM feel that government employees frequently write computer requirements to favor IBM. If consolidation is ever effected and a computer procurement results in an award to IBM, this study will be used as part of the protest package by one of the non-selected bidders.

2. Page 5-27. Starting on page 0-15 of the August 1989 DOD Telephone Directory, there are 11 DOD "agencies" that are listed and all are major claimants on DOD for budget purposes. The proposed title for the new commissary consolidation is the Defense Commissary "SYSTEM". Suggest you start out on equal footing with the other competitors for budget dollars.

3. Page 6-2. The first paragraph under "Background" states that the stock fund account "was originally funded with appropriated funds, but now consists of patrons funds". This is incorrect.

4. Page 6-28. The report recommends that troop support remain status quo. It is difficult to imagine the Army and Air Force allowing a DOD joint organization to be responsible for feeding their troops.

5. Page 7-20. This page lists overseas DPSC depots for freeze/chill items as United Kingdom, Naples and Yokosuka. The depots are located in Germany and United Kingdom.

6. Page 7-30 and 11-28. On page 7-30 both perishable and semiperishable missions are transferred from DPSC to the DECS, however on page 11-28 only the semiperishable mission is moved.

7. Chapter 10. The recommendations appear convinced that no form of consolidation will take place. Also, the procurement of the hardware necessary to standardize all commissary stores, the regions and the headquarters is a major ADP procurement initiative and will be very difficult, time consuming and frustrating. That sense of concern is not evident in this chapter.

8. Page 11-5. There is no one page that lays out all the dollar costs of moving to a consolidated system or lists the savings generated by pulling together similar functions. On page 11-5, the study reports that $118.2 million will be saved by centralizing receipts at a central distribution center, consolidating the bill-paying function and merging of all commissary organizations into one. ALA did not have time to review and analyze the data in the appendices. We hope that the study groups analysis of all costs and savings was thorough and conservative -- since it is anticipated that either Congress

or the DOD Comptroller (or both) will begin to reduce the appropriated funds for the commissary system before the savings begin to accrue.

9. Page 11-9. The Board of Directors for DECS lists the "Deputy Chief of Staff, Naval Operations (Logistics)". This should be the "Deputy Chief of Naval Operations (Logistics)".

10. Appendix J. In an undated Jones Commission letter to The Dornbush Group, is the statement that all central distribution centers (in CONUS and overseas) will receive only car lot shipments direct from the manufacturer. ALA members, who are manufacturers and distributors, believe that there will be many less than truckload (LTL) quantities delivered to the CDC's. For overseas CDC's, this means some warehouse activity in CONUS will have to process LTL orders, or the order will go from a manufacturer to a consolidation point somewhere in CONUS prior to shipment overseas.

ALA POSITION ON THE DRAFT JONES COMMISSION RECOMMENDATIONS

ALA has thoroughly reviewed each recommendation in the Jones Commission Draft Report. Many of the recommendations were supported by ALA or we had no comment. The following Jones Commission recommendations warrented an ALA position:

5.4a. That existing regulations be modified to allow commissary officers to use voluntary labor in commissary stores.	Request the recommendation be rewritten to ensure a clear understanding that the voluntary labor is not being provided from industry resources. Industry will continue to offer merchandising assistance, but does not want to be forced to provide volunteer labor.
5.5a. That, notwithstanding any other recommendations, the Air Force adopt a centralized bill paying system. That funds currently expended to perform the mission be transferred from the local installation to AFCOMS.	Although the report indicates that the Air Force system is very expensive, industry members report that it is the most timely of the services. Don't centralize the function from the local finance office to AFCOMS, and then to DSA, until an equally responsive payment system is operational. ALA members do not care who pays the bill, or where it is paid from, but they do want it paid on time and accuractely.
5.5b. That the DOD Resale Executive Board appoint a special panel to implement Electronic Data Interchange in all services. That the Marine Corps be given the lead role in the program development based on lessons learned in their current systems implementation.	ALA strongly supports this initiative and requests ALA and industry be members of this panel.
5.5c. That the concept of a system with off the shelf grocery industry automation as outlined in Chapter 10, as well as central distribution and electronic data interchange as outlined in the organizational strategies of Chapter 5 or Chapter 11 become the system of record for all future planning.	See ALA's cover letter.

5.6a. That central distribution be approved as the future concept of record for the commissary system.	See ALA's cover letter.
5.6b. That a follow-on study be conducted to determine adequate information management, milestones and implementation procedures for central distribution under the proposed regionalization concept.	If some form of central distribution is approved, then ALA supports this recommendation.
5.7a. That variable margin pricing be deferred until other options to achieve savings, through cost avoidance or revenue generation, are developed and implemented.	ALA strongly supports this recommendation. Variable margin pricing erodes the military patrons entitlement and can significantly increase prices.
5.9b. That, under regionalization, the proposed Troop Support Agency "Bill Paying" service center be given the mission of centrally paying AFCOMS bills currently paid locally by installations. That funds to accomplish the mission be transferred from Air Force installations to TSA.	Although the report indicates that the Air Force system is very expensive, industry members report that it is the most timely of the services. Don't centralize the function from the local finance office to AFCOMS, and then to TSA, until an equally responsive payment system is operational. ALA members do not care who pays the bill, or where it is paid from, but they do want it paid on time and accuractely.
5.10a. That Executive Responsibility be considered only as a last resort, intermediate step in implementing central distribution. Both issue 5.11 and issue 11.1 are better courses of action.	See ALA's cover letter.
5.11a. That, as an interim system, the Army and Air Force Commissary System (AAFCOMS) be established by consolidating all assets of the separate commissary systems operated by Troop Support Agency (TSA) and Air Force Commissary Service (AAFCOMS).	See ALA's cover letter.

6.4a. The commissary systems meet semi-annually to determine a core list of brand name items to be carried by all DOD commissaries.	ALA supports the concept of a system-wide core list, however the review and update process must be continuous to facilitate new item introductions and changing requirements by category.
6.4b. The commissary systems standardize commodity groupings so that references and movement data will be consistent.	ALA supports this recommendation, but requests that the services use industry standards for their commodity groupings.
6.4c. AFCOMS take the lead in developing Plan-O-Grams for all services. This will reduce duplication and enhance standardization, and reduce costs.	ALA supports standardization and reducing costs, but AFCOMS must insure that the Plan-O-Grams are store specific.
6.5 For the present, vendors must continue to stock items which are authorized for vendor stockage.	ALA prefers the stronger position stated on page 5-51, "Vendor stocking not normally provided in the civilian market will be transferred to in-house or contract operations." If shelf stocking must be continued in the short term, no additional categories should be authorized.
6.14b. Make EDI mandatory for all the commissary systems by FY91. Adopting EDI has additional benefits not related to commissaries. The finance and accounting communities need to start revising regulations and preparing for EFT so the systems are compatible with the local finance systems.	ALA supports EDI and the initiative to have all services EDI capable by FY91. At this time, ALA does not believe that all vendors will be ready for EDI by FY91, however if all the services adopt the UCS/ANSI X.12 standard and work with industry, it is anticipated that a high percentage could be using EDI during that time frame.
6.15b. All commissary systems jointly develop standardized reports.	ALA supports this recommendation and requests that ALA participate in the development of any forms used by industry.

7.1d. Conduct a joint services study to determine the viability of product support from commercial supermarket wholesalers/distributors or rackjobbers. This study must include a cost/benefit analysis of this support versus 25 percent savings to patrons.	ALA strongly disagrees with any proposal to support commissary stores through commercial supermarket wholesalers/distributors or rackjobbers. The commissary system must continue to only buy brand name products direct from the manufacturer or his sales representative. Procuring from third party sources will destroy the unique military market, with its strong emphasis on coupons and VPR's designed to support members serving in the armed forces. The individual commissary stores will lose the merchandising support provided by the manufacturers/brokers and the customers will pay significantly higher prices. The major reason to change is to reduce the cost of labor for the store, however this is not significant when compared to the impact on the individual patron and the preservation of the commissary system as a valid, important retention benefit.
7.2a. Establish a Cross Services FDS Task Force of operations, financial, and systems personnel to develop a uniform process for implementation of a region summary invoice payment system for the current FDS program, in coordination with industry. This group will report to the Commanders Joint Services Commissary Committee.	ALA supports this recommendation. ALA wants to be a member of the task force developing the new summary invoice payment system (there have been instances when industry was not consulted until all decisions had been made). ALA strongly supports all procurements being made from manufacturers and invoices be paid to manufacturers.
7.2b. Conduct a joint services study, in coordination with industry, to provide for payment of weekly invoices to distributors, in the manner discussed in the text.	ALA does not support this recommendation. ALA strongly believes that all procurements should be made from manufacturers and invoices should be paid to the manufacturers. ALA would like to be on this study group to work with the services in finding a solution.
7.3c Finance hardware and commercially available software packages to accomplish Central Distribution initiatives.	If the final decision is made to go to a centralized distribution system, then ALA would support this recommendation.

9.1b. Obtain DoD approval for use of surcharge monies. With O&M dollars decreasing, surcharge dollars are the only way to support a viable incentive program.	ALA does not support this recommendation. ALA does support incentive awards to outstanding employees, but not with surcharge funds. Funding awards with patron surcharge money will be seen by many as another step towards self-sufficiency.
10.1a. That the DOD Resale Executive Board appoint one service per acquisition to act as executive agents to provide recommendations on policy, use and procurement of systems such as self-scanning equipment and EDI/EFT.	ALA does not support this recommendation. From a business point of view, one person or agency should be responsible for procuring all software and hardware.
11.1a. That the Defense Commissary System (DECS) be established by consolidating all assets of the separate commissary systems operated by Troop Support Agency, Air Force Commissary Service, Navy Resale and Services Support Office and the Marine Corps Commissary System.	See ALA's cover letter.
11.1b. That all Defense Logistics Agency and Defense Personnel Support Center expenses currently used to support the semi-perishable commissary program be used to offset the cost of recommendation 11.1a. That an independent audit by Defense Audit Agency be used to isolate those assets used to perform the semi-perishable DICOMSS mission and determine the commensurate availability of these assets. That the assets be transferred to DECS to perform the new mission.	If the final decision is to consolidate in to DECS, then ALA supports this recommendation.

THE JONES COMMISSION

DOD STUDY OF THE MILITARY COMMISSARY SYSTEM

Volume II ✦ Appendices
December 18, 1989



OFFICE OF THE ASSISTANT SECRETARY OF DEFENSE
(FORCE MANAGEMENT AND PERSONNEL)
WASHINGTON, D.C.

#818

DOD Study of Military Commissaries - 1989

Volume I Study Report

Volume II Appendices

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PREFACE

The Department of Defense Study of Military Commissaries was initiated Mar 31, 1989 by the Deputy Assistant Secretary of Defense (Resource Management & Support), Mr. David J. Berteau. The study responds to a Congressional request that military commissaries be thoroughly and comprehensively analyzed. The study was to conduct an unrestrained baseline reassessment to be used to reduce the systems' dependence on appropriations and in the development of policies that will move the commissary system forward in an orderly and consistent manner into the next century. This study is submitted to fulfill this requirement.

The study organization included a steering group chaired by Lieutenant General Donald W. Jones, Deputy Assistant Secretary of Defense (Military Manpower & Personnel Policy) with Deputy Assistant Secretary and flag/general officer representation from the Office of the Secretary of Defense and the Military Departments. The steering group received assistance from a Technical Advisory Group composed of the four commissary system commanders. The steering group provided executive direction to a study staff composed of representatives from the Services's headquarters staffs, the commissary systems, and technical support agencies such as the Defense Personnel Support Center, Army and Air Force Exchange Service and Military Traffic Management Command. This structure brought together the most knowledgeable individuals in these organizations under a single oversight body and provided an effective way to approach and resolve the complex issues under review. The study group sought and received input from industry trade groups, commissary field activities, commissary support activities and various grocery industry corporations. The review took place between April and September 1989.

PARTICIPANTS

STEERING GROUP

Chairman and Deputy Assistant Secretary of Defense
(Military Manpower & Personnel Policy)
Lieutenant General Donald W. Jones, USA

Deputy Chief of Staff, Logistics and Engineering
Lieutenant General Charles C. McDonald, USAF

Deputy Chief of Staff for Logistics
Lieutenant General Jimmy D. Ross, USA

Deputy Chief of Naval Operations
(Logistics)
Vice Admiral Stanley R. Arthur, USN

Deputy Chief of Staff for Installations and Logistics
Lieutenant General W. G. Carson, USMC

Deputy Assistant Secretary of Defense
(Installations)
Mr. Robert A. Stone

Deputy Assistant Secretary of Defense
(Management Systems)
Mr. Herbert H. Kraft
Mr. Alvin Tucker

TECHNICAL ADVISORY GROUP

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Rear Admiral Rodney K. Squibb, USN, Commanding Officer, NAVRESSO

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Brigadier General Charles E. St. Arnaud, Commanding Officer, TSA

Brigadier General Michael P. Downs, USMC, Director, Facilities
and Services Division

Brigadier General W. T. Adams, USMC, Director, Facilities
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Mr. Carl Smith, AFCOMS

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Mr. Marvin Beck, TSA

Mr. Thomas Rowe, NAVRESSO

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Mr. Vincent Folio, DPSC

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CPL Gerald Woodard, USMCR

SPC Lashunder Hodge, USA

LCPL William Root, USMCR

OTHER SUPPORT

SFC Rexford Miller, USA

Appendix A

BASIS OF STUDY

THE OFFICE OF THE ASSISTANT SECRETARY OF DEFENSE
WASHINGTON D C 20301-4000

FORCE MANAGEMENT
AND PERSONNEL

31 MAR 1995

MEMORANDUM FOR ASSISTANT SECRETARY OF THE ARMY (INSTALLATIONS AND LOGISTICS)
ASSISTANT SECRETARY OF THE NAVY (SHIPBUILDING AND LOGISTICS)
ASSISTANT SECRETARY OF THE AIR FORCE (READINESS SUPPORT)
DIRECTOR, DEFENSE LOGISTICS AGENCY
COMMANDER, MILITARY TRAFFIC MANAGEMENT COMMAND

SUBJECT: DoD Study of the Military Commissary System

In the letter at Attachment 1, the Chairman, Morale, Welfare, and Recreation Panel of the House Armed Services Committee has directed that the Department conduct a comprehensive, unrestrained study of the military commissary system. The letter states the "study must strive toward developing policies that move the system forward in an orderly and consistent manner. Study parameters should encompass the options for ensuring a viable commissary program...examine the nature of the patron base, the projected demand for services, and the resource methodology needed to provide a satisfactory program in the 1990s and beyond."

The commissary benefit is a key factor in our ability to retain professional military members. Since it is in competition with other requirements for diminishing Department resources, we must ensure policies and directions are in place which allow the system to operate efficiently, be adaptable to change, and convey the maximum benefit to the Service member. This study will be key to setting this course for years to come. Proper consideration will address many multi-faceted and complex issues. It is a major undertaking that cannot be viewed lightly. The Deputy Secretary of Defense has directed the establishment of a DoD commission to conduct the study and appointed Lieutenant General Donald W. Jones as the chair. At Attachment 2 is an organizational chart for the commission and at Attachment 3 a detail listing of the resources required to staff and guide the effort. At Attachment 4 is a brief milestone chart detailing key events. I ask that you take the necessary actions to provide the resources tasked to your Department or agency. The full-time staff must be available by April 17 for a 180-day commitment. Each tasked agency must fund the resources required. Please report the names of the personnel who will represent your department/agency to Colonel Stuart Travis, telephone 697-7197, by April 7.

I appreciate your assistance and timely response and regret the short notice requirement; however, I am sure you will agree the effort is crucial to the benefits program of the military community.

David J. Berteau
Deputy Assistant Secretary of Defense
(Resource Management & Support)

Attachments:
As stated

[illegible]

U.S. House of Representatives
COMMITTEE ON ARMED SERVICES
Washington, DC 20515
ONE HUNDRED FIRST CONGRESS
LES ASPIN, WISCONSIN, CHAIRMAN

[illegible]

March 2, 1989

Maj. Gen. Donald W. Jones
Deputy Assistant Secretary of Defense
(Military Manpower & Personnel Policy)
Department of Defense
Room 3C963, The Pentagon
Washington, D.C. 20301

Dear General Jones:

The Fiscal Year 1989 National Defense Authorization Act strongly endorsed the commissary privilege by prohibiting the privatization of military commissaries. This measure represented a major commitment on the part of the Congress and the American people to ensure that the system continues as a viable entity in fulfillment of its purpose.

However, the system remains a competitor for limited defense resources as we debate budget priorities. We may be already approaching the upper threshold of appropriations that can be committed to the commissary program.

The leadership of the commissary program has made impressive gains in recent years. This success presents us with a new dilemma: as more entitled people shop at larger and more modern stores, appropriated fund operating resources are strained. The system is now challenged to survive success. This challenge is formidable, but it must be met if we are to continue to provide the commissary benefit in a satisfactory manner.

If nothing is done, I am certain the system will ultimately face curtailed operating hours, degraded service, and limited product availability. I believe the leaders of the commissary system share this view as evidenced by the variety of measures underway or being contemplated to meet the challenge.

Today, each branch of the armed services are taking a different approach to enhance system resourcing:

- More commissary functions and entire departments are contracted out.

- Manufacturers and brokers are providing shelf-stocking and other in-store services to varying degrees.

Atch 1

- Industry increasingly is being asked to provide more frequent delivery and distribution services.

- The armed services differ in their management of funding. Examples of this disparity are in the management of funds for construction and stock fund allocation.

Action being contemplated in the executive and legislative branches will bring further challenge and opportunity:

- Increases or changes in the application of surcharge funds is being proposed in some sectors in order to offset appropriated fund operating costs.

- A test is about to begin on a hybrid of the exchange and commissary systems in a combined store, a move with vast implications.

- The armed services vary on stock assortments. This has the effect of some commissary proceeds accruing to the exchange service and ultimately the base morale, welfare and recreation fund to compensate for funding shortages.

- A program has been proposed that will effectively charge manufacturers for government distribution.

- The Department of Treasury has asked the Department of Defense (DOD) to conduct a test of a debit card for customer transactions.

- Several government procurement regulations have driven the cost of certain products higher contrary to the best interest of the military patron.

- Suppliers are asking to promote products in commissaries by advertising that a portion of the cost of their products will be donated to various beneficial programs.

- In order to accommodate increased demand, the Army and the Air Force are testing a concept to keep some of their stores open longer, and the Air Force has implemented a number of "Wee Servs".

- The base closure initiative promises to cause considerable program disruption, overloading some stores, causing relocations, and creating new requirements.

The panel has consistently served notice that the Department of Defense may be constructing facilities that may not be able to fully staffed and operated. I recognize the efficiencies of modern stores. However, we are beginning to question whether the scope of the stores being built takes into full consideration the increased operating costs brought about by the increased sales.

The list of challenges and possible solutions is long. While each armed service faces similar challenges, approaches to the solution are very different. While innovation should be encouraged and change is essential and

inevitable. I am concerned that significantly disparate policies designed to address similar problems cause considerable disruption over the long term. This inconsistency sends mixed signals to Congress, Federal budget managers, industry, and the patrons.

The time has come for an unrestrained baseline reassessment of the DOD commissary program. I therefore ask that DOD initiate a comprehensive study of the commissary system in consultation with industry. This study must strive toward developing policies that move the system forward in an orderly and consistent manner. Study parameters should encompass the options for ensuring a viable commissary program. The study should also examine the nature of the patron base, the projected demand for services, and the resource methodology needed to provide a satisfactory program in the 1990s and beyond. The study must have the participation of representatives from the Department of Defense, each of the armed services' commissary systems, and the Defense Logistics Agency. The exchange services should be consulted in adjunct areas. The study should be provided to the panel by July 1, 1989.

The study should also consider the impact of base closures and realignments. This should include an assessment of the value of assets that will be lost and other costs associated with closures or force reductions. This inventory also should include an assessment of funds required to develop and operate facilities at bases where there may be population increases or otherwise experience increased demand due to closure of bases in close proximity. The panel also requests a similar inventory regarding nonappropriated fund morale, welfare and recreation programs. The panel directs that no further construction contracts be awarded that use either commissary surcharge funds or nonappropriated funds at bases targeted for closure or realignment.

The panel is prepared to work closely with the DOD in protecting the commissary privilege and looks forward to a vigorous effort by DOD in this regard.

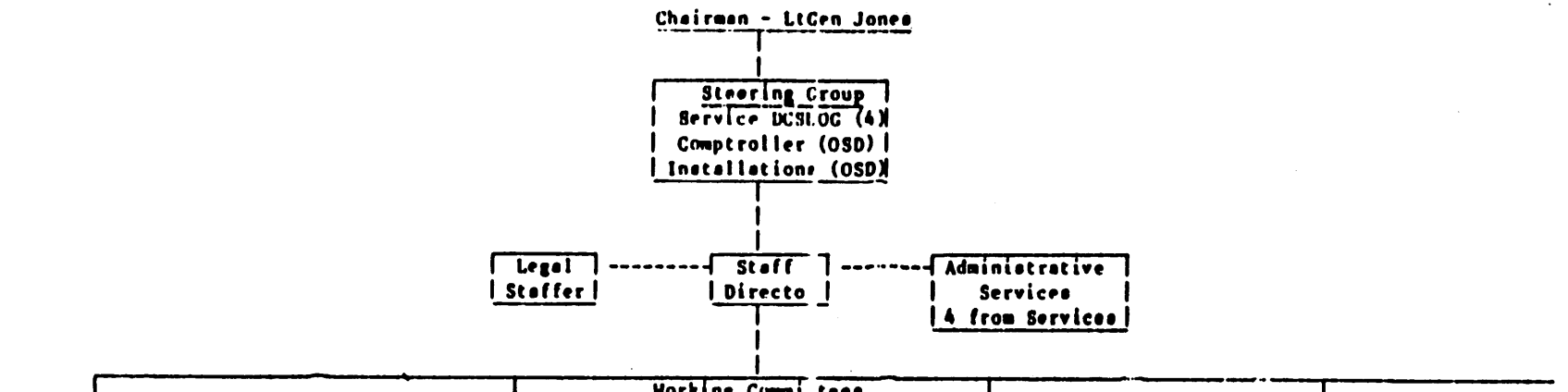
Sincerely,

Marvin Leath

Marvin Leath
Chairman
Morale, Welfare and Recreation Panel
Subcommittee on Readiness

ML:srkl

JONES COMMISSION ORGANIZATION



Systems Management

Task: Develop integrated data automation program(s) that provides effective management information, financial and inventory control system compatible with the business structure and objectives defined by the commission review. Including a review of existing and definition of needed hardware and software.

Chairman: AF Data Automation Expert

Operations Management

Task: Define acceptable service levels, desired categories of stock merchandising/stock assortments and to establish measurable standards of service and mission performance.

Chairman: Army Commissary Service Representative

Business/Financial Strategy

Task: Review current operations data and compare to successful private sector supermarket industry and recommend an effective concept for funding the military commissary benefit that considers current and future constraints on the overall Defense budget and the value of the benefit in retaining military members and families.

Chairman: Army Distribution Expert

Facilities

Task: Integration of an effective facility construction/rehabilitation concept in consideration of operations, inventory control and financial requirements/limitations.

Chairman: Air Force Engineering/Construction Representative

Staffing

Task: To review current organization structure, compensation, incentives, and personnel policies to propose an effective system to ensure efficient and economic mission accomplishment that includes ensuring customer oriented service to the military member.

Chairman: Navy Commissary Representative

Inventory/Management Control

Task: To develop effective means to procure and distribute sufficient quantities of resale merchandise to satisfy customer demand in a fashion to ensure freshness, acceptability and availability of product; but at the same time make effective efficient use of resources.

Chairman: Navy Inventory Management Systems Representative

Summary of Committee membership. All 16 permanent members appointed to commission for 180 days plus 4 administrative staff.

A. Army - three representatives (1) a commissary expert; (2) engineering/construction expert; (3) an overseas distribution expert.
B. Navy - three representatives (1) a commissary expert; (2) an inventory management systems expert; (3) a nonappropriated fund personnel expert.
C. Marine Corps - one representative - a commissary expert.
D. Air Force - three representatives (1) a commissary expert; (2) an engineering/construction expert; (3) a data automation expert.
E. Army and Air Force Exchange Service - one representative.
F. Defense Logistics Agency - one distibution representative from Defense Personnel Support Center.
G. Military Traffic Management Command - one transportation representative as appointed by MTMC.
H. Office of Secretary of Defense - (1) lawyer (part-time); (2) one civilian personnel expert.
I. Staff Director - as appointed by Chairman.

Administrative staff (appointed by each Military Service). One office manager (military or civilian); 1 admin. specialists.

Summary of Personnel Resources Tasked to the Jones Commission
DoD Review of Military Commissaries

Function	Requirement	
Chairman	LTG Donald W. Jones, DASD(MM&PP)	
Steering Group	Attend meetings of the Steering Group to be held @ twice monthly.	
	Deputy Chief of Staff, Logistics, Army	
	Deputy Chief of Staff, Naval Operations (Logistics)	
	Deputy Chief of Staff for Installation and Logistics, Marine Corps	
	Deputy Chief of Staff, Air Force, Logistics and Engineering	
	Deputy Assistant Secretary of Defense (Installations), OASD(P&L)	
	Deputy Assistant Secretary of Defense (Management Systems), OASD(C)	
Consultants to the Staff Director		
	From within DoD or private sector on a temporary basis as deemed appropriate by the Commission Chairman/Staff Director.	
Full Time Commission Staff		
Staff Director	0-6	As appointed by the Chairman.
Administrative Staff	Army-Admin Specialist	E-7 or E-8
	Air Force Typist	E-4 or equivalent civilian grade
	Navy Typist	E-4 or equivalent civilian grade
	Marine Corps Typist	E-4 or equivalent civilian grade
Committee Members		0-4 to 0-6 or equivalent graded civilian

Atch 3

Army - 3 members as follows:

1. A commissary expert from the Troop Support Agency.
2. Engineering/construction expert.
3. An expert for distribution of subsistence to overseas locations.

Navy - 3 members as follows:

1. A commissary expert from NAVRESSO.
2. An inventory management expert.
3. A nonappropriated fund personnel expert.

Marine Corps - 1 member as follows:

1. A commissary expert for the Marine Corps commissary system.

Air Force - 3 members as follows:

1. A commissary expert from AFCOMS.
2. An engineering/construction expert.
3. A data automation expert.

Defense Logistics Agency - 1 member as follows:

A distribution expert from Defense Personnel Support Center.

Army and Air Force Exchange Service:

One representative expert in retail operations and distribution.

Military Traffic Management Command:

One representative as appointed by Commander, MTMC.

Office of the Secretary of Defense:

One attorney as appointed by the chairman in a part-time advisory capacity.

One civilian personnel policy expert as appointed by ASD(FM&P).

Milestones for Completing the DoD Study of Military Commissaries
(the Jones Commission)

	Action	Milestone Completion	OPR
1.	Determine composition of the study group or commission and organizational structure. Several Options, recommendations and simple milestones are provided as follows:	March 24, 1989	DASD(MM&PP)
2.	Arrange for office space and equipment for Comission for 16 members and 4 administrative staff	April 3, 1989	DASD(MM&PP)
3.	Arrange to receive Commission staff and prepare In-briefings, billeting, etc.	Mar 27 - Apr 17	DASD(MM&PP)
4.	Write letter to General Officer Steering Group outlining major objectives of their involvement and advising of first meeting to be hosted by General Jones	March 27, 1989	DASD(MM&PP)
5.	Host initial meeting of General Officer Steering Group in Pentagon	April 17, 1989	Gen Jones
6.	Each member of commission will be assigned Committee Chairmanship responsibilities	April 20, 1989	Staff Director
7.	Chairman prepare In Process Review for General Officer Steering Group approximately every 15 days.	First IPR on April 20, 1989	Commission Chairman
8.	Present draft report and brief to Steering Group	June 1, 1989	Commission Chairman
9.	Final Draft Report submitted to Military Departments for comment	June 10, 1989	ODASD(MM&PP)

Atch 4

10. Comments included as appendix to report and final report submitted to ASD(FM&P) for signature	June 25, 1989	ODASD(MM&PP)
11. Report submitted to Congress	July 1, 1989	TBD

All actions assume no extension of the suspense to Congress is approved. It is anticipated that additional time may be required to complete the report. July 1, 1989, is used for planning purposes.

Appendix B

LEGAL AND LEGISLATIVE REFERENCES

CURRENT LEGISLATION

1. 10 USC 9621 Air Force Commissaries

2. 10 USC 4621 Army Commissaries

3. 10 USC 7601 Navy Commissaries

4. 10 USC 2482 Private persons may operate commissaries

5. 10 USC 2484 List of items that customer must pay for

6. 10 USC 2485 Donation of unmarketable food

7. 10 USC 2486 Merchandise that can be sold/surcharge

8. 10 USC 2487 Limitation on release of sales information

9. 10 USC 2685 Surcharge for construction

10. 10 USC 2304 Authority to buy Brand Name items without competition

11. Congressional record - Authority to buy brand name beef

12. DOD FAR 219.7000 - Authority to purchase commissary resale items without Small Business preference

13. DOD Directive 1330.17 - Military Commissaries

14. Comptroller General Decisions - B14851, B189651, B190650, - Purchase from AAFES, a NAFI, must be treated like purchase from commercial entities.

15. Comptroller General Decision - B188770 - Surcharge funds for commissary construction are considered appropriated funds. (Fortec)

16. DOD Authorization Bill (FY 1987) - Section 312 - Authority to purchase on a sole source basis, bakery and dairy products produced in AAFES facilities overseas.

17. DOD Authorization Bill (FY1989-90) - Section 324 - Adds laundry and dry cleaning operations to the list of exchange activities that can do work for appropriated funded activities on a reimburseable basis.

18. DOD Authorization Bill (FY1989-90) - Section 325 - Authority to purchase overseas from military exchanges with a limitation of $50,000 provided the exchange price is considered fair and reasonable.

Appendix C

COMPUTER SYSTEMS INTEGRATION COSTS

ANDERSEN CONSULTING
ARTHUR ANDERSEN & CO.

Suite 400
6280 Greensboro Drive
McLean Virginia 22102
(703) 448-0010

To: Lt. Col. Vincent

From: Steven M. Block

Date: September 13, 1989

Subject: Andersen Consulting Hardware Sizing Models

Van Hitch asked me to develop two additional runs of the DCS/Logistics hardware sizing sizing models for the commissary consolidation using new input for the "purchase orders/day" parameter. Jamey McCabe is on vacation this week but he was able to supply me with his models. All other input parameters for the model are the same as those used for the runs supplied to you last week by Jamey. For these two runs of the model, we input 300 purchase orders per day and 100 purchase orders per day.

For each model, three sections of the output are enclosed. Section A contains the parameters used as input, Section C provides the expected CPU utilizations based on the input parameters and Section E displays the MIPS required for each application group within the DCS/Logistics package. When the model was run with 300 purchase orders per day, it was appears that the an IBM 3090-150S would be the appropriate processor while the model with 100 purchase orders per day showed an IBM 3090-100S to be appropriate.

An additional page has been included showing the approximate cost of a representative hardware configuration using the above mainframes.

Please call me at (703) 448-3173 with any questions regarding these models.

Jones Commission
Conceptual Consolidated Services System
9-SEP-1989

	Funding (million$)		
	Large 3090-600	Medium 3090-300	Small 3090-180
Development			
Installation, Integration - 7 regions	15.0	15.0	15.0
Installation, Integration - HQ	3.0	3.0	3.0
Aquisition			
Mainframes - 7 Regions	71.8	38.9	17.2
Mainframes - HQ	1.0	1.0	1.0
Core Software - DCS/Logistics	2.0	2.0	2.0
INFOREM forecasting software	0.7	0.7	0.7
NCR POS Polling Software	0.7	0.7	0.7
Other Application Software	0.7	0.7	0.7
System Software and Peripherals	17.5	17.5	17.5
Operation (personnel, facilities, telecom)			
Maintenance (hardware, software)			
Disposal	0.0	0.0	0.0
	112.4	79.5	57.8
Number of Purchase Orders Per day*	2500*	1500*	750*

	Funding (millions $)	
	3090-150S	3090-100S
Development		
Installation, Integration - 7 regions	15.0	15.0
Installation, Integration - HQ	3.0	3.0
Aquisition		
Mainframes - 7 regions	9.2	3.7
Mainframes - HQ	1.0	1.0
Core Software - DCS/Logistics	2.0	2.0
INFOREM forecasting software	0.7	0.7
NCR POS Polling Software	0.7	0.7
Other Application Software	0.7	0.7
System Software and Peripherals	17.5	17.5
Operation (personnel, facilities, telecom)		
Maintenance (hardware, software)		
Disposal	0.0	0.0
Number of Purchase Orders Per day*	49.8	44.3
	500*	100*

Note: For consisitancy with the earlier models, we have kept all software and peripheral prices the same. We expect a reduction in the volume of purchase orders would decrease the cost of peripherals but quantification of the reduction requires further anaylsis.

Jones Commission
Conceptual Consolidated Services System
9-SEP-1989

	Funding (million$)		
	Large 3090-600	Medium 3090-300	Small 3090-180
Development			
Installation, Integration - 7 regions	15.0	15.0	15.0
Installation, Integration - HQ	3.0	3.0	3.0
Aquisition			
Mainframes - 7 Regions	71.8	38.9	17.2
Mainframes - HQ	1.0	1.0	1.0
Core Software - DCS/Logistics	2.0	2.0	2.0
INFOREM forecasting software	0.7	0.7	0.7
NCR POS Polling Software	0.7	0.7	0.7
Other Application Software	0.7	0.7	0.7
System Software and Peripherals	17.5	17.5	17.5
Operation (personnel, facilities, telecom)			
Maintenance (hardware, software)			
Disposal	0.0	0.0	0.0
	112.4	79.5	57.8

Jones Commission
Conceptual Consolidated Services System
13-SEP-1989

	Funding (millions $)	
	3090-150S	3090-100S
Development		
Installation, Integration - 7 regions	15.0	15.0
Installation, Integration - HQ	3.0	3.0
Aquisistion		
Mainframes - 7 regions	9.2	3.7
Mainframes - HQ	1.0	1.0
Core Software - DCS/Logistics	2.0	2.0
INFOREM forecasting software	0.7	0.7
NCR POS Polling Software	0.7	0.7
Other Application Software	0.7	0.7
System Software and Peripherals	17.5	17.5
Operation (personnel, facilities, telecom)		
Maintenance (hardware, software)		
Disposal	0.0	0.0
	49.8	44.3

Note: For consisitancy with the earlier models, we have kept all software and peripheral prices the same. We expect a reduction in the volume of purchase orders would decrease the cost of peripherals but quantification of the reduction requires further anaylsis.

SECTION A - CLIENT DATA

UCS/Logistics
Version 10.0 Hardware Sizing

CLIENT : JONES COMMISSION
13-Sep-89

Applications Installed:

Order Processing:	N (Y/N)
Purchasing:	Y (Y/N)
Accounts Receivable:	Y (Y/N)
Inventory Control:	N (Y/N)
Warehouse Management:	N (Y/N)
Outbound Logistics:	N (Y/N)
Distribution Requirements:	Y (Y/N)
Customer Service Management:	N (Y/N)

Technical Environment:

File Access Method:	3 (1=VSAM,2->4.24=DB2)
OS Type:	1 (1=MVS,1.7=VSE)
On-line Hours/Day:	8
Number of Users:	30

Business Profile:

Number of Customers:	50
Avg. Msgs/Customer:	4
Number of Vendors:	5,000
Number of Items:	20,000
Number of Warehouses:	1
Number of Kits:	0
Number of Components/Kit:	0
Number of Contracts:	0
Items/Contract:	0
Inquiries per Day:	600
Maint. per Day:	600
Avg. # On-Line Pages per Day:	5,000

SECTION A - CLIENT DATA

DCS/Logistics — CLIENT : JONES COMMISSARY
Version 10.0 Hardware Sizing — 13-Sep-89

# of EMail Memos/Day:	90	
# of Lines/EMail Memo:	10	

Order Processing:

Sales Orders/Day:	60	
SOL's/Order:	5000	
Pick Lines/SOL:	75000	
Avg. # Kits/Order:	0	
Future Dated Prices:	0	
% of SO Lines:	5	Credit/Debit memos
% of SO Lines:	5	BO/BL lines
% of SO Lines:	5	Immediate Releases
% of SO Lines:	5	Picking Exceptions?
% of SO Lines:	5	Future Orders
Payments/Day:	125	Cash Receipts

Inventory Control:

Transfer Orders/Day:	0	
Transfer Order Lines/Order:	0	
Pick Lines/TOL:	0	
# of Receipts per Day:	2500	
# of Items per Receipt:	150	
Putaway Lines per Item:	3000	
# of Transfers per Day:	0	
# of Adjustments per Day:	0	
% of Rec'd Line:	5	% Auto BO Release

SECTION A - CLIENT DATA

DCS/Logistics — CLIENT : JONES COMMISSARY
Version 10.0 Hardware Sizing — 13-Sep-89

Purchasing:

Purchase Orders/Day:	300	
Purchase Order Lines/Order:	150	
% of P.O.s that Become Overdue:	5	%
% Overdue P.O. Lines:	1	%

Warehouse Management:

% of Locations Unavailable:	5	%
% Item/Locs. Counted per Day:	5	%
% Items w/Lots:	10	%
% of Locations:	5	% Mixed item locations
Avg. # Zones per Whse:	15	
Avg. Locs/Item:	3	
Avg. # Lots/Lot-Cntrld Item:	5	
Avg. Locs./Warehouse:	40,000	
Avg. Move Methods/Loc:	1	(Not greater than 3)
Avg. Storage Types/Loc:	1	(Not greater than 3)

Outbound Logistics:

Batch Bundling?	Y	(Y/N)
# of Freight Lanes:	12	
Avg. # Bundle Specs per Zone:	2	
Avg. # of SOLs per Load:	5,000	
Avg. # Pick Paths per Whse:	10	
Avg. # Ship Vias per Whse:	3	

SECTION A - CLIENT DATA

UCS/Logistics — CLIENT : JONES COMMISSION
Version 10.0 Hardware Sizing — 13-Sep-89

Customer Service Management:

# of CSM Periods:	24

Distribution Requirements Planning:

# of Bills of Distribution:	1
Avg. # Whses per Bill of Dist.:	1
# Suggested POs/Day:	2500

SECTION A - CLIENT DATA

OCS/Logistics — CLIENT : JONES COMMISSION
Version 10.0 Hardware Sizing — 13-Sep-89

Applications Installed:

Order Processing:	N (Y/N)
Purchasing:	Y (Y/N)
Accounts Receivable:	Y (Y/N)
Inventory Control:	N (Y/N)
Warehouse Management:	N (Y/N)
Outbound Logistics:	N (Y/N)
Distribution Requirements:	Y (Y/N)
Customer Service Management:	N (Y/N)

Technical Environment:

File Access Method:	3 (1-VSAM,2->4.2E-DB2)
OS Type:	1 (1-MVS,2-VSE)
On-line Hours/Day:	8
Number of Users:	30

Business Profile:

Number of Customers:	60
Avg. Msgs/Customer:	4
Number of Vendors:	5,000
Number of Items:	20,000
Number of Warehouses:	1
Number of Kits:	0
Number of Components/Kit:	0
Number of Contracts:	0
Items/Contract:	0
Inquiries per Day:	500
Maint. per Day:	200
Avg. # On-Line Pages per Day:	5,000

SECTION A - CLIENT DATA

DCS/Logistics CLIENT : JONES COMMISSION
Version 10.0 Hardware Sizing 13-Sep-89

# of EMail Memos/Day:	90	
# of Lines/EMail Memo:	10	

Order Processing:

Sales Orders/Day:	60	
SOL's/Order:	5000	
Pick Lines/SOL:	75000	
Avg. # Kits/Order:	0	
Future Dated Prices:	0	
% of SO Lines:	5	Credit/Debit memos
% of SO Lines:	5	BO/BL lines
% of SO Lines:	5	Immediate Release?
% of SO Lines:	5	Picking Exceptions?
% of SO Lines:	5	Future Orders
Payments/Day:	125	Cash Receipts

Inventory Control:

Transfer Orders/Day:	0	
#Transfer Order Lines/Order:	0	
Pick Lines/TOL:	0	
# of Receipts per Day:	2500	
# of Items per Receipt:	150	
Putaway Lines per Item:	3000	
# of Transfers per Day:	0	
# of Adjustments per Day:	0	
% of Rec'd Line:	5	% Auto PO Release

SECTION A - CLIENT DATA

DCS/Logistics — CLIENT : JONES COMMISSION
Version 10.0 Hardware Sizing — 13-Sep-95

Purchasing:

Purchase Orders/Day:	300
Purchase Order Lines/Order:	150
% of P.O.s that Become Overdue:	5 %
% Overdue P.O. Lines:	1 %

Warehouse Management:

% of Locations Unavailable:	5 %
% Item/Locs. Counted per Day:	5 %
% Items w/Lots:	10 %
% of Locations:	5 % Mixed item locations
Avg. # Zones per Whse:	15
Avg. Locs/Item:	3
Avg. # Lots/Lot-Cntrld Item:	5
Avg. Locs./Warehouse:	40,000
Avg. Move Methods/Loc:	1 (Not greater than 3)
Avg. Storage Types/Loc:	1 (Not greater than 3)

Outbound Logistics:

Batch Bundling?	Y (Y/N)
# of Freight Lanes:	12
Avg. # Bundle Specs per Zone:	2
Avg. # of SOLs per Load:	5,000
Avg. # Pick Paths per Whse:	10
Avg. # Ship Vias per Whse:	3

SECTION A - CLIENT DATA

DCS/Logistics — CLIENT : JOINT COMMISSION
Version 10.0 Hardware Sizing — 13-Sep-89

Customer Service Management:

# of CSM Periods: 24

Distribution Requirements Planning:

# of Bills of Distribution: 1
Avg. # Whses per Bill of Dist.: 1
Suggested POs/Day: 2500

SECTION C - FORECASTED CPU UTILIZATIONS

3090-300S CPU Estimate: 6.84 MIPS

***** MVS XA *****
***** ESTIMATES *****

MODEL	Complex MIPS	Processor Rate	Number of Processors	Complex Busy %	Processor Busy %
4381-1	2.00	2.00	1	342%	342%
4381-2	2.70	2.70	1	253%	253%
4381-3	4.80	2.40	2	142%	285%
4381-11	1.30	1.30	1	526%	526%
4381-12	2.70	2.70	1	253%	253%
4381-13	3.70	3.70	1	185%	185%
4381-14	6.50	3.25	2	105%	210%
4381-21	1.70	1.70	1	402%	402%
4381-22	2.90	2.90	1	236%	236%
4381-23	4.80	4.80	1	142%	142%
4381-24	8.50	4.25	2	80%	161%
4381-90	3.80	3.80	1	180%	180%
4381-91	4.80	4.80	1	142%	142%
4381-92	8.50	4.25	2	80%	161%
3081-CX	3.05	3.05	1	224%	224%
3083-[illegible]	3.75	3.75	1	182%	182%
3083-[illegible]	3.98	3.98	1	172%	172%
3083-CX	4.06	4.06	1	168%	168%
3083-B	5.64	5.64	1	121%	121%
3083-B*	5.99	5.99	1	114%	114%
3083-BX	6.11	6.11	1	112%	112%
3083-J	7.48	7.48	1	91%	91%
3083-J*	7.96	7.96	1	86%	86%
3083-JX	8.12	8.12	1	84%	84%
3081-D	10.20	5.10	2	67%	134%
3081-G	10.20	5.10	2	67%	134%

***** DOS VSE *****
***** ESTIMATES *****

MODEL	Complex MIPS	Processor Rate	Number of Processors	Complex Busy %	Processor Busy %
9373-20	0.50	0.50	1	1367%	1367%
9373-25	0.75	0.75	1	911%	911%
9373-30	1.20	1.20	1	570%	570%
9375-40	0.35	0.35	1	1953%	1953%
9375-50	1.20	1.20	1	570%	570%
9375-60	0.88	0.88	1	777%	777%
9375-60	1.80	1.80	1	380%	380%
9375-90	2.00	2.00	1	342%	342%
9377-80	1.80	1.80	1	380%	380%
9377-90	2.50	2.50	1	273%	273%
4341-2	1.50	1.50	1	456%	456%
4341-12	1.60	1.60	1	427%	427%
4361-4	1.10	1.10	1	621%	621%
4361-5	1.40	1.40	1	488%	488%
4381-1	2.00	2.00	1	342%	342%
4381-2	2.70	2.70	1	253%	253%
4381-3	4.80	2.40	2	142%	285%
4381-11	1.30	1.30	1	526%	526%
4381-12	2.70	2.70	1	253%	253%
4381-13	3.70	3.70	1	185%	185%
4381-14	6.50	3.25	2	105%	210%
4381-21	1.70	1.70	1	402%	402%
4381-22	2.90	2.90	1	236%	236%
4381-23	4.80	4.80	1	142%	142%
4381-24	8.50	4.25	2	80%	161%

SECTION C - FORECASTED CPU UTILIZATIONS

3090-300S CPU Estimate: 6.84 MIPS

***** MVS XA *****
***** ESTIMATES *****

MODEL	Complex MIPS	Processor Rate	Number of Processors	Complex Busy %	Processor Busy %
3081-G*	10.80	5.40	2	63%	127%
3081-GX	11.20	5.60	2	61%	122%
3081-K	13.80	6.90	2	50%	99%
3081-K*	14.60	7.30	2	47%	94%
3081-KX	15.40	7.70	2	44%	89%
3084-Q	23.00	5.75	4	30%	119%
3084-Q*	24.40	6.10	4	28%	112%
3084-QX	26.00	6.50	4	26%	105%
3090-100S	5.60	5.60	1	122%	122%
3090-120E	7.50	7.50	1	91%	91%
3090-120S	7.50	7.50	1	91%	91%
3090-150	9.80	9.80	1	70%	70%
3090-150E	10.20	10.20	1	67%	67%
3090-150S	11.60	11.60	1	59%	59%
3090-170S	14.80	14.80	1	46%	46%
3090-180	15.40	15.40	1	44%	44%
3090-180E	17.60	17.60	1	39%	39%
3090-180S	22.00	22.00	1	31%	31%
3090-200	27.70	13.85	2	25%	49%
3090-200E	32.00	16.00	2	21%	43%
3090-200S	40.00	20.00	2	17%	34%
3090-250S	22.00	11.00	2	31%	62%
3090-280E	32.00	16.00	2	21%	43%
3090-280S	40.00	20.00	2	17%	34%
3090-300E	44.00	14.67	3	16%	47%
3090-300S	55.00	18.33	3	12%	37%

***** DOS VSE *****
***** ESTIMATES *****

MODEL	Complex MIPS	Processor Rate	Number of Processors	Complex Busy %	Processor Busy %
4381-90	3.80	3.80	1	180%	180%
4381-91	4.80	4.80	1	142%	142%
4381-92	8.50	4.25	2	80%	161%

Note: All MIPS statistics presented here are taken from "The IBM Mainframe Scenario and Residual Value Forecast: Midyear 1989" report produced by the Gartner Group, Inc.

SECTION C - FORECASTED CPU UTILIZATIONS

3090-200S CPU Estimate: 6.84 MIPS

***** MVS XA *****
***** ESTIMATES *****

MODEL	Complex MIPS	Processor Rate	Number of Processors	Complex Busy %	Processor Busy %
3090-200S	53.00	17.67	3	13%	39%
3090-400	50.00	12.50	4	14%	55%
3090-400E	57.00	14.25	4	12%	48%
3090-400S	74.00	18.50	4	9%	37%
3090-500E	66.00	13.20	5	13%	52%
3090-500S	90.00	18.00	5	8%	38%
3090-600E	77.00	12.83	6	9%	53%
3090-600S	105.00	17.50	6	7%	39%

***** DOS VSE *****
***** ESTIMATES *****

MODEL	Complex MIPS	Processor Rate	Number of Processors	Complex Busy %	Processor Busy %

SECTION I - HARDWARE SIZING SUMMARY

AREA	MIPS	Label	DASD Megabytes
Common Features	1.02	C/F	5,051.50
Order Processing	0.00	O/P	0.00
Purchasing	2.02	PUR	262.55
Accounts Receivable	0.06	A/R	14,056.00
Inventory Control	0.00	I/C	0.00
Warehouse Management	0.00	W/M	0.00
Outbound Logistics	0.00	O/L	0.00
Distribution Requirements	3.74	DRP	1,126.51
Customer Service Mgmt.	N/A	CSM	0.00
Total:	6.84	Total:	20,498.55

SECTION A - CLIENT DATA

DCS/Logistics — CLIENT : JONES COMMISSION
Version 10.0 Hardware Sizing — 13-Sep-89

Applications Installed:

Order Processing:	N (Y/N)
Purchasing:	Y (Y/N)
Accounts Receivable:	Y (Y/N)
Inventory Control:	N (Y/N)
Warehouse Management:	N (Y/N)
Outbound Logistics:	N (Y/N)
Distribution Requirements:	Y (Y/N)
Customer Service Management:	N (Y/N)

Technical Environment:

File Access Method:	3 (1=VSAM,2=X.25,3=CB2)
OS Type:	1 (1=MVS,2=VSE)
On-line Hours/Day:	8
Number of Users:	30

Business Profile:

Number of Customers:	60
Avg. #sgs/Customer:	4
Number of Vendors:	5,000
Number of Items:	20,000
Number of Warehouses:	1
Number of Kits:	0
Number of Components/Kit:	0
Number of Contracts:	0
Items/Contract:	0
Inquiries per Day:	600
Maint. per Day:	600
Avg. # On-Line Pages per Day:	5,000

SECTION A - CLIENT DATA

DCS/Logistics — CLIENT : JONES COMMISSARY
Version 10.0 Hardware Sizing — 13-Sep-89

# of EMail Memos/Day:	90
# of Lines/EMail Memo:	10

Order Processing:

Sales Orders/Day:	60
SOL's/Order:	5000
Pick Lines/SOL:	25000
Avg. # Kits/Order:	0
Future Dated Prices:	0
% of SO Lines:	5 Credit/Debit Memos
% of SO Lines:	5 BO/EL Lines
% of SO Lines:	5 Immediate Release?
% of SO Lines:	5 Picking Exceptions?
% of SO Lines:	5 Future Orders
Payments/Day:	125 Cash Receipts

Inventory Control:

Transfer Orders/Day:	0
Transfer Order Lines/Order:	0
Pick Lines/IOL:	0
# of Receipts per Day:	2500
# of Items per Receipt:	150
Putaway Lines per Item:	3000
# of Transfers per Day:	0
# of Adjustments per Day:	0
% of Rec'd Line:	5 % Auto BC Release

SECTION A - CLIENT DATA

DCS/Logistics — CLIENT : JONES COMMISSION
Version 10.0 Hardware Sizing — 13-Sep-89

Purchasing:

Purchase Orders/Day:	100	
Purchase Order Lines/Order:	150	
% of P.O.s that Become Overdue:	5	%
% Overdue P.O. Lines:	1	%

Warehouse Management:

% of Locations Unavailable:	5	%
% Item/Locs. Counted per Day:	5	%
% Items w/Lots:	10	%
% of Locations:	5	% Mixed item locations
Avg. # Zones per Whse:	15	
Avg. Locs/Item:	3	
Avg. # Lots/Lot-Cntrld Item:	5	
Avg. Locs./Warehouse:	40,000	
Avg. Move Methods/Loc:	1	(Not greater than 3)
Avg. Storage Types/Loc:	1	(Not greater than 3)

Outbound Logistics:

Batch Bundling:	Y	(Y/N)
# of Freight Lanes:	12	
Avg. # Bundle Specs per Zone:	2	
Avg. # of SKUs per Load:	5,000	
Avg. # Pick Paths per Whse:	10	
Avg. # Ship Vias per Whse:	3	

SECTION A - CLIENT DATA

DCS/Logistics CLIENT : JCMES COMMISSION
Version 10.0 Hardware Sizing 13-Sep-89

Customer Service Management:

# of CSM Periods: 24

Distribution Requirements Planning:

# of Bills of Distribution: 1
Avg. # Whses per Bill of Dist.: 1
Suggested PDs/Day: 2500

SECTION C - FORECASTED CPU UTILIZATIONS

3090-300S CPU Estimate: 3.00 MIPS

***** MVS XA *****
***** ESTIMATES *****

MODEL	Complex MIPS	Processor Rate	Number of Processors	Complex Busy %	Processor Busy %
4381-1	2.00	2.00	1	150%	150%
4381-2	2.70	2.70	1	111%	111%
4381-3	4.80	2.40	2	63%	125%
4381-11	1.30	1.30	1	231%	231%
4381-12	2.70	2.70	1	111%	111%
4381-13	3.70	3.70	1	81%	81%
4381-14	6.50	3.25	2	46%	92%
4381-21	1.70	1.70	1	176%	176%
4381-22	2.90	2.90	1	103%	103%
4381-23	4.80	4.80	1	63%	63%
4381-24	8.50	4.25	2	35%	71%
4381-90	3.80	3.80	1	79%	79%
4381-91	4.80	4.80	1	63%	63%
4381-92	8.50	4.25	2	35%	71%
3083-C*	3.05	3.05	1	98%	98%
3083-E	3.75	3.75	1	80%	80%
3083-E*	3.98	3.98	1	75%	75%
3083-E**	4.06	4.06	1	74%	74%
3083-B	5.64	5.64	1	53%	53%
3083-B*	5.99	5.99	1	50%	50%
3083-B**	6.11	6.11	1	49%	49%
3083-J	7.48	7.48	1	40%	40%
3083-J*	7.96	7.96	1	38%	38%
3083-J**	8.12	8.12	1	37%	37%
3081-D	10.20	5.10	2	29%	59%
3081-G	10.20	5.10	2	29%	59%

***** DOS VSE *****
***** ESTIMATES *****

MODEL	Complex MIPS	Processor Rate	Number of Processors	Complex Busy %	Processor Busy %
9373-20	0.50	0.50	1	600%	600%
9373-25	0.75	0.75	1	400%	400%
9373-30	1.20	1.20	1	250%	250%
9375-40	0.35	0.35	1	857%	857%
9375-50	1.20	1.20	1	250%	250%
9375-60	0.88	0.88	1	341%	341%
9375-80	1.80	1.80	1	167%	167%
9375-90	2.00	2.00	1	150%	150%
9377-80	1.80	1.80	1	167%	167%
9377-90	2.50	2.50	1	120%	120%
4341-2	1.50	1.50	1	200%	200%
4341-12	1.60	1.60	1	188%	188%
4361-4	1.10	1.10	1	273%	273%
4361-5	1.40	1.40	1	214%	214%
4381-1	2.00	2.00	1	150%	150%
4381-2	2.70	2.70	1	111%	111%
4381-3	4.80	2.40	2	63%	125%
4381-11	1.30	1.30	1	231%	231%
4381-12	2.70	2.70	1	111%	111%
4381-13	3.70	3.70	1	81%	81%
4381-14	6.50	3.25	2	46%	92%
4381-21	1.70	1.70	1	176%	176%
4381-22	2.90	2.90	1	103%	103%
4381-23	4.80	4.80	1	63%	63%
4381-24	8.50	4.25	2	35%	71%

SECTION C - FORECASTED CPU UTILIZATIONS

3090-300S CPU Estimate: 3.00 MIPS

***** MVS XA *****
***** ESTIMATES *****

MODEL	Complex MIPS	Processor Rate	Number of Processors	Complex Busy %	Processor Busy %
3081-G*	10.80	5.40	2	28%	56%
3081-GX	11.20	5.60	2	27%	54%
3081-K	13.80	6.90	2	22%	43%
3081-K*	14.60	7.30	2	21%	41%
3081-KX	15.40	7.70	2	19%	39%
3084-Q	23.00	5.75	4	13%	52%
3084-Q*	24.40	6.10	4	12%	49%
3084-QX	26.00	6.50	4	12%	46%
3090-100S	5.60	5.60	1	54%	54%
3090-120I	7.50	7.50	1	40%	40%
3090-120S	7.50	7.50	1	40%	40%
3090-150	9.80	9.80	1	31%	31%
3090-150E	10.20	10.20	1	29%	29%
3090-150S	11.60	11.60	1	28%	28%
3090-170S	14.80	14.80	1	20%	20%
3090-180	15.40	15.40	1	19%	19%
3090-180I	17.60	17.60	1	17%	17%
3090-180S	22.00	22.00	1	14%	14%
3090-200	27.70	13.85	2	11%	22%
3090-200E	32.00	16.00	2	9%	19%
3090-200S	40.00	20.00	2	8%	15%
3090-250S	22.00	11.00	2	14%	27%
3090-280E	32.00	16.00	2	9%	19%
3090-280S	40.00	20.00	2	8%	15%
3090-300E	44.00	14.67	3	7%	20%
3090-300S	55.00	18.33	3	5%	16%

***** DOS VSE *****
***** ESTIMATES *****

MODEL	Complex MIPS	Processor Rate	Number of Processors	Complex Busy %	Processor Busy %
4381-90	3.80	3.80	1	79%	79%
4381-91	4.80	4.80	1	63%	63%
4381-92	8.50	4.25	2	35%	71%

Note: All MIPS statistics presented here are taken from "The IBM Mainframe Scenario and Residual Value Forecast: Midyear 1989" report produced by the Gartner Group, Inc.

SECTION C - FORECASTED CPU UTILIZATIONS

3390-300S CPU Estimate: 3.00 MIPS

***** MVS XA *****
***** ESTIMATES *****

MODEL	Complex MIPS	Processor Rate	Number of Processors	Complex Busy %	Processor Busy %
3090-300S	53.00	17.67	3	6%	17%
3090-400	50.00	12.50	4	6%	24%
3090-400L	57.00	14.25	4	5%	21%
3090-400S	74.00	18.50	4	4%	16%
3090-500E	66.00	13.20	5	5%	23%
3090-500S	90.00	18.00	5	3%	17%
3090-600E	77.00	12.83	6	4%	23%
3090-600S	105.00	17.50	6	3%	17%

***** DOS VSE *****
***** ESTIMATES *****

MODEL	Complex MIPS	Processor Rate	Number of Processors	Complex Busy %	Processor Busy %

SECTION E - HARDWARE SIZING SUMMARY

AREA	MIPS	Label	DASD Megabytes
Common Features	1.02	C/F	4,750.47
Order Processing	0.00	O/P	0.00
Purchasing	0.67	PUR	67.52
Accounts Receivable	0.06	A/R	19,058.00
Inventory Control	0.00	I/C	0.00
Warehouse Management	0.00	W/M	0.00
Outbound Logistics	0.00	O/L	0.00
Distribution Requirements	1.25	DRP	1,126.91
Customer Service Mgmt.	N/A	CSM	0.00
Total:	3.00	Total:	25,022.89

TO: Lt. Colonel Vincent
FROM: James McCabe, Andersen Consulting
DATE: September 9, 1989

REGARDING: Support Documentation for yesterdays briefing

The sizing material to support our conclusions of yesterdays meeting is attached. Please feel free to contact Van Hitch, Bill Neil or myself at anytime. The main number for Andersen Consulting in Washington is 862-3333. I can be reached this weekend and Monday, at work at 448-3167. Next week please call the receptionist at 862-3333.

In regard to the functionality of the POS polling that we talked about. I discussed this with a couple of consultants from different offices, one involved in the Safeway project. They confirmed your opinion that POS polling is a standard function, especially for NCR. The most likely package is NCD's own package. I included an estimated COTS package price in the costing spreadsheet which is also included. The integration of this COTS package should not significantly add to the development/integration price.

I should be here both days this weekend.

SECTION A - CLIENT DATA

DCS/Logistics — CLIENT : JONES COMMISSION
Version 10.0 Hardware Sizing — 09-Sep-89

Applications Installed:

Order Processing:	N	(Y/N)
Purchasing:	Y	(Y/N)
Accounts Receivable:	Y	(Y/N)
Inventory Control:	N	(Y/N)
Warehouse Management:	N	(Y/N)
Outbound Logistics:	N	(Y/N)
Distribution Requirements:	Y	(Y/N)
Customer Service Management:	N	(Y/N)

Technical Environment:

File Access Method:	3	(1=VSAM,2->4.24=DB2)
OS Type:	1	(1=MVS,1.7=VSE)
On-line Hours/Day:	8	
Number of Users:	30	

Business Profile:

Number of Customers:	60	
Avg. Msgs/Customer:	4	
Number of Vendors:	5,000	
Number of Items:	20,000	
Number of Warehouses:	1	
Number of Kits:	0	
Number of Components/Kit:	0	
Number of Contracts:	0	
Items/Contract:	0	
Inquiries per Day:	600	
Maint. per Day:	600	
Avg. # On-Line Pages per Day:	5,000	
# of EMail Memos/Day:	90	
# of Lines/EMail Memo:	10	

Order Processing:

Sales Orders/Day:	60	
SOL's/Order:	5000	
Pick Lines/SOL:	7500	
Avg. # Kits/Order:	0	
Future Dated Prices:	0	
% of SO Lines:	5	Credit/Debit memos
% of SO Lines:	5	BO/BL lines
% of SO Lines:	5	Immediate Release?
% of SO Lines:	5	Picking Exceptions?
% of SO Lines:	5	Future Orders
Payments/Day:	125	Cash Receipts

Inventory Control:

Transfer Orders/Day:	0	
Transfer Order Lines/Order:	0	
Pick Lines/TOL:	0	
# of Receipts per Day:	2500	
# of Items per Receipt:	150	

SECTION A - CLIENT DATA

DCS/Logistics — CLIENT : JONES COMMISSION
Version 10.0 Hardware Sizing — 09-Sep-89

Putaway Lines per Item:	300	
# of Transfers per Day:	0	
# of Adjustments per Day:	0	
% of Rec'd Line:	5	% Auto BO Release

Purchasing:

Purchase Orders/Day:	2500	
Purchase Order Lines/Order:	150	
% of P.O.s that Become Overdue:	5	%
% Overdue P.O. Lines:	1	%

Warehouse Management:

% of Locations Unavailable:	5	%
% Item/Locs. Counted per Day:	5	%
% Items w/Lots:	10	%
% of Locations:	5	% Mixed item locations
Avg. # Zones per Whse:	15	
Avg. Locs/Item:	3	
Avg. # Lots/Lot-Cntrld Item:	5	
Avg. Locs./Warehouse:	40,000	
Avg. Move Methods/Loc:	1	(Not greater than 3)
Avg. Storage Types/Loc:	1	(Not greater than 3)

Outbound Logistics:

Batch Bundling?	Y	(Y/N)
# of Freight Lanes:	12	
Avg. # Bundle Specs per Zone:	2	
Avg. # of SOLs per Load:	5,000	
Avg. # Pick Paths per Whse:	10	
Avg. # Ship Vias per Whse:	3	

Customer Service Management:

# of CSM Periods:	24	

Distribution Requirements Planning:

# of Bills of Distribution:	1	
Avg. # Whses per Bill of Dist.:	1	
# Suggested POs/Day:	2500	
# Suggested TOs/Day:	0	
% of Items Needing Gross Req. Adj.:	5	%

SECTION C - FORECASTED CPU

CPU Estimate: 49.02 MIPS

MODEL	Complex MIPS	Processor Rate	Number of Processors	Complex Busy %	Processor Busy %
4381-1	2.00	2.00	1	2451%	2451%
4381-2	2.70	2.70	1	1816%	1816%
4381-3	4.80	2.40	2	1021%	2043%
4381-11	1.30	1.30	1	3771%	3771%
4381-12	2.70	2.70	1	1816%	1816%
4381-13	3.70	3.70	1	1325%	1325%
4381-14	6.50	3.25	2	754%	1508%
4381-21	1.70	1.70	1	2884%	2884%
4381-22	2.90	2.90	1	1690%	1690%
4381-23	4.80	4.80	1	1021%	1021%
4381-24	8.50	4.25	2	577%	1153%
4381-90	3.80	3.80	1	1290%	1290%
4381-91	4.80	4.80	1	1021%	1021%
4381-92	8.50	4.25	2	577%	1153%
3083-CX	3.05	3.05	1	1607%	1607%
3083-E	3.75	3.75	1	1307%	1307%
3083-E*	3.98	3.98	1	1232%	1232%
3083-EX	4.06	4.06	1	1207%	1207%
3083-B	5.64	5.64	1	869%	869%
3083-B*	5.99	5.99	1	818%	818%
3083-BX	6.11	6.11	1	802%	802%
3083-J	7.48	7.48	1	655%	655%
3083-J*	7.96	7.96	1	616%	616%
3083-JX	8.12	8.12	1	604%	604%
3081-D	10.20	5.10	2	481%	961%
3081-G	10.20	5.10	2	481%	961%
3081-G*	10.80	5.40	2	454%	908%
3081-GX	11.20	5.60	2	438%	875%
3081-K	13.80	6.90	2	355%	710%
3081-K*	14.60	7.30	2	336%	672%
3081-KX	15.40	7.70	2	318%	637%
3084-Q	23.00	5.75	4	213%	853%
3084-Q*	24.40	6.10	4	201%	804%
3084-QX	26.00	6.50	4	189%	754%
3090-100S	5.60	5.60	1	875%	875%
3090-120E	7.50	7.50	1	654%	654%
3090-120S	7.50	7.50	1	654%	654%
3090-150	9.80	9.80	1	500%	500%
3090-150E	10.20	10.20	1	481%	481%
3090-150S	11.60	11.60	1	423%	423%
3090-170S	14.80	14.80	1	331%	331%
3090-180	15.40	15.40	1	318%	318%
3090-180E	17.60	17.60	1	279%	279%
3090-180S	22.00	22.00	1	223%	223%
3090-200	27.70	13.85	2	177%	354%
3090-200E	32.00	16.00	2	153%	306%
3090-200S	40.00	20.00	2	123%	245%
3090-250S	22.00	11.00	2	223%	446%
3090-280E	32.00	16.00	2	153%	306%
3090-280S	40.00	20.00	2	123%	245%
3090-300E	44.00	14.67	3	111%	334%
3090-300S	55.00	18.33	3	89%	267%

SECTION C - FORECASTED CPU

CPU Estimate: 49.02 MIPS

MODEL	Complex MIPS	Processor Rate	Number of Processors	Complex Busy %	Processor Busy %
3090-380S	53.00	17.67	3	92%	277%
3090-400	50.00	12.50	4	98%	392%
3090-400E	57.00	14.25	4	86%	344%
3090-400S	74.00	18.50	4	66%	265%
3090-500E	66.00	13.20	5	74%	371%
3090-500S	90.00	18.00	5	54%	272%
3090-600E	77.00	12.83	6	64%	382%
3090-600S	105.00	17.50	6	47%	280%

SECTION E - HARDWARE SIZING SUMMARY

AREA	MIPS	Label	DASD Megabytes
Common Features	1.02	C/F	8,362.87
Order Processing	0.00	O/P	0.00
Purchasing	16.81	PUR	2,187.90
Accounts Receivable	0.06	A/R	14,058.00
Inventory Control	0.00	I/C	0.00
Warehouse Management	0.00	W/M	0.00
Outbound Logistics	0.00	O/L	0.00
Distribution Requirements	31.13	DRP	1,126.91
Customer Service Mgmt.	N/A	CSM	0.00
Total:	49.02	Total:	25,735.68

SECTION A - CLIENT DATA

DCS/Logistics
Version 10.0 Hardware Sizing

CLIENT : JONES COMMISSION
09-Sep-89

Applications Installed:

Order Processing:	N	(Y/N)
Purchasing:	Y	(Y/N)
Accounts Receivable:	Y	(Y/N)
Inventory Control:	N	(Y/N)
Warehouse Management:	N	(Y/N)
Outbound Logistics:	N	(Y/N)
Distribution Requirements:	Y	(Y/N)
Customer Service Management:	N	(Y/N)

Technical Environment:

File Access Method:	3	(1=VSAM,2->4.24=DB2)
OS Type:	1	(1=MVS,1.7=VSE)
On-line Hours/Day:	8	
Number of Users:	30	

Business Profile:

Number of Customers:	60
Avg. Msgs/Customer:	4
Number of Vendors:	5,000
Number of Items:	20,000
Number of Warehouses:	1
Number of Kits:	0
Number of Components/Kit:	0
Number of Contracts:	0
Items/Contract:	0
Inquiries per Day:	600
Maint. per Day:	600
Avg. # On-Line Pages per Day:	5,000
# of EMail Memos/Day:	90
# of Lines/EMail Memo:	10

Order Processing:

Sales Orders/Day:	50	
SOL's/Order:	5000	
Pick Lines/SOL:	7500	
Avg. # Kits/Order:	0	
Future Dated Prices:	0	
% of SO Lines:	5	Credit/Debit memos
% of SO Lines:	5	BO/BL lines
% of SO Lines:	5	Immediate Release?
% of SO Lines:	5	Picking Exceptions?
% of SO Lines:	5	Future Orders
Payments/Day:	75	Cash Receipts

Inventory Control:

Transfer Orders/Day:	0
Transfer Order Lines/Order:	0
Pick Lines/TOL:	0
# of Receipts per Day:	2500
# of Items per Receipt:	150

SECTION A - CLIENT DATA

DCS/Logistics — CLIENT : JONES COMMISSION
Version 10.0 Hardware Sizing — 09-Sep-89

Putaway Lines per Item:	300	
# of Transfers per Day:	0	
# of Adjustments per Day:	0	
% of Rec'd Line:	5	% Auto BO Release

Purchasing:

Purchase Orders/Day:	1500	
Purchase Order Lines/Order:	150	
% of P.O.s that Become Overdue:	5	%
% Overdue P.O. Lines:	1	%

Warehouse Management:

% of Locations Unavailable:	5	%
% Item/Locs. Counted per Day:	5	%
% Items w/Lots:	10	%
% of Locations:	5	% Mixed item locations
Avg. # Zones per Whse:	15	
Avg. Locs/Item:	3	
Avg. # Lots/Lot-Cntrld Item:	5	
Avg. Locs./Warehouse:	40,000	
Avg. Move Methods/Loc:	1	(Not greater than 3)
Avg. Storage Types/Loc:	1	(Not greater than 3)

Outbound Logistics:

Batch Bundling?	Y	(Y/N)
# of Freight Lanes:	12	
Avg. # Bundle Specs per Zone:	2	
Avg. # of SOLs per Load:	5,000	
Avg. # Pick Paths per Whse:	10	
Avg. # Ship Vias per Whse:	3	

Customer Service Management:

# of CSM Periods:	24	

Distribution Requirements Planning:

# of Bills of Distribution:	1	
Avg. # Whses per Bill of Dist.:	1	
# Suggested POs/Day:	2500	
# Suggested TOs/Day:	0	
% of Items Needing Gross Req. Adj.:	5	%

SECTION C - FORECASTED CPU

CPU Estimate: 29.82 MIPS

MODEL	Complex MIPS	Processor Rate	Number of Processors	Complex Busy %	Processor Busy %
4381-1	2.00	2.00	1	1491%	1491%
4381-2	2.70	2.70	1	1105%	1105%
4381-3	4.80	2.40	2	621%	1243%
4381-11	1.30	1.30	1	2294%	2294%
4381-12	2.70	2.70	1	1105%	1105%
4381-13	3.70	3.70	1	806%	806%
4381-14	6.50	3.25	2	459%	918%
4381-21	1.70	1.70	1	1754%	1754%
4381-22	2.90	2.90	1	1028%	1028%
4381-23	4.80	4.80	1	621%	621%
4381-24	8.50	4.25	2	351%	702%
4381-90	3.80	3.80	1	785%	785%
4381-91	4.80	4.80	1	621%	621%
4381-92	8.50	4.25	2	351%	702%
3083-CX	3.05	3.05	1	978%	978%
3083-E	3.75	3.75	1	795%	795%
3083-E*	3.98	3.98	1	749%	749%
3083-EX	4.06	4.06	1	735%	735%
3083-B	5.64	5.64	1	529%	529%
3083-B*	5.99	5.99	1	498%	498%
3083-BX	6.11	6.11	1	488%	488%
3083-J	7.48	7.48	1	399%	399%
3083-J*	7.96	7.96	1	375%	375%
3083-JX	8.12	8.12	1	367%	367%
3081-D	10.20	5.10	2	292%	585%
3081-G	10.20	5.10	2	292%	585%
3081-G*	10.80	5.40	2	276%	552%
3081-GX	11.20	5.60	2	266%	533%
3081-K	13.80	6.90	2	216%	432%
3081-K*	14.60	7.30	2	204%	409%
3081-KX	15.40	7.70	2	194%	387%
3084-Q	23.00	5.75	4	130%	519%
3084-Q*	24.40	6.10	4	122%	489%
3084-QX	26.00	6.50	4	115%	459%
3090-100S	5.60	5.60	1	533%	533%
3090-120E	7.50	7.50	1	398%	398%
3090-120S	7.50	7.50	1	398%	398%
3090-150	9.80	9.80	1	304%	304%
3090-150E	10.20	10.20	1	292%	292%
3090-150S	11.60	11.60	1	257%	257%
3090-170S	14.80	14.80	1	201%	201%
3090-180	15.40	15.40	1	194%	194%
3090-180E	17.60	17.60	1	169%	169%
3090-180S	22.00	22.00	1	136%	136%
3090-200	27.70	13.85	2	108%	215%
3090-200E	32.00	16.00	2	93%	186%
3090-200S	40.00	20.00	2	75%	149%
3090-250S	22.00	11.00	2	136%	271%
3090-280E	32.00	16.00	2	93%	186%
3090-280S	40.00	20.00	2	75%	149%
3090-300E	44.00	14.67	3	68%	203%
3090-300S	55.00	18.33	3	54%	163%

SECTION C - FORECASTED CPU

CPU Estimate: 29.82 MIPS

MODEL	Complex MIPS	Processor Rate	Number of Processors	Complex Busy %	Processor Busy %
3090-380S	53.00	17.67	3	56%	169%
3090-400	50.00	12.50	4	60%	239%
3090-400E	57.00	14.25	4	52%	209%
3090-400S	74.00	18.50	4	40%	161%
3090-500E	66.00	13.20	5	45%	226%
3090-500S	90.00	18.00	5	33%	166%
3090-600E	77.00	12.83	6	39%	232%
3090-600S	105.00	17.50	6	28%	170%

SECTION E - HARDWARE SIZING SUMMARY

AREA	MIPS	Label	DASD Megabytes
Common Features	1.02	C/F	6,857.70
Order Processing	0.00	O/P	0.00
Purchasing	10.08	PUR	1,312.74
Accounts Receivable	0.04	A/R	14,058.00
Inventory Control	0.00	I/C	0.00
Warehouse Management	0.00	W/M	0.00
Outbound Logistics	0.00	O/L	0.00
Distribution Requirements	18.68	DRP	1,126.91
Customer Service Mgmt.	N/A	CSM	0.00
Total:	29.82	Total:	23,355.35

SECTION A - CLIENT DATA

DCS/Logistics
Version 10.0 Hardware Sizing

CLIENT : JONES COMMISSION
09-Sep-89

Applications Installed:

Order Processing:	N	(Y/N)
Purchasing:	Y	(Y/N)
Accounts Receivable:	Y	(Y/N)
Inventory Control:	N	(Y/N)
Warehouse Management:	N	(Y/N)
Outbound Logistics:	N	(Y/N)
Distribution Requirements:	Y	(Y/N)
Customer Service Management:	N	(Y/N)

Technical Environment:

File Access Method:	3	(1=VSAM,2->4.24=DB2)
OS Type:	1	(1=MVS,1.7=VSE)
On-line Hours/Day:	8	
Number of Users:	30	

Business Profile:

Number of Customers:	60	
Avg. Msgs/Customer:	4	
Number of Vendors:	5,000	
Number of Items:	20,000	
Number of Warehouses:	1	
Number of Kits:	0	
Number of Components/Kit:	0	
Number of Contracts:	0	
Items/Contract:	0	
Inquiries per Day:	600	
Maint. per Day:	600	
Avg. # On-Line Pages per Day:	5,000	
# of EMail Memos/Day:	90	
# of Lines/EMail Memo:	10	

Order Processing:

Sales Orders/Day:	60	
SOL's/Order:	5000	
Pick Lines/SOL:	7500	
Avg. # Kits/Order:	0	
Future Dated Prices:	0	
% of SO Lines:	5	Credit/Debit memos
% of SO Lines:	5	BO/BL lines
% of SO Lines:	5	Immediate Release?
% of SO Lines:	5	Picking Exceptions?
% of SO Lines:	5	Future Orders
Payments/Day:	38	Cash Receipts

Inventory Control:

Transfer Orders/Day:	0	
Transfer Order Lines/Order:	0	
Pick Lines/TOL:	0	
# of Receipts per Day:	2500	
# of Items per Receipt:	150	

SECTION A - CLIENT DATA

DCS/Logistics
Version 10.0 Hardware Sizing

CLIENT : JONES COMMISSION
09-Sep-89

Putaway Lines per Item:	300	
# of Transfers per Day:	0	
# of Adjustments per Day:	0	
% of Rec'd Line:	5	% Auto BO Release

Purchasing:

Purchase Orders/Day:	750	
Purchase Order Lines/Order:	150	
% of P.O.s that Become Overdue:	5	%
% Overdue P.O. Lines:	1	%

Warehouse Management:

% of Locations Unavailable:	5	%
% Item/Locs. Counted per Day:	5	%
% Items w/Lots:	10	%
% of Locations:	5	% Mixed item locations
Avg. # Zones per Whse:	15	
Avg. Locs/Item:	3	
Avg. # Lots/Lot-Cntrld Item:	5	
Avg. Locs./Warehouse:	40,000	
Avg. Move Methods/Loc:	1	(Not greater than 3)
Avg. Storage Types/Loc:	1	(Not greater than 3)

Outbound Logistics:

Batch Bundling?	Y	(Y/N)
# of Freight Lanes:	12	
Avg. # Bundle Specs per Zone:	2	
Avg. # of SOLs per Load:	5,000	
Avg. # Pick Paths per Whse:	10	
Avg. # Ship Vias per Whse:	3	

Customer Service Management:

# of CSM Periods:	24	

Distribution Requirements Planning:

# of Bills of Distribution:	1	
Avg. # Whses per Bill of Dist.:	1	
# Suggested POs/Day:	2500	
# Suggested TOs/Day:	0	
% of Items Needing Gross Req. Adj.:	5	%

SECTION C - FORECASTED CPU

CPU Estimate: 15.42 MIPS

MODEL	Complex MIPS	Processor Rate	Number of Processors	Complex Busy %	Processor Busy %
4381-1	2.00	2.00	1	771%	771%
4381-2	2.70	2.70	1	571%	571%
4381-3	4.80	2.40	2	321%	643%
4381-11	1.30	1.30	1	1186%	1186%
4381-12	2.70	2.70	1	571%	571%
4381-13	3.70	3.70	1	417%	417%
4381-14	6.50	3.25	2	237%	475%
4381-21	1.70	1.70	1	907%	907%
4381-22	2.90	2.90	1	532%	532%
4381-23	4.80	4.80	1	321%	321%
4381-24	8.50	4.25	2	181%	363%
4381-90	3.80	3.80	1	406%	406%
4381-91	4.80	4.80	1	321%	321%
4381-92	8.50	4.25	2	181%	363%
3083-CX	3.05	3.05	1	506%	506%
3083-E	3.75	3.75	1	411%	411%
3083-E*	3.98	3.98	1	387%	387%
3083-EX	4.06	4.06	1	380%	380%
3083-B	5.64	5.64	1	273%	273%
3083-B*	5.99	5.99	1	257%	257%
3083-BX	6.11	6.11	1	252%	252%
3083-J	7.48	7.48	1	206%	206%
3083-J*	7.96	7.96	1	194%	194%
3083-JX	8.12	8.12	1	190%	190%
3081-D	10.20	5.10	2	151%	302%
3081-G	10.20	5.10	2	151%	302%
3081-G*	10.80	5.40	2	143%	286%
3081-GX	11.20	5.60	2	138%	275%
3081-K	13.80	6.90	2	112%	223%
3081-K*	14.60	7.30	2	106%	211%
3081-KX	15.40	7.70	2	100%	200%
3084-Q	23.00	5.75	4	67%	268%
3084-Q*	24.40	6.10	4	63%	253%
3084-QX	26.00	6.50	4	59%	237%
3090-100S	5.60	5.60	1	275%	275%
3090-120E	7.50	7.50	1	206%	206%
3090-120S	7.50	7.50	1	206%	206%
3090-150	9.80	9.80	1	157%	157%
3090-150E	10.20	10.20	1	151%	151%
3090-150S	11.60	11.60	1	133%	133%
3090-170S	14.80	14.80	1	104%	104%
3090-180	15.40	15.40	1	100%	100%
3090-180E	17.60	17.60	1	88%	88%
3090-180S	22.00	22.00	1	70%	70%
3090-200	27.70	13.85	2	56%	111%
3090-200E	32.00	16.00	2	48%	96%
3090-200S	40.00	20.00	2	39%	77%
3090-250S	22.00	11.00	2	70%	140%
3090-280E	32.00	16.00	2	48%	96%
3090-280S	40.00	20.00	2	39%	77%
3090-300E	44.00	14.67	3	35%	105%
3090-300S	55.00	18.33	3	28%	84%

SECTION C - FORECASTED CPU

CPU Estimate: 15.42 MIPS

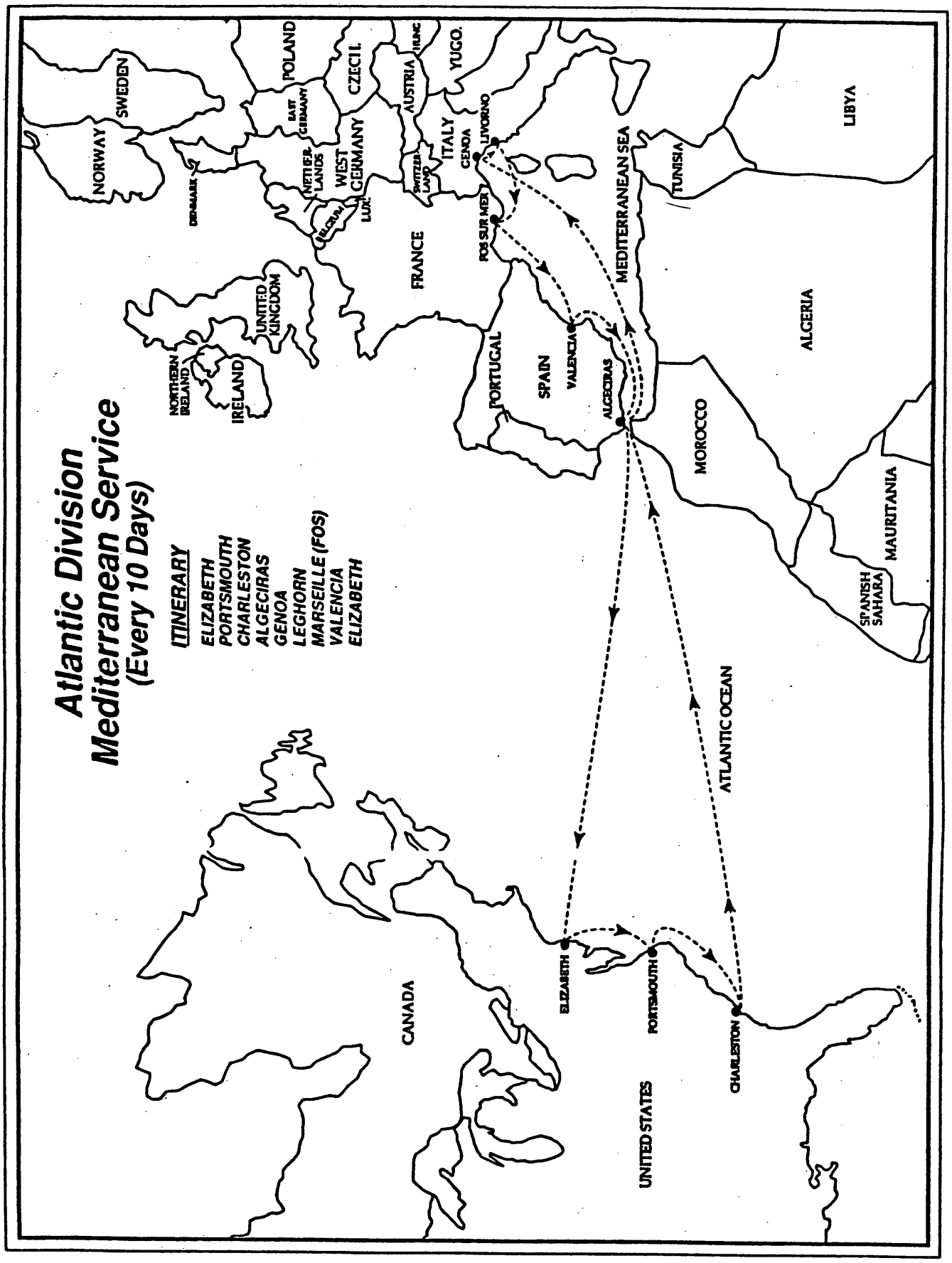
MODEL	Complex MIPS	Processor Rate	Number of Processors	Complex Busy %	Processor Busy %
3090-380S	53.00	17.67	3	29%	87%
3090-400	50.00	12.50	4	31%	123%
3090-400E	57.00	14.25	4	27%	108%
3090-400S	74.00	18.50	4	21%	83%
3090-500E	66.00	13.20	5	23%	117%
3090-500S	90.00	18.00	5	17%	86%
3090-600E	77.00	12.83	6	20%	120%
3090-600S	105.00	17.50	6	15%	88%

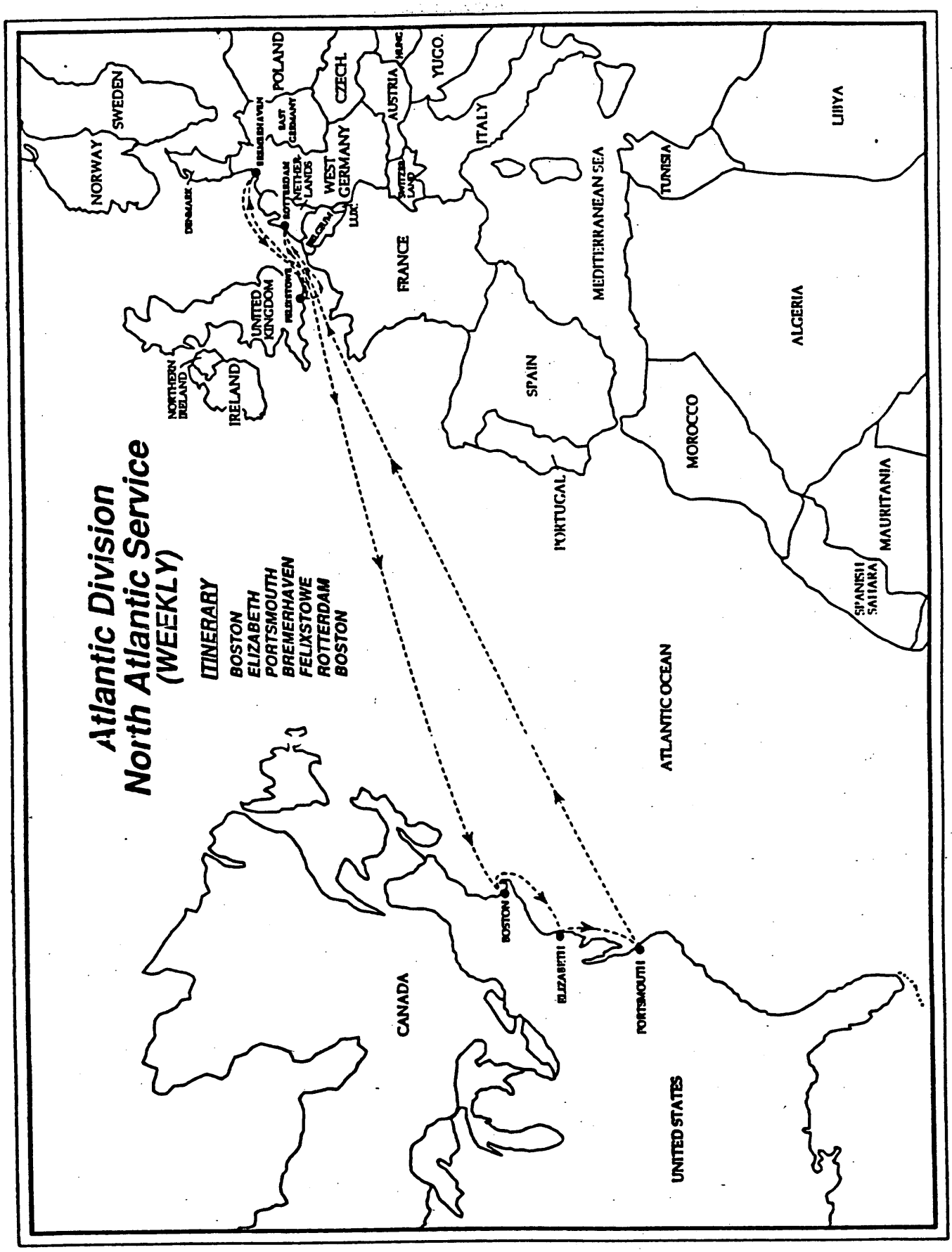
SECTION E - HARDWARE SIZING SUMMARY

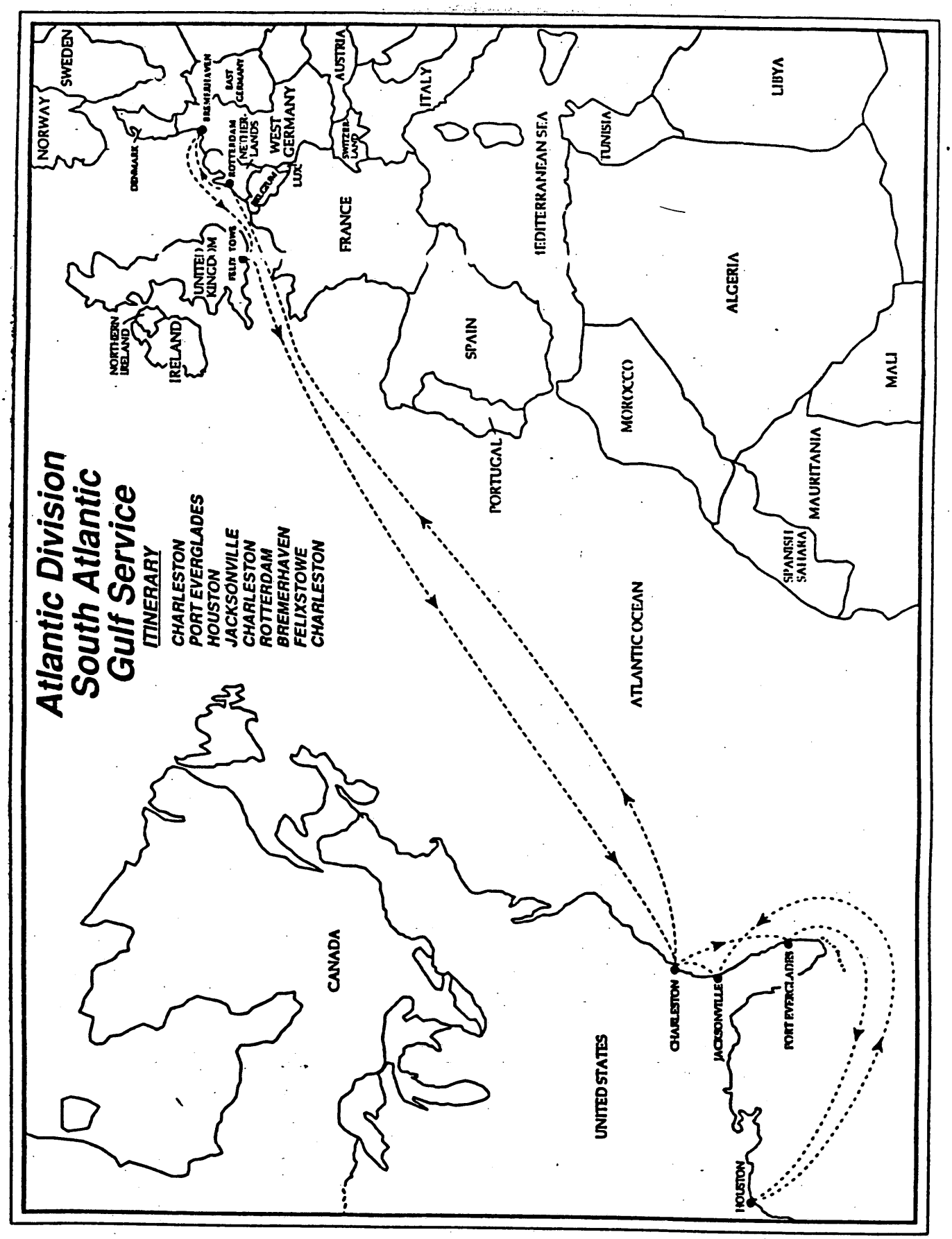
AREA	MIPS	Label	DASD Megabytes
Common Features	1.02	C/F	5,728.82
Order Processing	0.00	O/P	0.00
Purchasing	5.04	PUR	656.37
Accounts Receivable	0.02	A/R	14,058.00
Inventory Control	0.00	I/C	0.00
Warehouse Management	0.00	W/M	0.00
Outbound Logistics	0.00	O/L	0.00
Distribution Requirements	9.34	DRP	1,126.91
Customer Service Mgmt.	N/A	CSM	0.00
Total:	15.42	Total:	21,570.10

Appendix D

TRANSPORTATION DATA


Atlantic Division
Mediterranean Service
(Every 10 Days)
ITINERARY
ELIZABETH
PORTSMOUTH
CHARLESTON
ALGECIRAS
GENOA
LEGHORN
MARSEILLE (FOS)
VALENCIA
ELIZABETH
NORWAY
SWEDEN
DENMARK
POLAND
EAST GERMANY
CZECH.
AUSTRIA
HUNG.
YUGO.
NETHER. LANDS
WEST GERMANY
SWITZER. LAND
ITALY
GENOA
LIVORNO
BELGIUM
LUX.
FOS SUR MER
FRANCE
UNITED KINGDOM
NORTHERN IRELAND
IRELAND
PORTUGAL
SPAIN
VALENCIA
ALGECIRAS
MEDITERRANEAN SEA
TUNISIA
LIBYA
ALGERIA
MOROCCO
MAURITANIA
SPANISH SAHARA
ATLANTIC OCEAN
CANADA
UNITED STATES
ELIZABETH
PORTSMOUTH
CHARLESTON


Atlantic Division
North Atlantic Service
(WEEKLY)
ITINERARY
BOSTON
ELIZABETH
PORTSMOUTH
BREMERHAVEN
FELIXSTOWE
ROTTERDAM
BOSTON
SWEDEN
NORWAY
POLAND
CZECH.
AUSTRIA
YUGO.
ITALY
LIBYA
TUNISIA
MEDITERRANEAN SEA
WEST GERMANY
NETHER-LANDS
ROTTERDAM
BREMERHAVEN
EAST GERMANY
DENMARK
FRANCE
UNITED KINGDOM
FELIXSTOWE
NORTHERN IRELAND
IRELAND
SPAIN
PORTUGAL
MOROCCO
ALGERIA
MAURITANIA
SPANISH SAHARA
ATLANTIC OCEAN
CANADA
UNITED STATES
BOSTON
ELIZABETH
PORTSMOUTH


Atlantic Division
South Atlantic
Gulf Service
ITINERARY
CHARLESTON
PORT EVERGLADES
HOUSTON
JACKSONVILLE
CHARLESTON
ROTTERDAM
BREMERHAVEN
FELIXSTOWE
CHARLESTON
NORWAY
SWEDEN
DENMARK
BREMERHAVEN
EAST GERMANY
ROTTERDAM (NETHERLANDS)
WEST GERMANY
LUX
BELGIUM
AUSTRIA
SWITZERLAND
ITALY
FRANCE
FELIXSTOWE
UNITED KINGDOM
NORTHERN IRELAND
IRELAND
SPAIN
PORTUGAL
MEDITERRANEAN SEA
TUNISIA
LIBYA
ALGERIA
MOROCCO
MALI
MAURITANIA
SPANISH SAHARA
ATLANTIC OCEAN
CANADA
UNITED STATES
CHARLESTON
JACKSONVILLE
PORT EVERGLADES
HOUSTON

ATLANTIC TRANSIT TIME MATRIX
SEA-LAND ATLANTIC CLASS VESSEL DEPLOYMENT AS OF 3/10/89

KEY: Eastbound Days/Westbound Days

	MONT	BOS	ELZ	BALT	PORTS	CHAS	JAX	PEV	HOU	LB	OAK	SEATL
Felixstowe	15/14	16/10	13/12	16/15	11/14	14/9	15/18	23/11	19/14	24/19	25/20	21/20
Scotland	18/14	19/11	16/13	19/15	14/15	16/11	17/20	25/13	21/16	26/21	27/22	24/21
Liverpool	16/16	17/12	14/14	17/17	12/16	16/10	17/19	25/12	21/15	23/20	24/21	22/22
Ireland	19/14	20/10	17/12	20/16	15/15	12/16	13/25	21/18	17/21	22/26	23/27	25/20
Rotterdam	16/12	17/8	14/10	17/13	12/13	10/13	11/22	19/15	15/18	20/24	21/25	22/18
Antwerp	17/13	18/9	15/11	18/14	13/14	11/14	12/23	20/16	16/19	21/24	22/25	23/19
LeHavre	18/14	19/10	16/12	19/15	14/15	12/15	13/24	21/17	17/20	22/25	23/26	24/20
Bhvn	13/16	14/12	11/14	14/17	9/16	12/11	13/20	21/13	17/16	22/21	23/22	19/22
Hamburg	14/17	15/13	12/15	15/18	10/17	13/12	14/21	22/14	18/17	23/22	24/23	20/23
Gdynia	19/21	21/18	17/19	20/22	15/21	17/17	19/26	26/19	22/21	27/26	28/27	25/27
Copenhagen	20/17	21/13	18/15	21/18	16/17	17/15	18/24	26/17	22/22	27/27	28/28	26/23
Goth/Wal	18/18	19/14	16/16	19/19	14/18	15/16	16/25	24/18	20/23	25/28	26/29	24/24
Helsinki	18/21	19/17	16/19	19/22	14/21	17/16	18/25	26/18	22/21	27/26	28/27	24/27
Bilbao	27/17	28/14	25/15	28/18	23/18	17/21	18/30	26/23	22/27	26/32	27/33	33/22
Lisbon	25/14	26/14	23/12	26/15	21/14	15/16	16/18 *	24/20	26/30	25/35	26/36	31/19
Valencia	22/12	22/12	20/10	23/13	19/12	17/14	19/16	39/27	35/30	40/35	41/36	27/17
Marseilles	20/14	20/14	18/12	21/15	17/14	15/16	17/18	37/29	33/32	38/37	39/38	25/19
Leghorn	19/15	19/15	17/13	20/16	16/15	14/17	15/19	36/30	32/33	37/38	38/39	24/20
Genoa	17/16	17/16	15/14	18/17	14/16	12/18	14/20	34/32	30/35	35/40	36/41	22/21
Piraeus	27/19	27/19	25/17	28/20	24/19	22/21	20/23	33/30	29/27	34/32	35/33	32/23
Algeciras	15/10	15/10	13/8	16/11	12/10	10/12	12/14	27/26	23/29	28/38	29/39	19/15

* Not Served Directly

0457.prr
3/10/89

Sea-Land

Service Description (as of April 15, 1989)

PACIFIC NORTHWEST SERVICE

Six D-9J's (Mariner, Freedom, Voyager, Developer, Express, Independence) operate on a weekly direct service between Tacoma, Yokohama, Kobe, Singapore, Hong Kong, Kaohsiung, Kobe, and Yokohama. The ports of Kobe, Hong Kong, Singapore, and Kaohsiung are the primary ports for relaying cargo to Sea-Land and Common Carrier feeders. These feeders serve the primary ports of Manila, Subic, Cebu, Jakarta, Port Kelang, Penang, Australian ports, and Bangkok.

PACIFIC SOUTHWEST SERVICE

Six D-9J's (Explorer, Liberator, Endurance, Patriot, Defender, Innovator) provide a weekly service between Long Beach, Oakland, Yokohama, Kobe, Busan, Hong Kong, Kaohsiung, Busan, Kobe, and Yokohama. Feeder service is provided to outlying ports as described above.

HAWAII GUAM SERVICE

Four C-8's (Navigator, Trader, Enterprise, Pacific) and one C-6 (Hawaii) provide a weekly domestic/international service between Long Beach, Oakland, Honolulu, Guam, Naha (Okinawa), and Kaohsiung. Feeder service exists for the neighbor islands of Hawaii by tug and barge. Connecting carrier service over Guam is also available to Saipan and Tinian.

PHILIPPINES FEEDER

One World-class vessel (World Lion) provides weekly direct service from Kaohsiung to Manila and Cebu, and back to Kaohsiung. Flag-impelled cargo to Subic Bay is relayed from Kaohsiung via the Sea-Land Pacer, which also calls Manila on a weekly basis.

BANGKOK/SINGAPORE FEEDER

Two Bay-class vessels (Somers Bay and Sandys Bay) provide a twice-weekly service from Bangkok to Singapore, with departures from Bangkok on Thursday and Saturday.

HONG KONG/KAOHSIUNG FEEDER

One world-class vessel (World Tiger) provides a twice-weekly shuttle service between Hong Kong and Kaohsiung.

SeaLand

Transit Matrix
Westbound

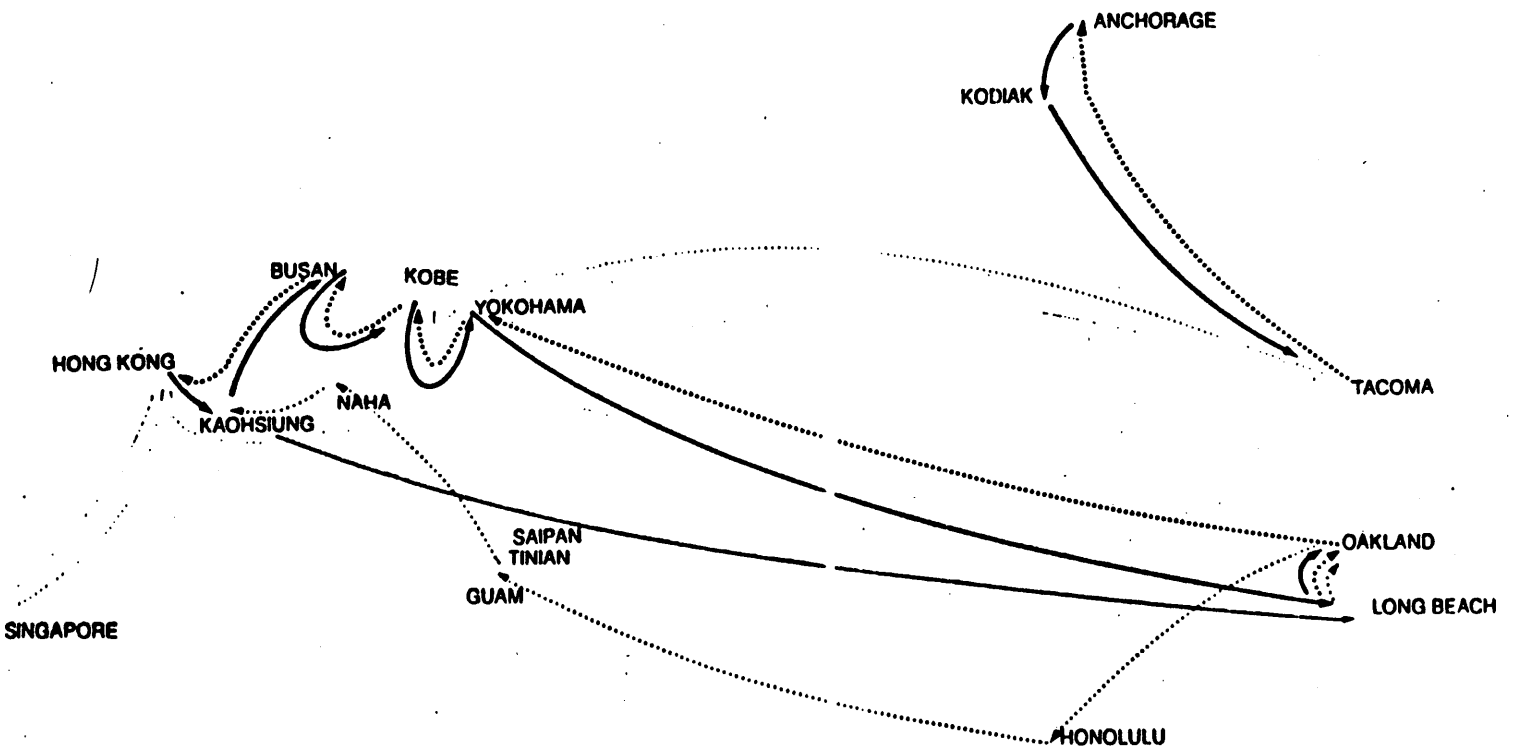
FROM/TO	TACOMA	LONG BEACH	OAKLAND	VANC. B.C.	ATLANTA	CHICAGO	DALLAS	MEMPHIS	PHIL/ N.Y.	BOSTON	BALT.	NEW ORLEANS	HOUSTON	TORONTO	MONTREAL
PACIFIC EXPRESS SERVICE															
Hong Kong	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Kaohsiung	—	20	18	—	27	25	26	28	31	32	27	28	28	32	32
Jakarta	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Port Kelang	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Penang	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Bangkok	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Singapore	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Naha	—	18	16	—	25	23	24	26	29	30	25	26	26	30	30
Manila	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subic Bay	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cebu	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
PACIFIC SOUTHWEST															
Hong Kong	—	20	19	—	27	26	27	25	—	—	—	30	29	—	—
Kaohsiung	—	22	21	—	29	28	29	27	—	—	—	32	31	—	—
Busan	—	16	15	—	23	22	23	21	—	—	—	26	25	—	—
Kobe	—	14	13	—	21	20	21	19	—	—	—	24	23	—	—
Yokohama	—	12	11	—	19	18	19	17	—	—	—	22	21	—	—
Jakarta	—	31	30	—	38	37	38	36	—	—	—	41	40	—	—
Port Kelang	—	29	28	—	36	35	36	34	—	—	—	39	38	—	—
Penang	—	31	30	—	38	37	38	36	—	—	—	41	40	—	—
Bangkok	—	30	29	—	37	36	37	35	—	—	—	40	39	—	—
Singapore	—	27	26	—	34	33	34	32	—	—	—	37	36	—	—
Incheon	—	17	16	—	24	23	24	22	—	—	—	27	26	—	—
Manila	—	27	26	—	34	33	34	32	—	—	—	37	36	—	—
Subic Bay	—	29	28	—	36	35	36	34	—	—	—	39	38	—	—
Cebu	—	29	28	—	36	35	36	34	—	—	—	39	38	—	—
PACIFIC NORTHWEST															
Hong Kong	17	—	—	21	—	22	—	—	25	29	27	—	—	25	28
Kaohsiung	19	—	—	23	—	24	—	—	27	31	29	—	—	27	30
Kobe	13	—	—	17	—	18	—	—	21	25	3	—	—	21	24
Yokohama	11	—	—	15	—	16	—	—	19	23	21	—	—	19	22
Singapore	21	—	—	25	—	26	—	—	29	33	31	—	—	29	32
Busan	17	—	—	21	—	22	—	—	25	29	27	—	—	25	28
Jakarta	25	—	—	29	—	30	—	—	33	37	35	—	—	33	36
Port Kelang	23	—	—	27	—	28	—	—	31	35	33	—	—	31	34
Penang	24	—	—	28	—	29	—	—	32	36	34	—	—	32	35
Bangkok	31	—	—	35	—	36	—	—	39	43	41	—	—	39	42
Incheon	18	—	—	22	—	23	—	—	26	30	28	—	—	26	29
Manila	25	—	—	29	—	30	—	—	33	37	35	—	—	33	36
Subic Bay	30	—	—	34	—	35	—	—	38	42	40	—	—	38	41
Cebu	23	—	—	27	—	28	—	—	31	35	33	—	—	31	34

Sea-Land

ORIGIN B/L	CY LOCATION	CUTOFF DAY	CUTOFF TIME	AVAIL. DAY	GUAM TRANSIT
MID-WEST (Cont.)					
Louisville (Via Oakland)	CSX Ramp 7304 Grade Lane Louisville, KY	Tues	6 PM	Wed	22 Days
Memphis	Southern Pacific 130 Terminal Center Memphis, TN	Mon	4 PM	Wed	23 Days
St. Louis	Southern Pacific 1000 S. 22nd St St. Louis, MO	Mon	6 PM	Wed	23 Days
GULF					
Houston	Southern Pacific 5500 Wallisville Rd Houston, TX	Mon	6 PM	Wed	23 Days
New Orleans Stack Service	CSX Ramp 6701 Almonaster New Orleans, LA	Mon	6 PM	Wed	23 Days
PNW SERVICE					
TRUCK SERVICE					
Portland	Western Container Freight 3860 N. Shuttle Rd Portland, OR	Mon	3 PM	Wed	16 Days
Seattle	Nelson Trucking 1600 S. 92nd Place Seattle, WA	Mon	3 PM	Wed	16 Days
Tacoma	Sea-Land Service 1675 Lincoln Ave Tacoma, WA	Mon	3 PM	Wed	16 Days
RAIL SERVICE					
Portland	Western Container Freight 3860 N. Shuttle Rd Portland, OR	Fri	Noon	Wed	19 Days
Seattle	Nelson Trucking 1600 S. 92nd Place Seattle, WA	Fri	Noon	Wed	19 Days
Tacoma	Sea-Land Service 1675 Lincoln Ave Tacoma, WA	Fri	Noon	Wed	19 Days
CALIFORNIA SERVICE					
Long Beach	Sea-Land Service Berth 228 Long Beach, CA	Thu Fri	5 PM Dry 5 PM POV's Noon Rfr/Hot Hatch	Wed	16 Days
Oakland	Sea-Land Service 1425 Maritime St Oakland, CA	Wed Tues	Noon Dry/Rfr 4:45 PM Hot Hatch	Wed	14 Days

SeaLand

Deployment: Line-Haul Services



I-1

Westbound
Tacoma
Yokohama
Kobe
Hong Kong
Singapore

Eastbound
Hong Kong
Kaohsiung
Kobe
Yokohama
Tacoma

Weekly Vessels
(6 D-9J's)
Mariner
Freedom
Independence
Developer
Voyager
Express

PSW

Westbound
Long Beach
Oakland
Yokohama
Kobe
Busan
Hong Kong

Eastbound
Kaohsiung
Busan
Kobe
Yokohama
Long Beach
Oakland

Weekly Vessels
(6 D-9J's)
Explorer
Liberator
Endurance
Patriot
Defender
Innovator

HAWAII/GUAM - PEX

Southbound
Long Beach
Oakland
Honolulu
Guam
Naha
Kaohsiung

Eastbound
Long Beach

Weekly Vessels
(4 C-8's)
Trader
Navigator
Pacific
Enterprise

(1 C-6)
Hawaii

ALASKA

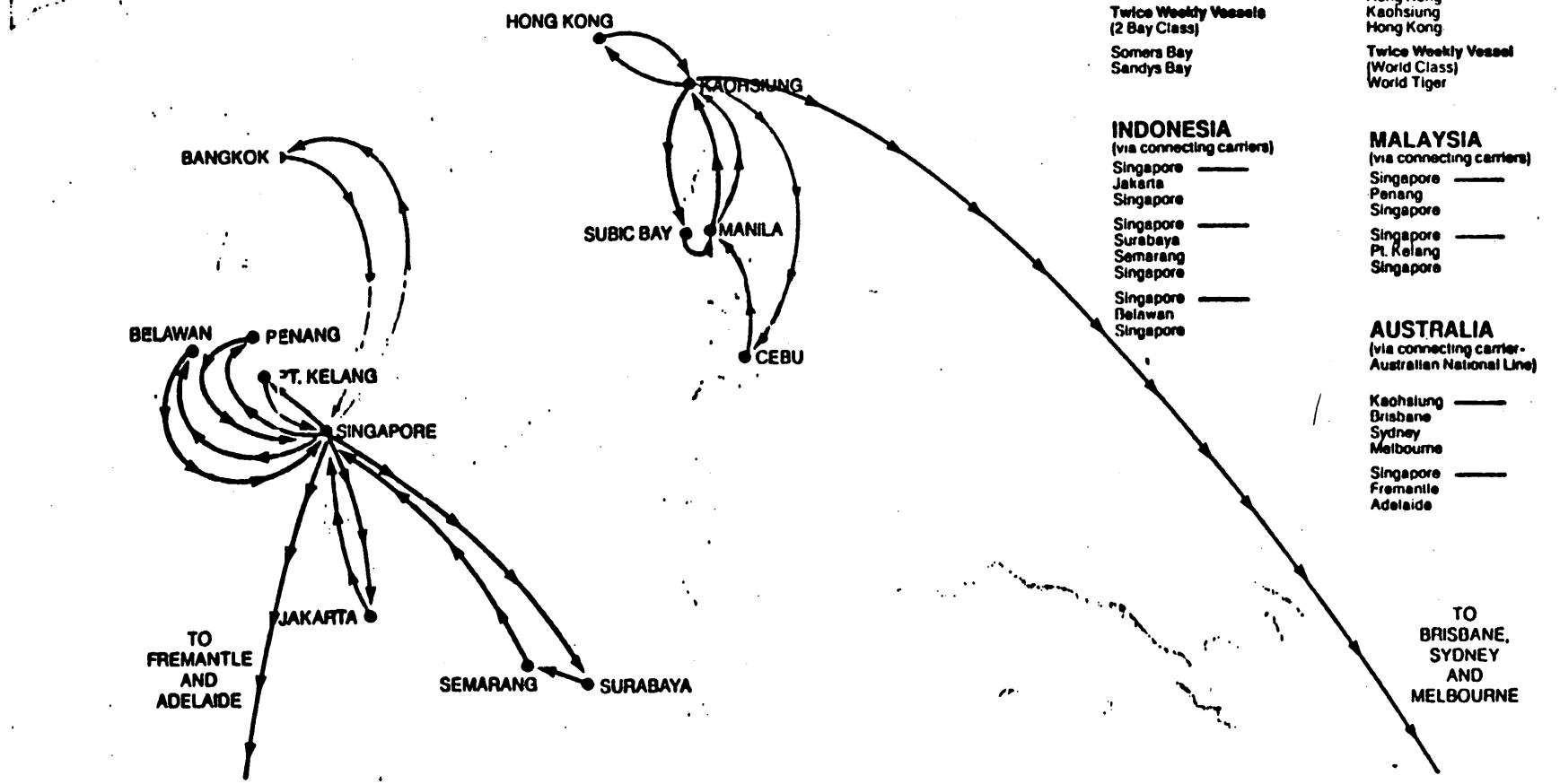
Northbound
Tacoma
Anchorage
Kodiak

Southbound
Tacoma

Twice Weekly Vessels
(3 D-7's)
Tacoma
Kodiak
Anchorage

Sea-Land

Deployment: Feeder Vessels



PHILIPPINES FEEDERS

Kaohsiung — Cebu — Manila — Kaohsiung

Weekly Vessels (World Class) World Lion

Kaohsiung — Subic Bay — Manila — Kaohsiung

Weekly Vessel (1 D-6 Class) Sea-Land Pacer

BANGKOK FEEDERS

Bangkok — Singapore — Bangkok

Twice Weekly Vessels (2 Bay Class)

Somers Bay
Sandys Bay

HONG KONG/ KAOHSIUNG FEEDER

Hong Kong — Kaohsiung — Hong Kong

Twice Weekly Vessel (World Class) World Tiger

INDONESIA
(via connecting carriers)

Singapore — Jakarta — Singapore

Singapore — Surabaya — Semarang — Singapore

Singapore — Belawan — Singapore

MALAYSIA
(via connecting carriers)

Singapore — Penang — Singapore

Singapore — Pt. Kelang — Singapore

AUSTRALIA
(via connecting carrier- Australian National Line)

Kaohsiung — Brisbane — Sydney — Melbourne

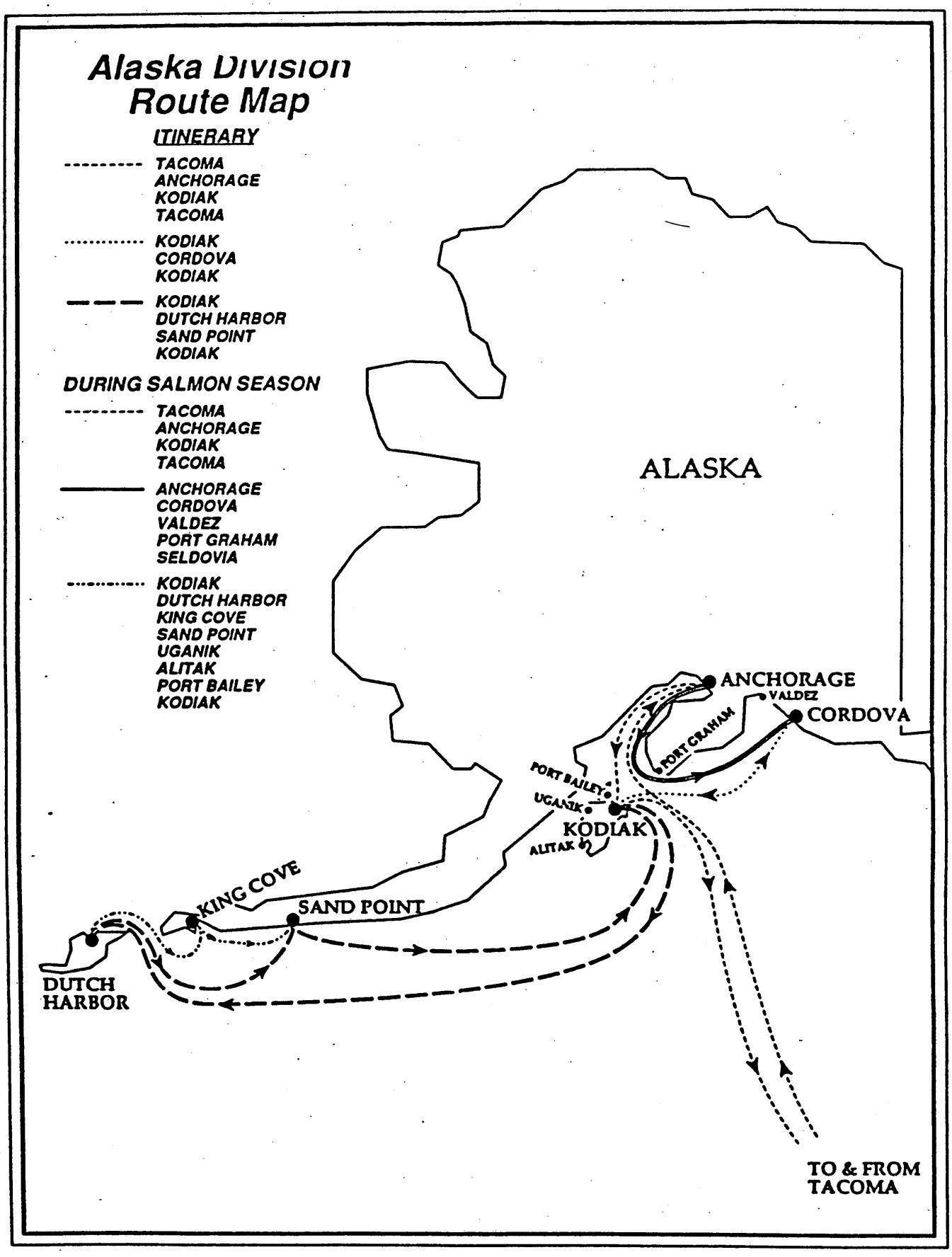
Singapore — Fremantle — Adelaide

SOUTHBOUND
TRANSIT TIME MATRIX

ORIGINS

DESTINATIONS	ELIZABETH	JACKSONVILLE	PT EVERGLADES	NEW ORLEANS	HOUSTON	LONG BEACH	OAKLAND	SEATTLE/TACOMA
Puerto Rico	4	4	5	7	11	12	14	13
Virgin Islands	6	5	6	8	12	13	15	15
Dominican Republic	8	8	6	9	14	15	16	16
Trinidad	12	9	15	12	16	17	19	20
Aruba	8	6	12	9	13	14	16	17
Curacao	9	7	13	10	14	15	17	18
Jamaica	20	5	3	6	11	12	13	13
Haiti	21	6	4	7	12	13	14	14
Costa Rica	16	7	7	4	7	8	11	11
El Salvador	19	7	6	10	13	14	17	18
Honduras	16	4	3	7	10	11	14	15
Guatemala	16	4	3	7	10	11	14	14

NOTE: Microbridge (intermodal) services are available from Boston, Philadelphia, Baltimore, Charleston, and other points.


Alaska Division
Route Map
ITINERARY
TACOMA
ANCHORAGE
KODIAK
TACOMA
KODIAK
CORDOVA
KODIAK
KODIAK
DUTCH HARBOR
SAND POINT
KODIAK
DURING SALMON SEASON
TACOMA
ANCHORAGE
KODIAK
TACOMA
ANCHORAGE
CORDOVA
VALDEZ
PORT GRAHAM
SELDOVIA
KODIAK
DUTCH HARBOR
KING COVE
SAND POINT
UGANIK
ALITAK
PORT BAILEY
KODIAK
ALASKA
ANCHORAGE
VALDEZ
CORDOVA
PORT GRAHAM
PORT BAILEY
UGANIK
KODIAK
ALITAK
KING COVE
SAND POINT
DUTCH HARBOR
TO & FROM TACOMA

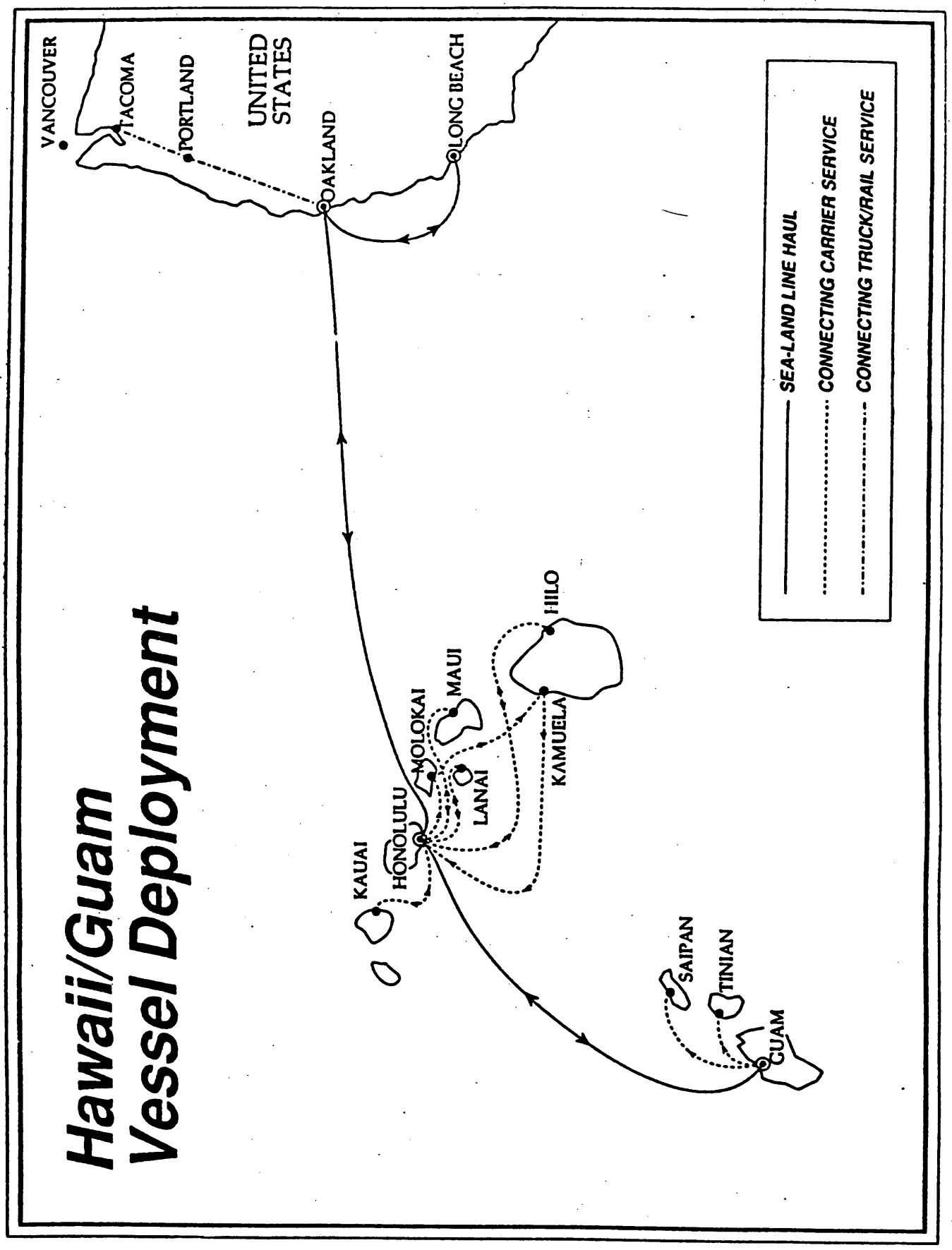
TRANSIT TIMES

Linehaul Service

ORIGINS	DESTINATIONS	TRANSIT TIME
Anchorage	Kodiak	16 hours
Tacoma	Anchorage	3 days, 7 hours
Kodiak	Tacoma	3 days, 3 hours
Tacoma	Kodiak	4 days

Barge Service

ORIGINS	DESTINATIONS	TRANSIT TIME
Kodiak	Chignik	1 day, 9 hours
Chignik	Sand Point	17 hours
Sand Point	Dutch Harbor	1 day, 8 hours
Dutch Harbor	Kodiak	3 days, 4 hours
Kodiak	Cordova	1 day, 12 hours
Cordova	Kodiak	1 day, 12 hours
Kodiak	Port Bailey	7 hours
Kodiak	Alitak	16 hours
Anchorage	Cordova	2 days, 1 hour
Cordova	Valdez	10 hours
Valdez	Port Graham	1 day, 7 hours
Port Graham	Seldovia	2 hours
Seldovia	Anchorage	16 hours
Port Bailey	Uganik	12 hours
Uganik	Alitak	8 hours


Hawaii/Guam
Vessel Deployment
VANCOUVER
TACOMA
PORTLAND
UNITED STATES
OAKLAND
LONG BEACH
HILO
MAUI
MOLOKAI
LANAI
KAMUELA
KAUAI
HONOLULU
SAIPAN
TINIAN
GUAM
SEA-LAND LINE HAUL
CONNECTING CARRIER SERVICE
CONNECTING TRUCK/RAIL SERVICE

SeaLand

CUTOFF AND TRANSIT TIMES

Hawaii Service

ORIGIN B/L	CY LOCATION	CUTOFF DAY	CUTOFF TIME	AVAIL. DAY	HONOLULU TRANSIT
EAST COAST					
Atlanta Stack Service	CSX Ramp 1698 Marietta Rd Marietta, GA	Tues	Noon	Mon	14 Days
Baltimore (Via Oakland)	CSX Ramp Hanover St Port Covington Baltimore, MD	Tues	6 PM	Mon	14 Days
Boston	Coastal Terminal 378 Commercial Street Malden, MA	Thurs	6 PM	Mon	19 Days
Worcester	P & W Rail Ramp 382 Southbridge St. Worcester, MA	Thurs	6 PM	Mon	19 Days
Charleston	CSX Ramp 2700 Bennett Yard Rd Charleston, SC	Fri	6 PM	Mon	18 Days
Jacksonville	CSX Ramp 5902 Sportsman's Club Rd Jacksonville, FL	Fri	6 PM	Mon	18 Days
Little Ferry NJ Stack Service	ISI Ramp 2200 83rd St North Bergen, NJ	Fri	6 PM	Mon	18 Days
Miami	CSX Ramp 5995 East 8th St Hialeah, FL	Thurs	6 PM	Mon	19 Days
Norfolk (Via Oakland)	Norfolk & Southern Ramp Portsmouth Terminal Norfolk, VA	Tues	6 PM	Mon	14 Days
Philadelphia (Via Oakland)	CSX/Santa Fe Delaware Ave Philadelphia, PA	Tues	6 PM	Mon	14 Days
Savannah	CSX Ramp Tremont Rd Savannah, GA	Fri	6 PM	Mon	18 Days
Wilmington, NC	Seaboard—CSX 2202 Burnett Blvd North Carolina State Port Authority Wilmington, NC	Fri	6 PM	Mon	18 Days
MID WEST					
Chicago Stack Service (Via Oakland)	CSX Ramp 7000 W. 71st Bedford Park, IL	Fri	6 PM	Mon	12 Days
Kansas City	Burlington-Northern Ramp 153 W. 14th Ave No. Kansas City, MO	Mon	6 PM	Mon	15 Days

Sea-Land

ORIGIN B/L	CY LOCATION	CUTOFF DAY	CUTOFF TIME	AVAIL. DAY	HONOLULU TRANSIT
MID-WEST (Cont.)					
Louisville (Via Oakland)	CSX Ramp 7304 Grade Lane Louisville, KY	Tues	6 PM	Mon	14 Days
Memphis	Southern Pacific 130 Terminal Center Memphis, TN	Mon	4 PM	Mon	15 Days
St. Louis	Southern Pacific 1000 S. 22nd St St. Louis, MO	Mon	6 PM	Mon	15 Days
GULF					
Dallas	Southern Pacific 4135 Linfield Dallas, TX	Thurs	6 PM	Mon	12 Days
Houston	Southern Pacific 5500 Wallisville Rd Houston, TX	Mon	6 PM	Mon	15 Days
New Orleans Stack Service	CSX Ramp 6701 Almonaster New Orleans, LA	Mon	6 PM	Mon	15 Days
PNW SERVICE					
TRUCK SERVICE					
Portland	Western Container Freight 3860 N. Shuttle Rd Portland, OR	Mon	3 PM	Mon	8 Days
Seattle	Nelson Trucking 1600 S. 92nd Place Seattle, WA	Mon	3 PM	Mon	8 Days
Tacoma	Sea-Land Service 1675 Lincoln Ave Tacoma, WA	Mon	3 PM	Mon	8 Days
RAIL SERVICE					
Portland	Western Container Freight 3860 N. Shuttle Rd Portland, OR	Fri	Noon	Mon	8 Days
Seattle	Nelson Trucking 1600 S. 92nd Place Seattle, WA	Fri	Noon	Mon	8 Days
Tacoma	Sea-Land Service 1675 Lincoln Ave Tacoma, WA	Fri	Noon	Mon	8 Days
CALIFORNIA SERVICE					
Long Beach	Sea-Land Service Berth 228 Long Beach, CA	Thur Fri	5 pm Dry 5 pm POV'S Noon Rfr/Hot Hatch	Mon	7 Days
Oakland	Sea-Land Service 1425 Maritime St Oakland, CA	Wed Tues Wed	Noon Dry/Rfr 4:45 PM POV'S 4:45 PM Hot Hatch	Mon	5 Days

SeaLand

CUTOFF AND TRANSIT TIMES

Guam Service

ORIGIN B/L	CY LOCATION	CUTOFF DAY	CUTOFF TIME	AVAIL. DAY	GUAM TRANSIT
EAST COAST					
Atlanta (Stack Service)	CSX Ramp 1698 Marietta Rd Marietta, GA	Tues	Noon	Wed	22 Days
Baltimore	CSX Ramp Hanover St Port Covington Baltimore, MD	Tues	6 PM	Wed	22 Days
Boston	Coastal Terminal 378 Commercial St. Malden, MA	Thu	6 PM	Wed	27 Days
Worcester	P & W Rail Ramp 382 Southbridge St. Worcester, MA	Thu	6 PM	Wed	27 Days
Charleston	CSX Ramp 2700 Bennett Yard Rd Charleston, SC	Fri	6 PM	Wed	25 Days
Jacksonville	CSX Ramp 5902 Sportsman's Club Rd Jacksonville, FL	Fri	6 PM	Wed	25 Days
Little Ferry NJ Stack Service	ISI Ramp 2200 83rd St North Bergen, NJ	Fri	6 PM	Wed	26 Days
Miami	CSX Ramp 5995 East 8th St Hialeah, FL	Thu	6 PM	Wed	26 Days
Norfolk	Norfolk & Southern Ramp Portsmouth Terminal Norfolk, VA	Tues	6 PM	Wed	22 Days
Philadelphia	CSX/Santa Fe Delaware Ave Philadelphia, PA	Tues	6 PM	Wed	22 Days
Savannah	CSX Ramp Tremont Rd Savannah, GA	Fri	6 PM	Wed	25 Days
Wilmington, NC	Seaboard—CSX 2202 Burnett Blvd North Carolina State Port Authority Wilmington, NC	Fri	6 PM	Wed	25 Days
MID-WEST					
Chicago Stack Service (Via Oakland)	CSX Ramp 7000 W. 71st Bedford Park, IL	Fri	6 PM	Wed	19 Days
Kansas City	Burlington-Northern Ramp 153 W. 14th Ave No. Kansas City, MO	Mon	6 PM	Wed	23 Days

PACIFIC OUTBOUND

NORTH AMERICA TO ASIA / MID-EAST

SEA-LAND BRIDGE DEPARTURES

New York/Phil.	7/31	.....	8/ 7	.....	8/14	.....	8/21	.....	8/28		9/ 4		9/11	.....	9/18	.....
Houston	.....	7/31	.....	8/ 7	.....	8/14	.....	8/21	.....	8/28		9/ 4		9/11	.....	9/18
New Orleans	.....	7/31	.....	8/ 7	.....	8/14	.....	8/21	.....	8/28		9/ 4	.....	9/11	.....	9/18
Baltimore	7/29	.....	8/ 5	.....	8/12	.....	8/19	.....	8/26		9/ 2		9/ 9	.....	9/16	
Boston	7/27	.....	8/ 3	.....	8/10	.....	8/17	.....	8/24	.....	8/31	.....	9/ 7	.....	9/14	
Ports/Norfolk	7/29	.....	8/ 5	.....	8/12	8/12	8/19	.....	8/26	.....	9/ 2	.....	9/ 9	.....	9/16	
Wilmington N.C.	7/28	7/29	8/ 4	8/ 5	8/11	8/12	8/18	8/19	8/25	8/25	9/ 1	9/ 2	9/ 8	9/ 9	9/15	9/16
Chas/Savannah	7/31	7/29	8/ 7	8/ 5	8/14	8/12	8/21	8/19	8/28	8/25	9/ 4	9/ 2	9/11	9/ 9	9/18	9/16
Jax/Mia/Tampa	.....	7/29	.....	8/ 5	.....	8/12	.....	8/19	.....	8/25		9/ 2		9/ 9		9/16
Mobile	.....	7/29	.....	8/ 5	.....	.....	.....	8/19	.....	8/26	.....	9/ 2	.....	9/ 9	.....	9/16
Toronto	7/31	.....	8/ 7	.....	8/14	.....	8/21	.....	8/28	.....	9/ 4	.....	9/11	.....	9/18	
Montreal	7/28	.....	8/ 4	.....	8/11		8/18	.....	8/25	.....	9/ 1	.....	9/ 8	.....	9/15	

INLAND AMERICAN DEPARTURES *

Atlanta	.....	8/ 2	.....	8/ 9	.....	8/16	.....	8/23	.....	8/30	.....	9/ 6	.....	9/13	.....	9/20
Chicago	8/ 3	8/ 3	8/10	8/10	8/17	8/17	8/24	8/24	8/31	8/31	9/ 7	9/ 7	9/14	9/14	9/21	9/21
Dallas/Ft. Worth	.....	8/ 2	.....	8/ 9	.....	8/16	.....	8/23	.....	8/30	.....	9/ 6	.....	9/13	.....	9/20
Denver	.....	8/ 7	.....	8/14	.....	8/21	.....	8/28	.....	9/ 4	.....	9/11	.....	9/18	.....	9/25
K.C. Mo/Ks	.....	8/ 4	.....	8/12	.....	8/19	.....	8/26	.....	9/ 2	.....	9/ 9	.....	9/16	.....	9/23
Memphis	.....	8/ 2	.....	8/ 9	.....	8/16	.....	8/23	.....	8/30	.....	9/ 6	.....	9/13	.....	9/20
Milwaukee	8/ 2	.....	8/ 9	.....	8/16	.....	8/23	.....	8/30	.....	9/ 6	.....	9/13	.....	9/20	
Minn/St. Paul	8/ 4	.....	8/11	.....	8/16	.....	8/25	.....	9/ 1	.....	9/ 8	.....	9/15	.....	9/22	
Nashville	.....	8/ 3	.....	8/10	.....	8/17	.....	8/24	.....	8/31	.....	9/ 7	.....	9/14	.....	9/21
St. Louis	.....	8/ 4	.....	8/11	.....	8/18	.....	8/25	.....	9/ 1	.....	9/ 8	.....	9/15	.....	9/22

LINEHAUL VESSEL & VOYAGE SAILS	VOYAGER 141 W	ENDURANCE 94 W	DEVELOPER 120W	PRODUCER 99W	EXPRESS 134W	DEFENDER 100W	INDEPEN-DENCE 119W	INNOVATOR 94W	MARINER 96W	EXPLORER 98W	FREEDOM 99W	LIBERATOR 102W	VOYAGER 142W	ENDURANCE 93W	DEVELOPER 121W	PRODUCER 100W
Vancouver B.C.[A]	8/ 4	.....	8/11	.....	8/18	.....	8/25	.....	9/ 1	.....	9/ 8	.....	9/15	.....	9/22	
Portland[A]	8/ 4	.....	8/11	.....	8/16	.....	8/25	.....	9/ 1	.....	9/ 8	.....	9/15	.....	9/22	
Tacoma	8/ 8	.....	8/15	.....	8/20	.....	8/29	.....	9/ 5	.....	9/12	.....	9/19	.....	9/26	
Long Beach	.....	8/ 9	.....	8/16	.....	8/23	.....	8/30	.....	9/ 6	.....	9/13	.....	9/20	.....	9/27
Oakland	.....	8/10	.....	8/17	.....	8/24	.....	8/31	.....	9/ 7	.....	9/14	.....	9/21	.....	9/28
ARRIVES																
Yoko/Tokyo[C]	8/19	8/21	8/26	8/28	9/ 2	9/ 4	9/ 9	9/11	9/16	9/18	9/23	9/25	9/30	10/ 2	10/ 7	10/ 9
Kobe/Osa[C]	8/21	8/23	8/28	8/30	9/ 4	9/ 6	9/11	9/13	9/18	9/20	9/25	9/27	10/ 2	10/ 4	10/ 9	10/11
Busan[I]	8/25	8/25	9/ 1	9/ 1	9/ 8	9/ 8	9/15	9/15	9/22	9/22	9/29	9/29	10/ 6	10/ 6	10/13	10/13
Kao/Keelung[B]	8/27	8/31	9/ 2	9/ 7	9/10	9/14	9/17	9/21	9/24	9/29	10/ 1	10/ 5	10/ 8	10/12	10/15	10/19
Hong Kong	8/25	8/29	9/ 1	9/ 5	9/ 8	9/12	9/15	9/19	9/22	9/26	9/29	10/ 3	10/ 6	10/10	10/13	10/17
Singapore[G]	8/29	9/ 5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	10/10	10/17	10/17	10/24
Manila[D/H]	9/ 2	9/ 4	9/ 9	9/12	9/16	9/19	9/23	9/26	9/30	10/ 3	10/ 7	10/10	10/14	10/17	10/21	10/24
Incheon[I]	8/26	8/26	9/ 2	9/ 2	9/ 9	9/ 9	9/16	9/16	9/23	9/23	9/30	9/30	10/ 7	10/ 7	10/14	10/14
Naha	9/ 4	.....	9/11	.....	9/18	.....	9/25	.....	10/ 2	.....	10/ 9	.....	10/16	.....	10/23	
Bangkok[F]	9/ 8	9/ 8	9/15	9/15	9/22	9/22	9/29	9/29	10/ 6	10/ 6	10/13	10/13	10/20	10/20	10/27	10/27
Penang[F]	9/ 1	9/ 9	9/ 8	9/16	9/15	9/23	9/22	9/30	9/26	10/ 7	10/ 6	10/14	10/13	10/21	10/20	10/28
Port Kelang[F]	8/31	9/ 7	9/ 7	9/14	9/14	9/21	9/21	9/28	9/28	10/ 5	10/ 5	10/12	10/12	10/19	10/19	10/26
Jakarta[F]	9/ 2	9/ 9	9/ 9	9/16	9/16	9/23	9/23	9/30	9/30	10/ 7	10/ 7	10/14	10/14	10/21	10/21	10/28
Shanghai[E]	8/31	9/ 8	9/ 7	9/15	9/14	9/22	9/21	9/29	9/28	10/ 6	10/ 5	10/13	10/12	10/20	10/19	10/27
Dalian[E]	8/31	9/ 8	9/ 7	9/15	9/14	9/22	9/21	9/29	9/28	10/ 6	10/ 5	10/13	10/12	10/20	10/19	10/27
Xingang[E]	8/31	9/ 8	9/ 7	9/15	9/14	9/22	9/21	9/29	9/28	10/ 6	10/ 5	10/13	10/12	10/20	10/19	10/27
ARRIVES																
Colombo[K]	9/ 5	9/ 5	9/12	9/12	9/19	9/19	9/26	9/26	10/ 3	10/ 3	10/10	10/10	10/17	10/17	10/24	10/24
Bombay	9/14	9/14	9/24	9/21	9/28	9/26	10/ 5	10/ 5	10/12	10/12	10/12	10/19	10/24	10/24	11/ 2	11/ 2
Cochin	9/17	9/17	9/24	9/24	10/ 1	10/ 1	10/ 8	10/ 8	10/15	10/15	10/22	10/22	10/29	10/29	11/ 5	11/ 5
Tuticorin	9/16	9/16	9/23	9/23	9/30	9/30	10/ 7	10/ 7	10/14	10/14	10/21	10/21	10/28	10/28	11/ 4	11/ 4
Madras	9/ 6	9/ 6	9/13	9/13	9/20	9/20	9/27	9/27	10/ 4	10/ 4	10/11	10/11	10/18	10/18	10/25	10/25
Chittagong	9/ 6	9/ 6	9/13	9/13	9/20	9/20	9/27	9/27	10/ 4	10/ 4	10/11	10/11	10/18	10/18	10/25	10/25
Dubai/Jebel Ali	9/11	9/11	9/18	9/18	9/25	9/25	10/ 2	10/ 2	10/ 9	10/ 9	10/16	10/16	10/23	10/23	10/30	10/30
Sharjah	9/11	9/11	9/18	9/18	9/25	9/25	10/ 2	10/ 2	10/ 9	10/ 9	10/16	10/16	10/23	10/23	10/30	10/30
Abu Dhabi	9/12	9/12	9/19	9/19	9/26	9/26	10/ 3	10/ 3	10/10	10/10	10/17	10/17	10/24	10/24	10/31	10/31
Muscat	9/13	9/13	9/20	9/20	9/27	9/27	10/ 4	10/ 4	10/11	10/11	10/18	10/18	10/25	10/25	11/ 1	11/ 1
Bahrain	9/14	9/14	9/21	9/21	9/28	9/28	10/ 5	10/ 5	10/12	10/12	10/19	10/19	10/26	10/26	11/ 2	11/ 2
Kuwait	9/16	9/16	9/22	9/23	9/30	9/30	10/ 7	10/ 7	10/14	10/14	10/21	10/21	10/28	10/28	11/ 4	11/ 4
Damman	9/15	9/15	9/22	9/22	9/29	9/29	10/ 6	10/ 6	10/13	10/13	10/20	10/20	10/27	10/27	11/ 3	11/ 3
Karachi	9/14	9/14	9/21	9/22	9/28	9/29	10/ 5	10/ 5	10/12	10/12	10/19	10/19	10/26	10/26	11/ 3	11/ 3
Doha	9/12	9/12	9/19	9/19	9/26	9/26	10/ 3	10/ 3	10/10	10/10	10/17	10/17	10/24	10/24	10/31	10/31

ATLANTIC DIVISION
LANDBRIDGE SERVICE

Outbound — North America to N. Europe/Mediterranean

SEA-LAND BRIDGE DEPARTURES	North Atlantic/West Coast/Canada					Atlantic to Mediterranean					South Atlantic/Gulf/West Coast				
Long Beach	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	8/ 3	8/10	8/17	8/24	8/31
Oakland	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	8/ 2	8/ 9	8/16	8/23	8/30
Vanc. B.C.	8/12	8/19	8/26	9/ 2	9/ 9	8/ 5	8/16	8/27	9/ 7	9/18	.....	.....	.....	.....	.....
Tacoma	8/13	8/20	8/27	9/ 3	9/10	8/ 6	8/17	8/28	9/ 8	9/19	.....	.....	.....	.....	.....
SAILS															
Ft. Evrglds	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	8/ 5	8/12	8/19	8/26	9/ 2
Houston	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	8/ 8	8/15	8/22	8/29	9/ 5
N. Orleans[A]	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	8/ 6	8/13	8/20	8/27	9/ 3
Boston	8/15	8/22	8/29	9/ 5	9/12	8/11	8/22	9/ 2	9/13	9/24	.....	.....	.....	.....	.....
Baltimore	8/17	8/24	8/31	9/ 7	9/14	8/11	8/22	9/ 2	9/13	9/24	.....	.....	.....	.....	.....
New York[B]	8/19	8/26	9/ 2	9/ 9	9/16	8/13	8/24	9/ 4	9/15	9/26	.....	.....	.....	.....	.....
Wilm. NC	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Charleston	.....	.....	.....	.....	.....	8/17	8/28	9/ 8	9/19	9/30	8/13	8/20	8/27	9/ 3	9/10
Jax	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	8/12	8/19	8/26	9/ 2	9/ 9
Portsmouth	8/21	8/26	9/ 4	9/11	9/18	8/15	8/26	9/ 6	9/17	9/26	.....	.....	.....	.....	.....

LINEHAUL VESSEL & VOYAGE	NEW YORK 019E	QUALITY 019E	HOLLAND 019E	INTEGRITY 020E	NEW YORK 020E	ACHIEVER 015E	VALUE 015E	RALEIGH BAY 017E	ACHIEVER 016E	VALUE 016E	PERFOR-MANCE 016E	ATLANTIC 016E	COMMITMENT 015E	GALVESTON BAY 016E	HUDSON 016E
ARRIVES															
Rotterdam[C]	9/ 2	9/ 9	9/16	9/23	9/30	.....	.....	.....	.....	.....	8/23	8/30	9/ 6	9/13	9/20
Bremerhaven[D]	8/30	9/ 6	9/13	9/20	9/27	.....	.....	.....	.....	.....	8/25	9/ 1	9/ 8	9/15	9/22
Antwerp	9/ 4	9/11	9/18	9/25	10/ 2	.....	.....	.....	.....	.....	8/25	9/ 1	9/ 8	9/15	9/22
Walhamn	9/ 4	9/11	9/18	9/25	10/ 2	.....	.....	.....	.....	.....	8/28	9/ 4	9/11	9/18	9/25
Felixstowe[E]	9/ 1	9/ 8	9/15	9/22	9/29	.....	.....	.....	.....	.....	8/27	9/ 3	9/10	9/17	9/24
Aarhus	9/ 6	9/13	9/20	9/27	10/ 4	.....	.....	.....	.....	.....	8/30	9/ 6	9/13	9/20	9/27
Bilbao	9/12	9/19	9/26	10/ 3	10/10	.....	.....	.....	.....	.....	8/29	9/ 5	9/12	9/19	9/26
Lisbon	9/12	9/19	9/26	10/ 3	10/10	.....	.....	.....	.....	.....	8/29	9/ 5	9/12	9/19	9/26
Grangemouth	9/ 2	9/ 9	9/16	9/23	9/30	.....	.....	.....	.....	.....	8/31	9/ 7	9/14	9/21	9/28
Genoa	.....	.....	.....	.....	.....	8/30	9/10	9/21	10/ 2	10/13	9/ 3	9/10	9/17	9/24	10/ 1
Dublin	9/ 7	9/14	9/21	9/28	10/ 5	.....	.....	.....	.....	.....	8/30	9/ 8	9/15	9/22	9/29
Le Havre	9/ 5	9/12	9/19	9/26	10/ 6	.....	.....	.....	.....	.....	8/25	9/ 1	9/ 8	9/15	9/22
Leixoes/Oporto	9/13	9/20	9/27	10/ 4	10/11	.....	.....	.....	.....	.....	8/31	9/ 7	9/14	9/21	9/28
Algeciras[F]	.....	.....	.....	.....	.....	8/25	9/ 5	9/16	9/27	10/ 8	8/31	9/ 7	9/14	9/21	9/28
Valencia	.....	.....	.....	.....	.....	9/12	9/13	9/24	10/ 5	10/16	8/31	9/ 7	9/14	9/21	9/28
Leghorn	.....	.....	.....	.....	.....	8/26	9/ 6	9/19	9/30	10/11	9/11	9/18	9/25	10/ 2	10/ 9
FOS	.....	.....	.....	.....	.....	8/31	9/11	9/22	10/ 3	10/14	9/ 7	9/14	9/21	9/28	10/ 5
Barcelona	.....	.....	.....	.....	.....	8/29	9/12	9/19	10/ 3	10/17	9/ 5	9/12	9/19	9/26	10/ 3
Pireeus	.....	.....	.....	.....	.....	9/15	9/12	9/26	10/ 3	10/17	9/ 5	9/12	9/19	9/26	10/ 3
Naples	.....	.....	.....	.....	.....	9/10	9/16	10/ 2	10/ 8	10/22	9/10	9/17	9/24	10/ 1	10/ 8



AMERICAN PRESIDENT LINES, LTD.

Part of the American President Companies group.

August 17, 1989

Mr. Mac Frampton
Jones Commission
1211 Fern Street
Cafritz Building, rm. #A-100
Arlington, VA. 22202

Dear Mr. Frampton:

APL Service to Asia

Further to our conversation of this morning, we are pleased to provide the following information on our service to Asia.

We are also enclosing some brochures on our company which we trust you will find informative.

U.S.A. Port of Loading: San Pedro and Oakland, CA.; Seattle, WA.

Asian Discharge Ports	Transit time from Oakland
Japan - Yokohama	9 days
Kobe	10 days
Korea - Pusan	15 days
Okinawa -	18 days
Phillipines - Manila	21 days
Guam -	10 days
Australia - Sydney	21 days *
- Melbourne	25 days *
Hawaii -	APL service pending gov't approval

* via relay service over Japan

I would be pleased to discuss this infomation in greater detail as well as the other opportunites that American President Companies might be able to offer.

Sincerely yours,

Douglas Cole
Manager,
Government Sales/Service

Appendix E

SERVICE LEVELS

APPENDIX E

Minimum Levels of Customer Service for DOD Commissaries are included in this appendix. This is a comprehensive list of specific services that must be made available to all customers regardless of commissary location, and furnishes the basis for providing customers with a convenient and pleasant shopping environment.

MINIMUM LEVELS OF CUSTOMER SERVICE

SECTION 1 - STORE EXTERIOR

A. PARKING LOT

1. Paved.

2. Lighted.

3. Parking lot entrances & exits adequately lighted.

4. Spaces marked (min. 8.6 ft. width, but 9 ft. preferred).

5. Traffic pattern indicated.

6. Reserved spaces for the handicapped.

7. Reserved spaces for employees (areas of least convience to customers).

8. Delivery vehicles not blocking traffic flow.

9. Trash receptacles positioned throughout.

10. Parking lot inspected hourly during sales hours by designated to ensure cleanliness, retrieval of carry-out carts and absence of safety hazards.

11. Designated area for carry-out carts.

12. Pick-up lane, properly marked and kept clean, located near exit doors.

B. ENTRANCES/EXITS

1. Store entrance & exits prominently identified.

2. Automatic entrance & exit doors provided with door guards (not required with sliding automatic doors).

3. Automatic door pads clean and in good operating condition.

4. Minimum of one exit for every six to eight checkout stands.

5. Sufficient delivery doors to preclude use of customer entrance & exits for deliveries during sales hours.

6. Mats provided at entrance for cleaning of shoes during inclement weather.

7. Windguards and baffles at entrances & exits where there are no vestibules.

8. Doors equipped with safety glass.

9. Plate glass windows protected from carts by bumper rails.

C. HOURS OF OPERATION

1. Prominently posted.

2. Visible from exterior of the store.

D. CUSTOMER CONVENIENCE

1. Canopies or enclosed areas to protect waiting customers from the elements.

2. Carry-out service provided.

SECTION 2 - STORE INTERIOR

A. OPERATING HOURS

1. Open late at least one night per week.

2. Customers allowed adequate time after closing to conclude shopping.

3. Customers notified at least two weeks in advance of all store closing or changes in store hours. (Use public address system and local media).

4. Convenience of store hours reviewed at least semiannually.

B. SHOPPING CARTS AND BASKETS

1. At least 12 shopping carts in operating order per checkstand.

2. Shopping carts equipped with bottom racks, plastic handles, baby seats (plated vice painted).

3. Shopping carts, visibly different from carry-out carts, not permitted to leave the sales floor.

4. Shopping carts steam-cleaned semi-annually.

5. At least 5 hand-carry shopping baskets per checkstand.

6. At least 4 carry-out carts in operating condition per checkstand.

7. Register operators will check bottom of carts for merchandise.

C. CUSTOMER SERVICE

1. Pay telephone.

2. Separate rest rooms, for men and women, prominently identified.

3. Customer newsletter published and distributed at least quarterly.

4. Local newspaper used to publicize commissary operations.

5. Music and/or message repeater system used.

6. Floor diagram/shopping list/general information.

7. Comfortable visitor waiting area near the front of the store.

8. Bulletin board kept current.

9. Customer awareness Program implemented.

10. Water fountains conveniently placed.

11. Water fountains cleaned at least twice daily.

12. Commissary location listed in station directory; adequate directional road signs installed within constraints imposed by the host command.

13. Express lane, limited to 15 items, provided.

14. Public address system available for announcements on behalf of customers.

15. Adequate fire stations prominently marked.

16. Shopping traffic pattern indicated.

17. Adequate overhead lighting (at least 80 foot-candles).

18. Walls and floors of light, pleasant colors.

19. Clocks properly positioned and maintained for correct time.

20. Floors and aisles clean and free of debris.

D. OTHER OPERATING REQUIREMENTS

1. Regulation concerning entry requirements posted near entrance.

2. Information on refund, check-cashing, vendor coupon and food stamp procedures posted near entrance.

3. Refund and check-cashing procedures observed.

4. Bad-check list maintained in confidence.

5. Store appropriately decorated for all major holidays and sales promotions.

6. Signing attractive and permanently installed.

7. Replies furnished on all customer suggestions.

8. Access of vendors to sales area rigidly controlled.

9. Customers permitted reasonable access to supervisors.

10. Warehouse and preparation rooms prominently identified; signs prominently displayed prohibiting the entry of unauthorized persons.

11. Store inspected at least semiannually for compliance with weights and measures regulations.

12. Temperature checks, on a prescribed schedule, of all refrigerated spaces and display cases or alarm system.

13. Sales area inspected at least hourly for removal of safety hazards, e.g., spills and loose cardboard.

14. Health and sanitation inspection by qualified personnel at least twice a month.

15. Veterinary Services or local medical department used to inspect merchandise for quality.

16. Objectional odors promptly investigated and remedial action taken.

17. Smoking prohibited except in lounge areas.

18. Employees not permitted to smoke in sales or preparation

areas.

19. All cleaning gear stowed out of view of customers.

20. Prominent photographic identification of commissary officer and departmental supervisors.

21. Meeting of commissary management with wives clubs and other customer representative organizations at least quarterly.

22. Sales area temperature to be maintained between 70 - 75 degrees F; relative humidity less than 55% because of refrigeration requirements.

23. Markdowns made available on an equal basis to all authorized customers, with no special consideration given to any group of customers (e.g., employees).

24. Markdown sales area prominently identified and clean.

25. All markdown items properly identified and neatly displayed.

26. Markdown items to be salable (no swollen cans; no infested or mutilated packages).

27. All orders for authorized customers (including employees) packaged and removed from store immediately after purchase.

E. GROCERY DEPARTMENT

1. Merchandise (All categories authorized by DOD 1330.17 will be carried.

(a) Dry grocery products checked daily for freshness; all outdated merchandise removed from sale (rotation of product).

(b) An overall in-stock position of 95% maintained on the sales-floor at all times.

(c) 100% in-stock position maintained on designated master stock assortment items.

(d) Dry grocery items checked at least twice daily for out-of-stock conditions and remedial actions taken.

(e) Height of products displayed on shelves not to exceed 72 inches from floor level.

(f) Tray-packing policy and procedures established by HQ enforced.

(g) Daily inspection periods for tray-pack cardboard removal.

(h) Stock inspected twice daily for salability (dented cans, cans without labels, torn packages).

(i) All labels properly faced.

(j) All priced items clearly marked and labeled on shelf.

(k) Inspection schedule established to ensure that prices shown on shelves and items are inspected for accuracy and legibility at least once a week.

(l) Weekly promotions prominently displayed.

(m) Customers notified of new items by proper signs at shelf locations and at auxiliary display locations.

(n) Space allocation for each item reviewed quarterly.

(o) Shelves dusted and cleaned as needed.

2. Dairy

(a) Merchandise checked at least daily for date-codes, mold, salable appearance and proper rotation.

(b) Display cases meticulously clean.

(c) Broken, damaged, and leaky containers promptly removed.

(d) Continuous inspection for in-stock status.

(e) Insulated bags for ice cream provided at checkout.

3. Bakery

(a) Designated employee to check product freshness daily.

(b) Bakery shelving cleaned daily.

(c) Continuous inspection for in-stock status and salable appearance.

4. Other

(a) Attractive bases (no uncovered shipping pallets) used for floor displays.

(b) No obstruction in sales-floor aisles.
(c) No unattended stock in sales-floor aisles.

(d) All stocking during sales hours performed from narrow wheeled carts.

(e) Majority of shelf stocking accomplished during nonsales hours.

(f) Attractive aisle directory signing to identify the locations of commodity groups.

5. Meat Department

(a) The following constitutes the minimum merchandise selection available to all patrons:

(1) Beef: 30 cuts

(2) Fresh/frozen pork: 8 cuts

(3) Smoked meats: 4 cuts

(4) Veal: 2 cuts when displayed

(5) Lamb: 2 cuts when displayed

(6) Poultry: Whole & Part: 12 cuts

(b) Specific Meat Items Never Out-of-Stock:

(1) Ground Beef:

(2) Sirloin steak or round steak.

(3) T-Bone steak or porterhouse steak.

(4) Dry heat beef roast.

(5) Stew beef.

(6) Moist heat beef roast.

(7) Pork roast.

(8) Pork chops.

(9) Ham: boneless, shank or butt.

(10) Chicken, whole.

(11) Turkey, whole.

(c) Meat Cases Inspected Hourly For:

(1) Cleanliness.

(2) Adequate variety available.

(3) Weekly feature prominently displayed with price cards.

(4) Unsalable merchandise.

(5) Freshness of merchandise.

(6) Discoloration.

(7) Broken, sloppy, leaking packages.

(8) Excessive bleeding.

(9) Improper trim.

(10) Proper nomenclature and grade (retain cut description).

(11) Clear and proper pricing.

(d) Meat cuts adequately scraped to eliminate bone dust and fat particles.

(e) White foam trays used for packaging.

(f) Daily spot-checks for accurate weights and proper application of tare.

(g) Posting and enforcement of smoking prohibition rule in meat preparation, storage and display areas.

(h) Nearby commercial supermarkets surveyed at least once quarterly to compare prices of high-demand items and to determine merchandising trends (CONUS only).

(i) Display case lighting adequate, enhancing appearance of items on display.

(j) Special order policy and procedures prominently displayed.

(k) Paper towels conveniently available to customers.

(l) Display cases sectionalized by commodity groups.

(m) Commodity grups identified by channel indicators (e.g., beef steaks, beef roasts, etc.).

(n) When meat, poultry, or fish items are store-weighed and packaged, a two or three-character alphabetic, or numeric, customer-readable date code on the label.

H. PRODUCE DEPARTMENT

1. The following constitutes the minimum merchandise selection available to all patrons:

(a) Fresh vegetables: 29

(b) Fresh fruits: 26

(c) Nuts in shell: 5

(d) Refrigerated salad dressing: 3

2. Produce properly rotated in storage area.

3. Specific produce items never-out-of stock (U.S. stores only):

(a) Potatoes

(b) Onions (dry)

(c) Cabbage

(d) Carrots

(e) Lettuce

(f) Tomatoes

(g) Broccoli

(h) Celery

(i) Apples

(j) Oranges

(k) Bananas

4. Produce bins & cases checked frequently for:

(a) Selection.

(b) Salability (eye appeal, freshness, intact packages).

5. Merchandise attractively arranged with colors contrasted.

6. Produce cases and bins inspected prior to opening and at least at one other time during the day of cleanliness.

7. Produce cases for perishable merchandise equipped with spray hose.

8. Where merchandise is sold by individual units, poly bags readily available for patrons.

Appendix F

GLOSSARY OF DEFINITIONS/ABBREVIATIONS

GLOSSARY

DEFINITIONS

AUTHORIZED COMMISSARY PATRON - Individuals, organizations, and activities specified in paragraph 2-101.1 through 2-101.19 of DoD Directive 1330.17R, Armed Services Commissary Regulations.

BLANKET DELIVERY ORDER - A simplified procurement method of filling anticipated repetitive requirements for items covered by an existing contract which is used for subsistence items that are procured based on a specification or purchase description without regard to a specific brand name (eg. bread, milk, eggs).

BLANKET PURCHASE AGREEMENT - A simplified procurement method of filling anticipated repetitive requirements for small quantities of items which are not covered by an existing contract. BPAs are issued for brand name subsistence/resale items that are selected for stockage based on customer preference as well as non brand name items that are procured by purchase descriptions, without regard to a specific brand name.

COMMERCIAL ACTIVITY - Office of Management and Budget Circular A.76 requires that private sector services be used to provide service to Government agencies, when these services can be obtained for at least ten percent savings below government cost.

COMMERCIAL ONE STEP DESIGN BUILD - A procedure similar to Design Build except that the RFP contains less specific guidance so the contractor has more latitude in designing the store.

CONTRACT AUTHORITY - The authority given an agency to contract for construction of new commissaries or improvements to existing commissaries prior to realization of revenues necessary to repay the obligations.

COST PRICE - The unit price of an item at the time it is purchased from the manufacturer based on signed monthly price quotes provided by the manufacturer. This price is effective for the calendar month period (the 1st to the 31st of the month) or until the manufacturer provides a new price.

DEFENSE DATA NETWORK - A long haul (long line) DoD network used for the transmission of data.

DESIGN BUILD - A procurement process used to design and construct commissaries. A Request for Proposal (RFP), containing specific parameters, is furnished to construction contractors as a basis to be used to submit their proposals.

ELECTRONIC DATA INTERCHANGE - A network of subscribers whose membership can exchange data.

ELECTRONIC FUNDS TRANSFER - The capability to transfer funds by members to other members on a subscriber network.

EXTENDED HOURS CONCEPT - TSA initiative to increase total available hours of full service commissary shopping during peak demand evening hours by closing the commissary one day a week and reallocating those hours.

FULL-TIME EQUIVALENT - One full-time manpower authorization equating to 2087 hours per year.

DEPARTMENT OF DEFENSE RESALE EXECUTIVE BOARD - A permanent board, responsible to the Secretary through the Assistant Secretary of Defense, Force Management and Personnel for recommending broad policy guidance, including proposing goals for Military Departments in the operation of their resale systems.

MASTER STOCK LIST - Brand name products which have national distribution and are considered essential to support customer demand. The MSL assures a commodity of product mix in each store.

MILITARY PERSONNEL ACCOUNT - Appropriated fund that pays for military personnel used in the commissary system.

"MINI MART" - A TSA supplemental commissary service which offers extended hours in the main commissary with one to four cash registers and limited to those items still on the shelf. The store is not restocked for these hours.

NON-APPROPRIATED FUND EMPLOYEE - An employee of a non-appropriated fund instrumentality whose salary and benefits are paid from sources other than monies appropriated by the Congress of the United States, and which are not recorded in the books of the Treasury of the United States.

OPERATIONS AND MAINTENANCE FUND - Appropriated funds that finance common operating costs of the commissary stores other than unique operating expenses to include civilian personnel wages, utilities, shipment of stock funded inventories between commissary units, training, Automated Data Processing (ADP) support, Temporary Duty (TDY), and transportation of resale merchandise from the Port of Embarkation (POE) to designated warehouses or stores.

PERIPHERALS - Automatic data processing equipment used in support of computer processing such as tape drives, key entry, and CRTs.

PLAN-O-GRAMS - A detailed schematic of item location on a shelf set to expedite traffic flow, reduce out of stocks and excess inventory, and provide optimum use of shelf-space.

PROGRAM OBJECTIVE MEMORANDUM - Formal transmittal to OSD of all programs for resource allocation and consonance with proper guidance. POM decides all aspects of any programs which are designed to increase operational readiness. It highlights forces, manpower, training, material acquisition and logistical support required to meet the strategies and objectives of the services.

PROTOCOLS - A communications term that describes rules or procedures which enables the transfer of data.

REMOTE AND ISOLATED INSTALLATIONS - DOD designated installations where all Morale, Welfare and Recreation activities are eligible to receive appropriated money.

SELF SCANNING - A process that permits customers to scan their groceries and designed to reduce congestion in the front-end while reducing operating costs. Two checkers can effectively monitor six self-scanning lanes.

SELLING PRICE - The unit shelf price of an item at which it is sold to the customer. It is the same as the cost price at which purchased or rounded up by one cent if the cost price is in uneven cents. However, for NAVRESSO only, the effective date of a selling price is always made for the Sunday after the receipt of the order at the new cost price to accommodate:

- o Regionally centralized pricing, so that all stores and the distribution centers have the same price on an item at the same time when breakouts are made.
- o Physical inventory price change adjustments which are made to revalue the inventory to the new price.

STOCK FUND - A revolving fund initially capitalized by Congress which is used to order and pay for the inventory sold in commissary stores and which is replenished from the proceeds of sales.

SUTLER - A local merchant contracted with by the Army in early years of our country who supplied provisions to the soldier in the field at greatly inflated prices. This contributed to the establishment of the Military Subsistence Department.

SYMETRIC HARDWARE - Identical automatic data processing equipment that can be controlled from a distant site.

TRUST REVOLVING FUND - A DOD fund created by adding a 5 percent surcharge to commissary goods sold to patrons. This fund is used to finance unique commissary store expenses such as equipment maintenance and repair, telephone charges, certain consumable supplies such as carts, bags and other services. Additionally, this fund finances procurement of new equipment and construction of new or expanded facilities.

VENDOR STOCKING - An authorized list of commissary items that are stocked on the shelves by the vendors or their representatives.

"WEE SERV" - A supplemental commissary service provided by AFCOMS in a seperate building attached to the regular commissary with one to three cash registers and their own entrances/exits which duplicates an assortment of 700 - 1200 basic items, carried in the commissary.

GLOSSARY

ABBREVIATIONS

AAFES	-	Army Air Force Exchange Service
A&E	-	Architectural and Engineering
ACAPS	-	Automated Commissary and Accounting Procurement System
ACAS	-	Army Commissary Automation System
ACOS	-	Automated Commissary Operations Systems
ACS	-	Automated Commissary System
ADCOM	-	Advanced Distribution Communications
AFCOMS	-	Air Force Commissary Service
AIS	-	Automated Information System
ALA	-	American Logistics Association
ASAC	-	Automated Systems For Army Commissaries
ATS	-	Application Transfer Study
BCE	-	Base Civil Engineer
CAIRS	-	Commissary Automated Information Requirement Study
CAMIS	-	Commissary Automated Management Information System
CAMNET	-	Commissary Automated Management Network
CDC	-	Central Distribution Center
CFCI	-	Contractor Furnished, Contractor Installed
CMIS	-	Commissary Management Information System
C of E	-	Corps of Engineers
COINS	-	Commissary Overseas Inventory Control Navy System
COMNAVSUPSYSCOM	-	Commander Naval Supply Systems Command
CRT	-	Cathrode Ray Tube

CTRF	-	Commissary Trust Revolving Fund
DA DCSLOG	-	Department of the Army, Deputy Chief of Staff, Logistics
DASRC	-	Department of the Army Subistence Review Committee
DCS\I&L	-	Deputy Chief of Staff for Installations and and Logistics
DDMP	-	Defense Depot Mechanicsburg, Pa.
DDN	-	Defense Data Network
DDTC	-	Defense Depot Tracy, Calif.
DE	-	District Engineer
DECS	-	Defense Commissary System
DEH	-	Director, Engineering and Housing
DICOMSS	-	Direct Commissary Support System
DLA	-	Defense Logistics Agency
DODREB	-	Department of Defense Resale Executive Board
DOSS	-	District Oriented Store Systems
DPSC	-	Defense Personnel Support Center
DSD	-	Direct Store Delivery
DSO	-	Defense Subsistence Office
DSSF-B	-	Defense Subsistence Storage Facility; Bremenhaven, Germany
DSSF-G	-	Defense Subsistence Storage Facility; Germersheim, Germany
DSSF-K	-	Defense Subsistence Storage Facility; Kaiserslautern, Germany
DVD	-	Direct Vendor Delivery
EDI	-	Electronic Data Interchange
EFT	-	Electronic Funds Transfer

EPOS	-	Electronic Point of Sale
FA&O	-	Finance and Accounting Office
FF&V	-	Fresh Fruits and Vegetables
FIFO	-	First In - First Out
FTE	-	Full Time Equivalent
HASC	-	House Armed Services Committee
HQMC	-	Headquarters Marine Corps
IAP	-	Information Architecture Plan
IAV	-	Inventory Adjustment Voucher
ICS	-	Interactive Checkout Svstem
ISSA	-	Intra-Service Support Agreement
JOA	-	Journal of Adjustments
JOR	-	Journal of Receipts
LTL	-	Less-Than-Truckload
MACOM	-	Major Command - Army
MAJCOM	-	Major Command - Air Force
MAMI	-	Military Audits of Marketing Information
MCIP	-	Minor Construction Improvements Program
MHE	-	Material Handling Equipment
MILSTRIP	-	Military Standard Requisitioning and Issue Procedures
MOU	-	Memorandum of Understanding
MRC/CMP	-	Meat Room Controller/Central Meat Pricing
MRO	-	Material Release Order
MSL	-	Master Stock List
NAF	-	Non-Appropriated Funded
NAVFACENGCOM	-	Naval Facilities Engineering Command

NAVRESSO	-	Navy Resale & Services Support Office
NCR	-	National Cash Register
NIS	-	Not In Stock
NISH	-	National Institute for the Severely Handicapped
NSN	-	National Stock Number
O&M	-	Operations and Maintenance Funds
OCE	-	Office of the Chief of Engineers
OST	-	Order Ship Time
P2P	-	Processor to Processor
PDA	-	Procurement Defense Agencies
PDED	-	Portable Data Entry Device
PIP	-	Permanent Improvement Projects
PLU	-	Price Look Up
POM	-	Program Objective Memorandum
PSF	-	Public Sector Financing
PVA	-	Price Variance Account
PWO	-	Public Works Office
RBS	-	Remote Batch Systems
RFP	-	Request for Proposal
RPIE	-	Real Property Installed Equipment
RSL	-	Regional Stock List
SAMI	-	Selling Areas Marketing Information
SAVES	-	Standard Automated Voucher Examination Systems
SCS	-	Service Center System
SPC	-	Sell Price Change
SPCED	-	Selling Price Change Effective Date
SSL	-	Store Stock List

STANFINS	-	Standard Army Financial System
TRACS	-	Total Reporting Accounting and Communications Systems
TRF	-	Trust Revolving Fund
TSA	-	Troop Support Agency
TSAMIS	-	Troop Support Agency Management Information System
UCS	-	Uniform Communication Standards
UPC	-	Universal Product Code
VPR	-	Voluntary Price Reduction

Appendix G

BIBLIOGRAPHY

SELECTED BIBLIOGRAPHY

Progressive Grocer Research Department, "56th Annual Report of the Grocery Industry, 1989," Progressive Grocer, April 1989.

Food Marketing Institute (FMI), "FMI Speaks: Facts of Life for Supermarket Industry," Supermarket News, May 1989.

U.S. Department of Defense, American Forces Information Service, Defense 88, Almanac, U.S. Government Printing Office, 1988.

U.S. Department of Defense, Your Defense Budget, The FY 1990/FY 1991 Biennial Budget, U.S. Government Printing Office, 1989.

The American Logistics Association, A Study Among Active Duty Military Personnel Concerning Attitudes Toward Commissaries and Exchanges, Counsel House Research, a division of The Frederic C. Decker Company, Inc., Brookfield Center, Connecticut, 1983.

U.S. Department of Defense, U.S. Army Community and Family Support Center (CFSC), Annual Survey of Army Families, A Report on Army Spouses and Families in 1987, Research Triangle Institute, 1988.

U.S. Department of Defense, Washington Headquarters Services, Directorate for Information, Operations and Reports (DIOR), Selected Manpower Stastics, Fiscal Year 1988, MO1.

U.S. Department of Defense, Washington Headquarters Services, Directorate for Information, Operations and Reports (DIOR), Worldwide Manpower Distribution by Geographical Area, Quarter Ending March 31, 1989, MO5.

U.S. Department of Defense, Assistant Secretary of Defense) Force Management and Personnel), DODD 1330.17-R, Armed Services Commissary Regulations (ASCR), April 1987 (latest change #2, February 15, 1989).

U.S. Department of Defense, Assistant Secretary of Defense) Force Management and Personnel), letter dated 30 Jan 89 to Senator Sam Nunn and Representative Les Aspin on the classification of remote and isolated installations.

U.S. House of Representatives, Representative Marvin Leath, letter dated 11 Apr 89 to Acting Assistant Secretary of Defense (Force Management and Personnel) on the classification of remote and isolated installations.

Arthur Young Co., A Distribution Study for European Commissaries, DLA Contract Number 140-85-C-0027, June 1986.

U.S. Air Force, Air Force Commissary Service (AFCOMS), Directorate of Communications - Computer Systems Communications, Computer Systems Plan - Part I, 1 Oct 1988.

U.S. Air Force, Air Force Commissary Service (AFCOMS), Information Requirements Study, Contract Number F11628-82-D-OA, Tractor Applied Sciences Inc., Austin, TX, 13 Jun 1988.

U.S. Air Force, Air Force Commissary Service (AFCOMS), AFCOMS Training Material 145-20, AFCOMS "How To" for ACOS Management Reports, 13 Apr 1989.

U.S. Air Force, Air Force Commissary Service (AFCOMS), Commissary Automated Management Network (CAMNET) Configuration Management Plan, 1 Jul 1988.

U.S. Air Force, Air Force Commissary Service (AFCOMS), Directorate of Communications - Computer Systems, Automated Commissary Operations System (ACOS), Executive Summary, 28 Jan 1986.

U.S. Air Force, Air Force Commissary Service (AFCOMS), Analysis of the Automated Commissary Operations System, Contract Number DAAL 03-86-D-0001, Bytronic Technologies Corp., Lancaster, OH, 16 Feb 1987.

U.S. Air Force, Air Force Commissary Service (AFCOMS), Application Architecture Annex, Contract Number F 11628-82-D-0001, Tracor Applied Sciences Inc., Austin, TX, 27 Jun 1988.

U.S. Air Force, AF Reg 700-4, Information Systems Program Management and Acquisition, 15 Mar 1985.

Department of Defense, DODD 5000-11, Data Elements and Data Codes Standardization Program, 7 Dec 1964.

Department of Defense, DODD 4120.3, Defense Standardization and Specification Program, 10 Feb 1979.

Department of Defense, DODD 7950.1, Automated Data Processing Resources Management, 29 Sep 1980.

Department of Defense, DODD 7920.1, Life Cycle Management of Automated Information Systems (AIS), 20 Jun 1988.

Department of Defense, DOD Regulation 1330.17R, Armed Services Commissary Regulation (ASCR), April 1987.

U.S. Navy, Navy Resale and Services Support Office (NAVRESSO), Automated Retail Merchandising Systems (ARMS)/Automated Commissary System (ACS) Merge Project, 19 Aug 85, with Project Mission Element Need Statement (MENS) and Project System Decision Paper II (SDP II).

U.S. Navy, Naval Supply Systems Command, Deputy Commander for Inventory and Information Systems Development (SUP4), FY89 Inventory and Information Management Systems Development Strategic Plan, Navy Commissaries.

U.S. Navy, Navy Resale and Services Support Office (NAVRESSO), Application Transfer Study, in conjunction with Arthur Young Co., 1988.

U.S. Navy, Navy Resale and Services Support Office (NAVRESSO), Strategic Information System Plan FY88-90, in conjunction with Arthur Young Co., July 1988.

Arthur D. Little Inc., Managing the Large Food Store of the Future, a study produced for the Coca-Cola Retailing Research Council, May 1984.

U.S. Navy, Navy Resale and Services Support Office (NAVRESSO), System Specifications Vol I and Vol II, NAVRESSO Invoice Payment System, Feb 1986.

U.S. Navy, Navy Resale and Services Support Office (NAVRESSO), Functional Specifications (Draft) Commissary Overseas Inventory Control Navy System (COINS), undated.

U.S. Navy, Navy Resale and Services Support Office (NAVRESSO), Systems Specifications, Automated Commissary Accounting and Procurement System Direct Store Delivery.

U.S. Navy, Navy Resale and Services Support Office (NAVRESSO), Instruction 4065.4B, Frequent Delivery System, 14 Apr 1988.

U.S. Navy, Navy Resale and Services Support Office (NAVRESSO), Check Robot, Contract Number N00250-89-C 2006, Check Robot, Inc., Dearfield Beach, FL, 3 Jan 1989.

U.S. Marine Corps, Commissary Management Information System (CMIS) Project Management and Technical Data Plans, Contract Number M00027-86-C-0096, Informatics General Corp., Columbus, OH, Apr 1989.

U.S. Marine Corps, Marine Corps Commissary Stores Management Manual, MCO-P4065-1, 22 Sep 1987.

U.S. Army, Army Regulation 25-1, The Army Information Resources Management Program, 18 Dec 1988.

U.S. Army, Troop Support Agency (TSA), Information Architecture Planning Study, Contract Number DAHC 44-85-R-0039, Technology Management Corp., Alexander, VA, 27 Mar 1986.

U.S. Army, Troop Support Agency (TSA), TSA Software Catalog, 21 Feb 1989.

U.S. Army, Troop Support Agency (TSA), Information Systems Planning Study, Contract Number DAH-44-85-C-0005, Informatics General Corp., Rockville, MD, 17 Jul 1985.

U.S. Army, Troop Support Agency (TSA), FY89 Information management plan input for HQDA Information Management Master Plan (IMMP), undated.

U.S. Army, Troop Support Agency (TSA), Meat Room Control System (MRC) User Manual, 1 Jun 1988.

U.S. Army, Troop Support Agency (TSA), OCONUS Central Distribution Center DADCSLOG Briefing, 14 Jul 1989.

U.S. Army, Troop Support Agency (TSA), Standard Automated Voucher Examination System (SAVES) Operations Procedures, Oct 1988.

U.S. Army, Troop Support Agency (TSA), Directorate of Operations, Scanning User's Manual, Feb 1989.

U.S. Army, Troop Support Agency (TSA), Information paper (LOTA-CO-OP), subject: Frequent Delivery, 20 Apr 1989.

U.S. Army, Troop Support Agency (TSA), District Oriented Store System, Functional Users Manual, Vol I and II, 10 Mar 1988 (revised).

U.S. Army, Troop Support Agency (TSA), European Commissary Region (EURCOR), Automated System for Army Commissaries/District Oriented Store System (ASAC/DOSS) Automation Economic Analysis (AEA), Dec 1985.

U.S. Army, Troop Support Agency (TSA), Individual System Automation Plans, undated.

U.S. Army, Troop Support Agency (TSA), Long Range Business Plan of the U.S. Army Troop Support Agency 1987 through 2000, Dec 1987.

U.S. Army, Troop Support Agency (TSA), Commanding General (28 Apr 89) Subject: Action Plan - Agency Commitments Toward Implementation of the Information Architecture

U.S. Army, Troop Support Agency (TSA), TSA Reg 10-1, Mission Organization and Functions of the U.S. Army Troop Support Agency, 1 Oct 88

U. S. Congress. House of Representatives. Review of the Military Exchanges and Commissaries and Related Activities. Hearings Before a Subcommittee of the Committee on Appropriations, House of Representatives. 91st Congress, 2nd Session, HASC #91081, 1970.

U. S. Congress. House of Representatives. Review of the Military Exchanges and Commissaries and Related Activities. Report by the Special Subcommittee on Exchanges and Commissaries of the Committee on Armed Services, House of Representatives. 91st Congress, 2nd Congress, 2nd Session, HASC #91-77. 22 December 1970.

U. S. Congress. House of Representatives. Department of Defense Appropriations for 1976, part 8. Hearings before a Subcommittee of the Committee on Appropriations, House of Representatives. Washington: Government Printing Office, 1976.
NCR Corporation, NCR Extended TRACS System, Mil-Del 2. Jun 1986, NCR Corporation, Dayton, Ohio, Jun 1986

BASS Inc., BASS Exchange (BX2126) Users Manual Version 2.62, BASS, Inc., Dayton, Ohio, March 1988
Wechsler, J.11. "Electronic Funds Transfer", An Alternative Time Has Come", Interservice - Winter (1988) 40 - 42
Von Simson, Charles, "Assessing the Case of Information Technology (Inside the Industry)", Information Week, N214, P31,2), 3 Apr 1989

Goldstein, Michael, Hagel, Whr. "Systems discontinuity: A Roadblock to Strategic Change" Datamation V34, N20, P34(6), 15 Oct 1988

Grudman, Lawrence K., A Strategic Plan for the 1990's. (Training) Computerworld V22, N52, P89(1), 26 Dec 1988

Kobielus, James, "Information Technology Saves the World -- or does it?" Network World, V5.N42 P37(1), 17 Oct 1988

Kirchner, Jake, "Information Systems Act as a Lifeline (Interview LTG Bruce Reed Harris, DA, DISC4). Government Computer News V7, N16, P10(3), 1 Aug 1988

Taylor, James R., Katambwe, Jo Mulamba. "Are New Technologies Really Reshaping Our Organization?" Computer Communications V11, N5 P245(8), Oct 1988

Lederer, Albert L., Sethi, Viva. "The Implementation of Strategic Information Planning Methodologies, (Technical)."
MIS Quarterly, V12, N3 P444(16), Sep 1988

Nevels, Paul, "Avoiding Tunnel Vision: Don't Get Mired In Statestical - Imperical - Digital Thinking. (EDP Management) Information Week, N224 P56(1), 12 Jun 1988

Risler, Keith E., "Integrating Mainframes and Micros", Canadian Data Systems V21 N4 P73(2) April 1989

Bass, Brad, "In the Midst of a Revolution Ludwig Guides Air Force C4: "An Interview with Mag General Robert H. Ludwig, USAF/SC" Government Computer News, V8, N4, P76(3) 20 Feb 1989
Houser, Walter P., "Better Procurements May Come in Small Packages". Government Computer News, V7, N22 P95(1), 24 Oct 1988

Munro, Neil, "Six Years of IRM Innovation Cap Navy Career". [Interview with Rear Admiral Harry S. Quast, Navy Data Automation Command] V7, N21 P10(2), Government Computer News, 10 Oct 1988

Kerr, Susan, IS Trims Down, Datamation, V34 N19 P46(4), 1 Oc 1988

Ball, Michael, EDI Takes Root, Computerworld V22 N36A P23(2) 7 Sep 1988

Ady, H.P., III, IRM Policies Should Boost Electronic Record Keeping Government Computer News, V7 N24 P81(1), 21 Nov 1988
Progressive Grocer, April 1989, Part II: 56th Annual Report of the Grocery Industry - 1989.

Value Line; May 26, 1989

Gilliam, Margaret. "Thoughts on Retailing: Changes Coming in the 1990s". Reported in Stores. "Superstore Retailing" by Jacquelyn Bivins, July 1989.

Ellis, Joseph. Reported in "Superstore Retailing", by Jacquelyn Bivins, Stores, July 1989.

Farmer, Carol. Reported in "Superstore Retailing", by Jacquelyn Bivins, Stores, July 1989.

Diffine, D.P., Ph.D. "Always...A Winner: Check It Out - That's The Wal-Mart Way". Belden Center for Private Enterprise Education, Harding University, Searcy, Ark. 1989

Glass, David. Reported in "Superstore Retailing", by Jacquely Bivins. Stores, July, 1989.

Management Horizons. "New Store Focus, American Fare." Dublin, Ohio Issue 1, July 1989.

Fields, Bill. Reported in "SuperCenters: Wal-Mart's Future?" by Jay L. Johnson Discount Merchandising magazine, May, 1988.

Annual Reports of the Secretary of War. Years utilized: 1815, 1818, 1834, 1874.

Armed Services Commissary Store Regulation, 1 Aug 1949.

Army and Air Force Exchange Service (AAFES). History of the Army and Air Force Exchange Service. nd.

Barringer, John W. Legislative History of the Subsistence

Department of the Army from June 16, 1775 to August 15, 1876. Washington: Government Printing Office, 1877.

Boyd, Capt. George E. What is the Value of the Commissary Privelege? A Case Study at Wright-Patterson Air Force Base. Alexandria, Virginia: Defense Technical Information Center, Defense Logistics Agency 1977.

Carp, E. Wayne. To Starve the Army at Pleasure: Continental Army Administration and American Political Culture. Chapel Hill: University of North Carolina Press, 1984.

Cassidy, Elliott. The Development of Meat, Dairy, Poultry, and Fish Products for the Army. Quartermaster Corps Historical Studies No 7. Washington: Historical Section, General Administrative Services Division, Office of the Quartermaster General, October 1944.

Comptroller General of the United States. Information on Commissary Store Operations, Department of Defense. Report to the Committee on Appropriations, House of Representatives. FPCD # 75-132, 19 March 1975.

Cushing, Samuel T. "Subsistence Department: Splendid Record of the Personnel ofthe Corps." Army and Navy Register, 7 Sep 1985.

Dickson, Paul. Chow: A Cook's Tour of Military Food. New York: New American Library.

Dyer, Col Johnnie R., et al. Draft of Staff Report on Subsistence Supply System of the Department of Defense. Washington: Munitions Board, Office of Distribution Methods, 15 Nov 1950.

Grubb, C. L. Historical Brief: The Evolution of Military Commissaries. AFCOMS Office of History, 1980.

Hancock, Jim. "Army Commissary System: A Historical Perception." Troop Support Digest, Summer 1984.

Momyer, General Willima. Working Papers, Investigative Surveys of Commissaries and Open Messes, February 1970.

Risch, Erna. Quartermaster Support of the Army: A History of the Corps, 1775-1939. Washington: Quartermaster His torian's Office, Office of the Quartermaster General, 1962.

The Third Quadrennial Review of Military Compensation: Staff Studies and Selected Supporting Papers. Vol IV: Other Benefits. Washington: Office of the Secretary of Defense, Dec 1976.

Weigley, Russell F. History of the United States Army. New York: Macmillan Publishing Co., Inc., 1967.

Appendix H

SITES VISITED

SITES VISITED

26 April	-	Ft Myers Commissary
1 May	-	Giant Store, Bailey's Crossroads, Va.
2 May	-	Ft Belvoir Commissary, Va.
4 May	-	Andrews Commissary
		Annapolis Commissary
8 May	-	Navy Resale & Services Support Office (NAVRESSO) Command Brief
9 May	-	Twin County Grocers, Edison, NJ Distribution for Foodtown Supermarkets
	-	West Point Commissary, NY
10 May	-	Defense Personnel Support Center (DPSC) Command Brief
11 May	-	Defense Depot Mechanicsburg, PA (DDMP)
		NAVRESSO Field Support Office (FSO) Mechanicsburg
16 May	-	Army & Air Force Exchange Service (AAFES) Command Brief
17 May	-	Troop Support Agency (TSA) Midwestern Region
18 May	-	Air Force Commissary System (AFCOMS)- South Central Region
		Lackland & Brooks Commissaries
18-19 May	-	AFCOMS Command Brief
24 May	-	Marine Corps Command Brief
30 May	-	TSA Command Brief
31 May	-	TSA - Southeast Region
5 June	-	AAFES - Dan Daniels Distribution Center Newport News, Va.
6 June	-	Langley Commissary
		Military Distributors of Virginia

7 June	-	Little Creek and Norfolk Commissaries
		NAVRESSOFSO Norfolk Brief
8 June	-	(MCAS) Cherry Point Commissary, N.C.
9 June	-	MC East Coast Complex, Distribution Center Camp LeJeune, NC
28-29 June	-	AFCOMS North Central Region Brief Omaha, Nebraska
17 July	-	Defense Subsistence Region Europe, Zweibreucken, Germany
18 July	-	TSA Europe Region Brief, Zweibreucken
		AFCOMS Europe Region Brief, Ramstein
		Ramstein Commissary
19 July	-	Kaiserslautern Cold Storage
		Germersheim Depot
20 July	-	AAFES Europe Distribution Facility, Giessen District
		Giessen, Bad Hersfeld, and Fulda Commissaries
		Heidelberg District and Heidelberg Commissary
		Mannheim-Spinelli Distribution Center
		Mannheim Commissary
21 July	-	Wildflecken (plus annex), Bad Kissingen,
		Schweinfurt, and Aschaffenburg Commissaries
		Robinson Barracks, Patch Barracks, and Hanau Commissaries
		Director, Stuggart District
22 July	-	Bitburg, Spangdahlem, Trier, Rhein Main, Camp King and Frankfurt Commissaries
		Director, Frankfurt District
24 July	-	Hanau Army Commissary

25 July	-	Navy West Ruislip combined Exchange/Commissary
		Navy ResaleAct Dunstable and Distribution Center
		Cromwell, Truemper, Levy, Parkee and Woodsmall Inc. - Architectural Firm, Little Rock, Arkansas
26 July	-	Lakenheath HQ Complex
		Lakenheath, Alconbury, and Bentwaters Commissaries
		Defense Subsistance Office (DSO) Felixstowe
31 July	-	Ft Sheridan Commissary, IL
9 Aug	-	Southeastern Bonded Warehouse Inc., Atlanta, Ga.
		Proctor and Gamble Distribution Center
22-24 Aug	-	Super Valu Headquarters, Minneapolis, Mn.
30 Aug	-	Bonus Foods, Dumphries, Va.
		RichFood, Richmond, Va.

Appendix I

STUDY CONTRIBUTORS

U. S. ARMY

HEADQUARTERS TROOP SUPPORT AGENCY (TSA), FORT LEE, VA

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Mr. Charles E. Fulmore	Deputy to the Commander
COL Bill G. Belcher	Chief of Staff
Mr. Gary Lutz	Director, Resource Management
Ms. Ann Andrews	Chief Accounting and Finance Division
Mr. Winfred L. Hasty, III	Chief, Civilian Personnel Staff Office
Mr. Faron Woodard	Facility Construction Officer
Mr. Hugh M. Hodges, Jr.	Director of Commissary Operations
COL Stephen L. Weisel	Director of Information Systems
COL Cesar R. E. Morel	Director of Engineering and Material
Mr. Crosby H. Johnson	Chief, Acquisition Management Office
Mr. James Austin	Deputy Director, Information Systems
Ms. Dee Klepper	Chief, CMD OPS, Plans and Support Division
Ms. Mary Atwater	Management Analyst, CPED
Ms. Rosie Parkes	Chief, Commissary System Division
Ms. Nadine Lewis	Commissary Management Specialist, Operations Division

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Mr. Cecil Saunders	Director, SECOR
Mr. Chet Boutelle	Chief, Operations Division

Mr. C. Favale-Poggi	Chief, Resource Management
Ms. P. Christopher	Chief, Contracting Division
Fort Lee, VA	
Ms. Donn Devier	Commissary Officer
Fort Belvoir, VA	
Mr. Bob Waterhouse	Commissary Manager
Fort Myer, VA	
Mr. Jerry Clark	Commissary Manager
Fort Sheridian, IL	
Mr. John Gladish	Commissary Manager
TSA, Midwest Commissary Region (MWCOR), Fort Sam Houston, TX	
Mr. Ron Renaud	Director
Mr. Delmar Craig	Deputy Director
Mr. Billy Johnson	Chief, Operations Division
Mr. Larry Coker	Chief, Resource Management Division
Mr. John Loughlin	Chief, Information Systems Division
Mr. Paul Rubio	Chief, Logistics Management Division
Ms. Marietta Pritchard	Chief, Contracting Division
Mr. Jerry Brazil	Chief, Operations Branch
Mr. Robert Richardson	Chief, Merchandise Management Branch
Ms. Chris Windsor	Chief, Budget Branch
Ms. Jean Doonan	Chief, Accounting Branch
Mr. Robert Martinez	Chief, Management Branch
Mr. John Trevino	Chief, Personnel and Training Branch

Mr. Elvin Gant	Equal Opportunity Officer
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Mr. Michael Orr	Commissary Officer
COL A. S. Brant	Director of Logistics
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Mr. Edward Wenglowski	Chief, Commissary Operations Division
Mr. Eugene Riley	Accounting Chief, Resource Management Division
Giessen, FRG	
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Frankfurt, FRG	
Mr. M. Brimhall	Manager, Frankfurt District
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Mr. H. Wainwright	Deputy Commissary Officer
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Mr. Fritz Lohmann	Commissary Officer
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Mr. Robert Darden	Commissary Officer, Robinson Barracks
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COL Robert E. Finkel	Chief of Public Affairs
MR. Earl H. Norder	Deputy Director of Engineering
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Mr. V. Stevefair	GM-EDA

Mr. Richard L. Brown	Manager (And all staff members who visited with us on 20 Jul 89)

U. S. NAVY

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RADM Rodney Squibb, SC, USN	Commanding Officer
Mr. Edward Yerman	Deputy Commander, Commissary Operations Group
Mr. Tony DeGaetano	Assistant Deputy Commander (Acting), Commissary Operations Group
CAPT Gary Monroe, CEC, USN	Deputy Commander, Facilities Division
CDR John Flanagan, SC, USN	Deputy Commander, Exchange Operations Group
CDR Robert Brown, SC, USN	Deputy Commander, Office of Command Support
Mr. Ed Cart	Assistant Deputy Commander, Project Management Office
Mr. Robert Byrd	Deputy Commander, Distribution Management Division
Mr. Tom Nardone	Supervisor, Manpower Resources, Commissary Operations Group
Mr. Paul Vitola	Comptroller, Appropriated Fund Division
Mr. Stanley Kurin	Supervisor, CSTRF Budget Section

NAVRESSOFSO Norfolk, VA

CAPT Ross Hendricks, SC, USN	Commanding Officer
Mr. Lyle Thomas	Commissary Division Director
Mr. Claude Tucker	Operations/Merchandising Manager

Ms. Eleanora McClenney	Inventory Control Specialist
Ms. Jerry Merritt	Supervisor, Accounting Branch
Ms. Kathy Merritt	Supervisor, Data Processing Branch
Ms. Martha Lee	Supervisor, Administrative Branch
Mr. Frank Wagenbrenner	Commissary Distribution Manager
NAVRESSOFSO Mechanicsburg, PA	
CAPT Ronald Campisi, SC, USN	Commanding Officer
Mr. Doug Cook	Commissary Division Director
NAVRESSOFSO Jacksonville, FL	
CAPT John Mitchell, SC, USN	Commanding Officer
NAVRESSOFSO Oakland, CA	
CAPT James Kopp, SC, USN	Commanding Officer
NAVY RESALE ACTIVITIES	
Norfolk, VA	
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Little Creek, VA	
LCDR Jim Kobi, SC, USN	Officer in Charge
Mr. Sonny Tudor	Commissary Manager
Ms. Hazel Ennis	Assistant Commissary Manager
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LT Claude Coucoules, SC, USN	Officer in Charge
Mr. Dick Drake	Commissary Manager
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Mr. Dolan Brown	Systems Manager
Ms. Shirleen King	Financial Manager
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Mr. Robert Coogan	Warehousing Foreman
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Mr. Merwin Marshburn	Commissary Officer, Tarawa Terrace Commissary
Mr. Robert Patton	Commissary Officer Cherry Point Commissary
West Coast Commissary Complex, MCAS, El Toro, CA	
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U. S. AIR FORCE	
AIR FORCE COMMISSARY SERVICE (AFCOMS), KELLY AFB, TX	
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Mr. Geoffrey Morrison	Budget Analyst

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Mr. Thomas Ney	Cost Analyst
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LTC Stanley B. Polk	Director of Strategic Plans and Analysis
COL Ronald S. Leach	Director of Operations
Mr. James A. Doherty	Deputy Director Operations
Mr. Robert J. Sine, Jr.	Chief, Contracting Division
Mr. Bobbie R. Humphrey	Chief, Subsistence Division
Mr. Earl V. Ward	Chief, Policy and Procedures Branch
Mr. Melvin D. Palmer	Chief, Systems and Support Branch
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Ms. Emily R. Funari	Acting Chief, Program Management Division
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Mr. Arthur V. Wilson	Commissary Officer

Bentwaters RAF, UK

SMS Thomas Beard	Commissary Officer

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Mr. Gus Ditoma	Accounting and Finance for Subsistence, Comptroller
Mr. Robert McCloskey	Budget Officer, Comptroller

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LTC Felix Williams	Chief, Subsistence Division, Directorate of Distribution

Defense Subsistence Region Europe (DSRE), FRG

COL William Flanagan	Commander
LTC Jerry Bradley	Chief, Supply Operations Division
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MAJ Searless B. Hathaway	Chief, Defense Subsistence Storage Facility, Kaiserslautern, Germany

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Mr. Alan Nissalke	Director of Government Relations, Commissary Affairs, ALA
Ms. Carol Bok	Director of Government Relations, Exchange Affairs, ALA
Mr. Lloyd Johnson	Board of Directors, ALA C. Lloyd Johnson Co. Inc. Norfolk, VA
Mr. Fred Eddowes	Board of Directors, ALA SMS of Minneapolis, Inc. Minneapolis, MN

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1750 NER YORK AVENUE, NW
SUITE #340
WASHINGTON, DC 20006

Mr. Frank Hogan	President, AFMC
Mr. George R. Rowan, Jr.	Executive Vice President, AFMC

THE PROCTER & GAMBLE DISTRIBUTING CO
P. O. BOX 599
CINCINNATI, OH 45201

Mr. Earl L. Pool	Manager, Military Sales
Mr. Alton D. Trawick	Distribution Manager, Military Sales

SUPER VALU FOOD STORES, INC
P. O. BOX 990
MINNEAPOLIS, MN 55440

Mr. Mike Wright	President & Chief Executive Officer
Mr. John E. Morrissey	Senior Vice President & President, National Distribution Consultants, Inc. (A Super Valu subsidiary)
Mr. Archie Gamble	Director, Military Sales
Mr. John Seltzer	Director, Corporate Planning

THE DORNBUSH GROUP
P. O. BOX 44126
5180 PHILLIP LEE DRIVE, SW
ATLANTA, GA 30378

Mr. Robert E. Dornbush	President & Chief Executive Officer
Mr. Phillip Sumney	Operations Director Southeastern Bonded Warehouse, Inc. (a Dornbush Group Subsidiary)
Mr. David Turner	Southeastern Bonded Warehouses, Inc. (primary point of contact)

Mr. Lance Swedish	Southeastern Bonded Warehouses, Inc.
ANDERSON CONSULTING **ARTHUR ANDERSON & COMPANY** **1666 K STREET, NORTHWEST** **WASHINGTON, DC 20006**	
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Mr. William H. Neill	Consultant
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Ms. Anita Houser	DoD Marketing Representative-Bethesda (Primary point of contact)
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Ms. Shelly Enge	Field Advisor Area VII Nondurable Inventory Segment Rockville, MD
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Mr. Mike Pecora	Program Administrator, Inventory Services Industry Group, Wholesale Distribution Atlanta, GA

MILITARY DISTRIBUTORS OF VIRGINIA, INC.
P. O. BOX 12733
NORFOLK, VA 23502

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Mr. Wayne L. Duncan	Vice President, Operations Board of Directors, ALA
Mr. John Payne, Jr.	Vice President of Finance
Mr. Ken White	Assistant Comptroller
Mr. John E. O'Rourke	Director of Operations

TWIN COUNTY GROCERS
EDISON, NJ

Mr. Mike Papalco

Mr. Donald J. Karl

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Mr. Charles Post	Manager, Government Sales Sea-Land Service, Inc.

Thanks to all others unnamed who have also contributed to this study.

Appendix J

CENTRAL DISTRIBUTION CENTER/INFORMATION AND COST

THE DORNBUSH GROUP

5180 Phillip Lee Drive, S.W.
Atlanta, Georgia 30378
(404) 691-4031

August 17, 1989

Eldridge J. Vincent, Jr., LTC, USA
Deputy Staff Director
Jones Commission
1211 Fern Street, Room A-100
Arlington, VA 22202

Dear Col. Vincent:

Attached please find our "initial pass" at transportation and warehousing costs for distributing dry goods to DOD Commissaries for the southeastern U.S.

We are very comfortable with the transportation numbers, and believe the warehouse numbers are also very close----based on a general mix of grocery-type commodities.

If you need any further information on the southeast, please let us know. Otherwise, we shall be very interested in learning the results of your study, as they are available to the public.

We are working diligently on the bases in Germany, the Netherlands, Belgium and the U.K. We will be serving the first three countries out of facilities in Germany (4 locations), and the U.K. from the U.K. I hope we shall have this information for you next week.

Thank you for your interest.

Very Truly Yours,

Robert E. Dornbush
President and CEO
The Dornbush Group

JONES COMMISSION REVIEW
DATA FOR DOD COMMISSARIES-FY88
SEMI-PERISHABLE PRODUCTS (DRY GOODS)
SOUTHEASTERN UNITED STATES

I. TRANSPORTATION COSTS (DOMESTIC)

SERVICE	COMMISSARY STORE	ST/ CNTRY	ZIP	PER VAN	TOTAL PER MONTH
** SERVICE COMPONENT AF					
AF	MAXWELL	AL	36112	$350.00	$7,350.00
AF	GUNTER	AL	36114	$350.00	$3,150.00
AF	PATRICK	FL	32925	$718.50	$22,992.00
AF	TYNDALL	FL	32403	$427.50	$7,695.00
AF	HURLBURT FIELD	FL	32542	$481.50	$6,259.50
AF	HOMESTEAD	FL	33039	$1,020.00	$25,500.00
AF	ELGIN	FL	32542	$481.50	$14,445.00
AF	AVON PARK	FL	33825	$718.50	$718.50
AF	MACDILL	FL	33608	$673.50	$34,348.50
AF	MOODY	GA	31699	$436.00	$3,924.00
AF	ROBINS	GA	31098	$284.00	$4,544.00
AF	KEESLER AFB	MS	39534	$504.39	$14,627.31
AF	COLUMBUS AFB	MS	39701	$350.00	$2,800.00
AF	SHAW AFB	SC	29152	$350.00	$4,900.00
AF	MYRTLE BEACH AFB	SC	29577	$350.00	$3,150.00
AF	CHARLESTON AFB	SC	29404	$455.37	$11,384.25
AF	ARNOLD AFB	TN	37389	$367.65	$1,102.95
** Subtotal **					$168,891.01
** SERVICE COMPONENT AR					
AR	HOWARD	CZ +		$367.65	$2,205.90
AR	ESPINAR	CZ +		$367.65	$1,102.95
AR	COROZAL	CZ +		$367.65	$7,353.00
AR	REDSTONE	AL	35898	$350.00	$700.00
AR	RUCKER	AL	36362	$350.00	$700.00
AR	MCCLELLAN	AL	36205	$350.00	$5,250.00
AR	STEWART	GA	31314	$464.00	$6,496.00
AR	HUNTER	GA	31409	$464.00	$4,640.00
AR	GORDON	GA	30905	$396.00	$8,712.00
AR	GILLEM	GA	30050	$212.00	$4,452.00
AR	MCPHERSON	GA	30330	$212.00	$848.00
AR	FORT BENNING	GA	31905	$348.00	$12,528.00
AR	MERRILL	GA	30533	$212.00	$212.00
AR	BUCHANAN	PR +		$367.65	$7,720.65
AR	JACKSON	SC	29207	$350.00	$8,750.00
** Subtotal **					$71,670.50
** SERVICE COMPONENT MA					
MA	MCLB ALBANY	GA	31704	$400.00	$2,000.00
MA	PARRIS ISLAND	SC	29905	$350.00	$2,100.00
** Subtotal **					$4,100.00
** SERVICE COMPONENT NA					
NA	BERMUDA	BM +		$367.65	$1,102.95

JONES COMMISSION REVIEW
DATA FOR DOD COMMISSARIES-FY88
SEMI-PERISHABLE PRODUCTS (DRY GOODS)
SOUTHEASTERN UNITED STATES

I. TRANSPORTATION COSTS (DOMESTIC)

SERVICE	COMMISSARY STORE	ST/ CNTRY	ZIP	PER VAN	TOTAL PER MONTH
NA	GUANTANAMO BAY	CU ++		$459.00	$2,295.00
NA	MAYPORT	FL	32228	$459.00	$4,590.00
NA	KEY WEST	FL	33040	$1,201.00	$4,804.00
NA	JACKSONVILLE	FL	32212	$459.00	$11,475.00
NA	ORLANDO	FL	32862	$651.00	$11,718.00
NA	CECIL FIELD	FL	32215	$459.00	$2,295.00
NA	KINGS BAY	GA	30600	$400.00	$1,200.00
NA	ATHENS	GA	30601	$284.00	$568.00
NA	ROSSEVELT RDS	PR +		$367.65	$2,573.55
NA	NWS CHARLESTON	SC	29405	$367.65	$3,308.85
NA	CHARLESTON	SC	29408	$367.65	$2,573.55
NA	PENSACOLA	FL	32508	$481.50	$10,111.50
NA	WHITING FIELD	FL	32570	$435.50	$1,306.50
NA	NEW ORLEANS	LA	70140	$607.59	$4,860.72
NA	GULFPORT	MS	39301	$519.87	$2,079.48
NA	MERIDIAN	MS	39301	$375.39	$1,126.17
NA	MEMPHIS	TN	38054	$470.85	$7,533.60
** Subtotal **					$75,521.87
*** Total ***					$320,183.38

+ Port of Charleston, SC
++ Port of Jacksonville, FL

II. WAREHOUSING COST:

In addition to the above transportation costs need to be added the following warehousing costs:

Based on the attached estimation of the receiving and order filling characteristics, product handling and storage requirements, we believe a first estimate of throughput warehouse handling costs would be approximately $ .16 per hundredweight.

Costs for storage space would be in addition to the above. In the current Atlanta market the fully allocated costs for warehousing space is approximately $ 32,000 - $ 33,000 per month per 100,000 gross square feet.

Based on pallet patterns of 45 - 50 cases per pallet, 100,000 SqFt would allow for between 350,000 to 385,000 cases of base inventory in stock to support order filling of the 1,131,938 cases per month. Based on usage of 100,000 square feet, the additional cost per case for storage would be ($ 33,000 divided by 1,131,938) or about $.0292 per case.

JONES COMMISSION REVIEW
DATA FOR DOD COMMISSARIES-FY88
SEMI-PERISHABLE PRODUCTS (DRY GOODS)
SOUTHEASTERN UNITED STATES

I. TRANSPORTATION COSTS (DOMESTIC)

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AR	MERRILL	GA	30533	$212.00	$212.00
AR	BUCHANAN	PR +		$367.65	$7,720.65
AR	JACKSON	SC	29207	$350.00	$8,750.00
** Subtotal **					$71,670.50
** SERVICE COMPONENT MA					
MA	MCLB ALBANY	GA	31704	$400.00	$2,000.00
MA	PARRIS ISLAND	SC	29905	$350.00	$2,100.00
** Subtotal **					$4,100.00
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JONES COMMISSION REVIEW
DATA FOR DOD COMMISSARIES-FY88
SEMI-PERISHABLE PRODUCTS (DRY GOODS)
SOUTHEASTERN UNITED STATES

I. TRANSPORTATION COSTS (DOMESTIC)

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NA	ORLANDO	FL	32862	$651.00	$11,718.00
NA	CECIL FIELD	FL	32215	$459.00	$2,295.00
NA	KINGS BAY	GA	30600	$400.00	$1,200.00
NA	ATHENS	GA	30601	$284.00	$568.00
NA	ROSSEVELT RDS	PR +		$367.65	$2,573.55
NA	NWS CHARLESTON	SC	29405	$367.65	$3,308.85
NA	CHARLESTON	SC	29408	$367.65	$2,573.55
NA	PENSACOLA	FL	32508	$481.50	$10,111.50
NA	WHITING FIELD	FL	32570	$435.50	$1,306.50
NA	NEW ORLEANS	LA	70140	$607.59	$4,860.72
NA	GULFPORT	MS	39301	$519.87	$2,079.48
NA	MERIDIAN	MS	39301	$375.39	$1,126.17
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** Subtotal **					$75,521.87
*** Total ***					$320,183.38

\+ Port of Charleston, SC
++ Port of Jacksonville, FL

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JONES COMMISSION REVIEW
DATA FOR DOD COMMISSARIES-FY88
SEMI-PERISHABLE PRODUCTS (DRY GOODS)
SOUTHEASTERN UNITED STATES

II. WAREHOUSING COST:

SERVICE	COMMISSARY STORE	ST/ CNTR	ZIP	CASES REC'D	WHSG COST	TRANSP. COST	TOTAL DISTR. COST	COST PER CASE WHSE HDLG & STGE	COST PER CASE TRANSP
** SERVICE COMPONENT AF									
AF	MAXWELL	AL	36112	34420	$6,512.26	$7,350.00	$13,862.26	0.1892	0.2135
AF	GUNTER	AL	36114	15514	$2,935.25	$3,150.00	$6,085.25	0.1892	0.2030
AF	PATRICK	FL	32925	52255	$9,886.65	$22,992.00	$32,878.65	0.1892	0.4399
AF	TYNDALL	FL	32403	30233	$5,720.08	$7,695.00	$13,415.08	0.1892	0.2545
AF	HURLBURT FIELD	FL	32542	18236	$3,450.25	$6,259.50	$9,709.75	0.1892	0.3432
AF	HOMESTEAD	FL	33039	40666	$7,694.01	$25,500.00	$33,194.01	0.1892	0.6270
AF	ELGIN	FL	32542	49446	$9,355.18	$14,445.00	$23,800.18	0.1892	0.2921
AF	AVON PARK	FL	33825	2017	$381.62	$718.50	$1,100.12	0.1892	0.3562
AF	MACDILL	FL	33608	83362	$15,772.09	$34,348.50	$50,120.59	0.1892	0.4120
AF	MOODY	GA	31699	15791	$2,987.66	$3,924.00	$6,911.66	0.1892	0.2484
AF	ROBINS	GA	31098	26503	$5,014.37	$4,544.00	$9,558.37	0.1892	0.1714
AF	KEESLER AFB	MS	39534	47451	$8,977.73	$14,627.31	$23,605.04	0.1892	0.3082
AF	COLUMBUS AFB	MS	39701	14057	$2,659.58	$2,800.00	$5,459.58	0.1892	0.1991
AF	SHAW AFB	SC	29152	22618	$4,279.33	$4,900.00	$9,179.33	0.1892	0.2166
AF	MYRTLE BEACH AFB	SC	29577	15610	$2,953.41	$3,150.00	$6,103.41	0.1892	0.2017
AF	CHARLESTON AFB	SC	29404	40242	$7,613.79	$11,384.25	$18,998.04	0.1892	0.2828
AF	ARNOLD AFB	TN	37389	5795	$1,096.41	$1,102.95	$2,199.36	0.1892	0.1903
**	Subtotal **			514216	$97,289.67	$168,891.01	$266,180.68	0.1892	0.3284
** SERVICE COMPONENT AR									
AR	HOWARD	CZ		10759	$2,035.60	$2,205.90	$4,241.50	0.1892	0.2050
AR	ESPINAR	CZ		5317	$1,005.98	$1,102.95	$2,108.93	0.1892	0.2074
AR	COROZAL	CZ		32594	$6,166.78	$7,353.00	$13,519.78	0.1892	0.2255
AR	REDSTONE	AL	35898	4085	$772.88	$700.00	$1,472.88	0.1892	0.1713
AR	RUCKER	AL	36362	3247	$614.33	$700.00	$1,314.33	0.1892	0.2155
AR	MCCLELLAN	AL	36205	25483	$4,821.38	$5,250.00	$10,071.38	0.1892	0.2060
AR	STEWART	GA	31314	24160	$4,571.07	$6,496.00	$11,067.07	0.1892	0.2688
AR	HUNTER	GA	31409	17514	$3,313.65	$4,640.00	$7,953.65	0.1892	0.2649
AR	GORDON	GA	30905	36223	$6,853.39	$8,712.00	$15,565.39	0.1892	0.2405
AR	GILLEM	GA	30050	34462	$6,520.21	$4,452.00	$10,972.21	0.1892	0.1291
AR	MCPHERSON	GA	30330	7330	$1,386.84	$848.00	$2,234.84	0.1892	0.1156
AR	FORT BENNING	GA	31905	58795	$11,124.01	$12,528.00	$23,652.01	0.1892	0.2130
AR	MERRILL	GA	30533	445	$84.19	$212.00	$296.19	0.1892	0.4764
AR	BUCHANAN	PR		34825	$6,588.89	$7,720.65	$14,309.54	0.1892	0.2216
AR	JACKSON	SC	29207	41739	$7,897.02	$8,750.00	$16,647.02	0.1892	0.2096
**	Subtotal **			336978	$63,756.22	$71,670.50	$135,426.72	0.1892	0.2126
** SERVICE COMPONENT MA									
MA	MCLB ALBANY	GA	31704	8216	$1,554.47	$2,000.00	$3,554.47	0.1892	0.2434
MA	PARRIS ISLAND	SC	29905	10894	$2,061.14	$2,100.00	$4,161.14	0.1892	0.1927
**	Subtotal **			19110	$3,615.61	$4,100.00	$7,715.61	0.1892	0.2145
** SERVICE COMPONENT NA									

JONES COMMISSION REVIEW
DATA FOR DOD COMMISSARIES-FY88
SEMI-PERISHABLE PRODUCTS (DRY GOODS)
SOUTHEASTERN UNITED STATES

II. WAREHOUSING COST:

SERVICE	COMMISSARY STORE	ST/ CNTR	ZIP	CASES REC'D	WHSG COST	+ TRANSP. COST	TOTAL DISTR. COST	COST PER CASE WHSE HDLG & STGE	COST PER CASE TRANSP
NA	BERMUDA	BM		6032	$1,141.25	$1,102.95	$2,244.20	0.1892	0.1828
NA	GUANTANAMO BAY	CU		8932	$1,689.93	$2,295.00	$3,984.93	0.1892	0.2569
NA	MAYPORT	FL	32228	16810	$3,180.45	$4,590.00	$7,770.45	0.1892	0.2730
NA	KEY WEST	FL	33040	6944	$1,313.80	$4,804.00	$6,117.80	0.1892	0.6918
NA	JACKSONVILLE	FL	32212	41620	$7,874.50	$11,475.00	$19,349.50	0.1892	0.2757
NA	ORLANDO	FL	32862	30219	$5,717.43	$11,718.00	$17,435.43	0.1892	0.3877
NA	CECIL FIELD	FL	32215	9209	$1,742.34	$2,295.00	$4,037.34	0.1892	0.2492
NA	KINGS BAY	GA	30600	5951	$1,125.93	$1,200.00	$2,325.93	0.1892	0.2016
NA	ATHENS	GA	30601	3586	$678.47	$568.00	$1,246.47	0.1892	0.1583
NA	ROSSEVELT RDS	PR		10238	$1,937.03	$2,573.55	$4,510.58	0.1892	0.2513
NA	NWS CHARLESTON	SC	29405	15912	$3,010.55	$3,308.85	$6,319.40	0.1892	0.2079
NA	CHARLESTON	SC	29408	12871	$2,435.19	$2,573.55	$5,008.74	0.1892	0.1999
NA	PENSACOLA	FL	32508	35506	$6,717.74	$10,111.50	$16,829.24	0.1892	0.2847
NA	WHITING FIELD	FL	32570	5533	$1,046.84	$1,306.50	$2,353.34	0.1892	0.2361
NA	NEW ORLEANS	LA	70140	13080	$2,474.74	$4,860.72	$7,335.46	0.1892	0.3716
NA	GULFPORT	MS	39301	7657	$1,448.70	$2,079.48	$3,528.18	0.1892	0.2715
NA	MERIDIAN	MS	39301	5663	$1,071.44	$1,126.17	$2,197.61	0.1892	0.1988
NA	MEMPHIS	TN	38054	25871	$4,894.79	$7,533.60	$12,428.39	0.1892	0.2911
**	Subtotal **			261634	$49,501.12	$75,521.87	$125,022.99	0.1892	0.2886
***	Total ***			1131938	$214,162.62	$320,183.38	$534,346.00	0.1892	0.2828

ACCT. NAME : JONES COMMISSION — PAGE 1
STORER # RED
DATE: 08/21/89
SKU'S ?

Avg. L.I. Per Pallet	1			CHECK COLUMN	CHECK COLUMN
INBOUND RECEIPT	TRUCK 04	RAIL 08		TRUCK	RAIL
# CASES PER TRLR/RAILCAR	1,539.0	0.0		1,539.0	0.0
# CASES PER PALLET/GRAB	54.0	0.0		54.0	0.0
WEIGHT PER CASE	21.0	0.0		21.0	0.0
# PALLETS PER TRLR/RAILCAR	28.5	0.0		28.5	0.0
WEIGHT PER TRLR/RAILCAR	32,319.0	0.0		32,319.0	0.0
WEIGHT PER PALLET/GRAB	1,134.0	0.0		1,134.0	0.0
# LINE ITEMS PER TRUCK/CAR	5.0	0.0		5.0	0.0
# CASES PER LINE ITEM	307.8	0.0		307.8	0.0
PERCENTAGE BY MODE----------}	100.00%	0.00%		100.0%	
ENTER PERCENTAGE BY TYPE				CASES	
HANDSTACKED PKGS }	0.0%	0.0%		HANDLED	
UNITIZED PALLETS }	25.0%	0.0%		AT ONCE	
ON SLIPSHEETS }	50.0%	0.0%		------	
USING CLAMP LIFT }	25.0%	0.0%		1	
	100.0%	0.0%			
ORDER FILLING	CODE 20			CHECK COLUMN	
# CASES PER ORDER	1539.0			1539.0	
# CASES PER LINE ITEM	30.8			30.8	
# CASES PER PALLET/GRAB	54.0			54.0	
WEIGHT PER ORDER	32319.0			32319.0	
WEIGHT PER CASE	21.0			21.0	
# LINE ITEMS PER ORDER	50.0			50.0	
# PALLETS/GRABS PER ORDER	28.5			28.5	
ORDER FILL-% CASES-CASEPICK	75.0%				
ORDER FILL-% CASES-PALLET UNIT	25.0%				
ORDER FILL-% CASES-CLAMPLIFT	0.0%			100.0%	
% CASES REQUIRING STENCILLING	0.0%				
OUTBOUND-% CASES-HANDSTACKED	0.0%			100.0%	
OUTBOUND-% CASES-PALLETIZED	100.0%				
STOCK BASE & MOVEMENT				CHECK COLUMN	AVERAGE PLTS/L.I.
BASE INVENTORY-PALLETS	6,868.0			6,868.0	
BASE INVENTORY-CASES	370,872			370,872	NA
MONTHLY THRUPUT-PALLETS	20,961.8			20,961.8	
MONTHLY THRUPUT-CASES	1,131,938			1,131,937	
		PERCENT			
STACKING HEIGHT-FLOOR	3	80.00%		1,831.5	FLR. POS.
STACKING HEIGHT-RACK	3	20.00%		1,374	RACK SLOT
SQUARE FOOTAGE REQ.-FLOOR	89,284	71,427			
SQUARE FOOTAGE REQ.-RACK	142,854	28,571		99,998	TOTAL SQ.
INVENTORY TURNS PER YEAR	36.63			36.6	
		PER WEEK			TRUCK
# ORDERS PER MONTH	735.50	169.73		735.50	RECEIPTS
# RECEIPTS PER MONTH	735.50	169.73		735.50	735.50

JONES COMMISSION REVIEW
DATA FOR DOD COMMISSARIES-FY88
SEMI-PERISHABLE PRODUCTS (DRY GOODS)
CENTRAL EUROPEAN REGION

SERVICE	COMMISSARY STORE	ST/ CNTR	ZIP	CASES REC'D	WHSG COST	TRANSP COST	TOTAL DISTR. COST	COST PER CASE WHSG	COST PER CASE TRANSP
** SERVICE COMPONENT AF									
AF	FLORENNES	BE	9000	1423	$410.38	$920.84	$1,331.22	0.2884	0.6471
AF	RAMSTEIN AB	WG	9012	42691	$12,311.58	$27,625.99	$39,937.57	0.2884	0.6471
AF	SOESTERBERG	NE	9011	7234	$2,086.20	$4,681.23	$6,767.43	0.2884	0.6471
AF	WOENSDRECHT	NE	9000	0	$0.00	$0.00	$0.00	NA	NA
AF	SPANGDAHLEM AB	WG	9123	1356	$391.05	$877.49	$1,268.54	0.2884	0.6471
AF	SEMBACH AB	WG	9130	10251	$2,956.27	$6,633.58	$9,589.85	0.2884	0.6471
AF	RHEIN-MAIN AB	WG	9057	25490	$7,351.02	$16,494.97	$23,845.99	0.2884	0.6471
AF	TRIER	WG	9021	447	$128.93	$143.01	$206.74	0.2884	0.6471
AF	LANDSTUHL POST	WG	9690	0	$0.00	$0.00	$0.00	NA	NA
AF	HESSISCH-OLDENDORF	WG	9669	2004	$577.93	$1,296.82	$1,874.75	0.2884	0.6471
AF	HOHN AB	WG	9109	18456	$5,322.49	$11,943.16	$17,265.65	0.2884	0.6471
AF	BITBURG AB	WG	9132	14092	$4,063.97	$9,119.15	$13,183.12	0.2884	0.6471
AF	VOGELWEH	WG	9012	25423	$7,331.70	$16,451.61	$23,783.31	0.2884	0.6471
AF	PRUEM	WG	9692	756	$218.02	$489.22	$707.24	0.2884	0.6471
**	Subtotal **			149397	$43,084.34	$96,677.07	$139,761.41	0.2884	0.6471
** SERVICE COMPONENT AR									
AR	CHIEVRES	BE	9088	12335	$3,557.27	$7,982.17	$11,539.44	0.2884	0.6471
AR	SCHINNEN	NE	9011	8145	$2,348.92	$5,270.75	$7,619.67	0.2884	0.6471
AR	SCHWABACH	WG	9200	1667	$480.74	$1,078.74	$1,559.48	0.2884	0.6471
AR	SCHWAEBISCH G	WG	9281	3797	$1,095.01	$2,457.10	$3,552.11	0.2884	0.6471
AR	SCHWAEBISCH H	WG	9025	1895	$546.50	$1,226.28	$1,772.78	0.2884	0.6471
AR	SCHWEINFURT	WG	9033	14160	$4,083.58	$9,163.15	$13,246.73	0.2884	0.6471
AR	SOEGEL	WG	9100	601	$173.32	$388.92	$562.24	0.2884	0.6471
AR	PATCH	WG	9131	11390	$3,284.74	$7,370.64	$10,655.38	0.2884	0.6471
AR	WERTHEIM	WG	9047	2538	$731.93	$1,642.38	$2,374.31	0.2884	0.6471
AR	WIESBADEN	WG	9057	11425	$3,294.84	$7,393.29	$10,688.13	0.2884	0.6471
AR	WILDFLECKEN	WG	9026	2704	$779.80	$1,749.80	$2,529.60	0.2884	0.6471
AR	PANZER	WG	9100	46	$13.27	$29.77	$43.04	0.2885	0.6471
AR	ERLANGEN	WG	9696	3346	$964.95	$2,165.25	$3,130.20	0.2884	0.6471
AR	DEXHEIM	WG	9100	1424	$410.66	$921.49	$1,332.15	0.2884	0.6471
AR	ZWEIBRUECKEN	WG	9052	9220	$2,658.94	$5,966.40	$8,625.34	0.2884	0.6471
AR	HELMSTEDT	WG	9100	244	$70.37	$157.90	$228.27	0.2884	0.6471
AR	BAD KRUEZNACH	WG	9252	5393	$1,555.28	$3,489.89	$5,045.17	0.2884	0.6471
AR	ROBINSON	WG	9154	16781	$4,839.44	$10,859.24	$15,698.68	0.2884	0.6471
AR	REGENSBURG	WG	9100	204	$58.83	$132.01	$190.84	0.2884	0.6471
AR	NEW ULM	WG	9178	6850	$1,975.46	$4,432.74	$6,408.20	0.2884	0.6471
AR	PIRMASENS	WG	9052	7745	$2,233.57	$5,011.91	$7,245.48	0.2884	0.6471
AR	RHEINBERG	WG	9100	2094	$603.89	$1,355.06	$1,958.95	0.2884	0.6471
AR	BAD AIBLING	WG	9098	2004	$577.93	$1,296.82	$1,874.75	0.2884	0.6471
AR	NECKARSULM	WG	9100	354	$102.09	$229.08	$331.17	0.2884	0.6471
AR	OSTERHOLZ-SCHARMBECK	WG	9000	5860	$1,689.96	$3,792.09	$5,482.05	0.2884	0.6471
AR	KITZINGIN	WG	9700	9947	$2,868.60	$6,436.85	$9,305.45	0.2884	0.6471
AR	NEUBRECKE	WG	9100	1003	$289.25	$649.06	$938.31	0.2884	0.6471

JONES COMMISSION REVIEW
DATA FOR DOD COMMISSARIES-FY88
SEMI-PERISHABLE PRODUCTS (DRY GOODS)
CENTRAL EUROPEAN REGION

SERVICE	COMMISSARY STORE	ST/ CNTR	ZIP	CASES REC'D	WHSG COST	+ TRANSP. COST	TOTAL DISTR. COST	COST PER CASE WHSG	COST PER CASE TRANSP
AR	KIRCHGOENS	WG	9700	1704	$491.41	$1,102.68	$1,594.09	0.2884	0.6471
AR	BABENHAUSEN	WG	9100	2723	$785.28	$1,762.09	$2,547.37	0.2884	0.6471
AR	AUGSBURG	WG	9178	16813	$4,848.67	$10,879.95	$15,728.62	0.2884	0.6471
AR	ASCHAFFENBURG	WG	9162	8464	$2,440.92	$5,477.18	$7,918.10	0.2884	0.6471
AR	ANSBACH	WG	9177	11222	$3,236.29	$7,261.93	$10,498.22	0.2884	0.6471
AR	AMBERG	WG	9452	1922	$554.28	$1,243.76	$1,798.04	0.2884	0.6471
AR	HERZO	WG	9100	1431	$412.68	$926.02	$1,338.70	0.2884	0.6471
AR	BAD KISSIGEN	WG	9330	2511	$724.14	$1,624.91	$2,349.05	0.2884	0.6471
AR	GIEBELSTADT	WG	9700	1364	$393.36	$882.67	$1,276.03	0.2884	0.6471
AR	MUNICH	WG	9108	9799	$2,825.92	$6,341.08	$9,167.00	0.2884	0.6471
AR	GERMERSHEIM	WG	9000	717	$206.77	$463.98	$670.75	0.2884	0.6471
AR	MCCULLY	WG	9100	553	$159.48	$357.85	$517.33	0.2884	0.6471
AR	GELNHAUSEN	WG	9091	4459	$1,285.92	$2,885.49	$4,171.41	0.2884	0.6471
AR	MAINZ	WG	9185	8459	$2,439.48	$5,473.95	$7,913.43	0.2884	0.6471
AR	GARMISCH	WG	9053	2016	$581.39	$1,304.58	$1,885.97	0.2884	0.6471
AR	GRAFENWOEHR	WG	9114	6863	$1,979.21	$4,441.15	$6,420.36	0.2884	0.6471
AR	FULDA	WG	9146	7447	$2,147.63	$4,819.07	$6,966.70	0.2884	0.6471
AR	GIESSEN	WG	9169	17688	$5,101.01	$11,446.17	$16,547.18	0.2884	0.6471
AR	MANNHEIM	WG	9086	21590	$6,226.30	$13,971.22	$20,197.52	0.2884	0.6471
AR	LUDWIGSBURG	WG	9154	3269	$942.74	$2,115.42	$3,058.16	0.2884	0.6471
AR	GOEPPINGEN	WG	9061	3792	$1,093.57	$2,453.86	$3,547.43	0.2884	0.6471
AR	MUENSTER	WG	9100	848	$244.55	$548.75	$793.30	0.2884	0.6471
AR	FUERTH	WG	9696	27300	$7,873.00	$17,666.24	$25,539.24	0.2884	0.6471
AR	BERLIN	WG	9742	20333	$5,863.80	$13,157.79	$19,021.59	0.2884	0.6471
AR	BERCHTESGADEN	WG	9100	1711	$493.43	$1,107.21	$1,600.64	0.2884	0.6471
AR	BAUMHOLDER	WG	9034	14267	$4,114.44	$9,232.39	$13,346.83	0.2884	0.6471
AR	KARLSCRUBE	WG	9164	10345	$2,983.38	$6,694.41	$9,677.79	0.2884	0.6471
AR	BAD HERSFELD	WG	9146	2005	$578.22	$1,297.47	$1,875.69	0.2884	0.6471
AR	KING	WG	9700	1458	$420.47	$943.49	$1,363.96	0.2884	0.6471
AR	FRANKFURT	WG	9757	27749	$8,002.49	$17,956.80	$25,959.29	0.2884	0.6471
AR	FLIEGERHORST	WG	9700	1416	$408.36	$916.32	$1,324.68	0.2884	0.6471
AR	KELLY	WG	9107	5745	$1,656.79	$3,717.68	$5,374.47	0.2884	0.6471
AR	HOHENFELS	WG	9173	1950	$562.36	$1,261.87	$1,824.23	0.2884	0.6471
AR	ILLESHEIM	WG	9140	3943	$1,137.11	$2,551.58	$3,688.69	0.2884	0.6471
AR	IDAR OBERSTEIN	WG	9000	963	$277.72	$623.17	$900.89	0.2884	0.6471
AR	HAHAU	WG	9165	26866	$7,747.84	$17,385.40	$25,133.24	0.2884	0.6471
AR	HEILBRONN	WG	9176	7716	$2,225.20	$4,993.14	$7,218.34	0.2884	0.6471
AR	FLENSURG	WG	9100	593	$171.01	$383.74	$554.75	0.2884	0.6471
AR	FISCHBACH	WG	9700	334	$96.32	$216.14	$312.46	0.2884	0.6471
AR	HEIDELBERG	WG	9102	26866	$7,747.84	$17,385.40	$25,133.24	0.2884	0.6471
AR	BAD TOELZ	WG	9050	2150	$620.03	$1,391.30	$2,011.33	0.2884	0.6471
AR	CRAILSHEIM	WG	9751	1673	$482.47	$1,082.62	$1,565.09	0.2884	0.6471
AR	BUEREN	WG	9100	693	$199.85	$448.45	$648.30	0.2884	0.6471
AR	BUEDINGEN	WG	9100	1858	$535.83	$1,202.34	$1,738.17	0.2884	0.6471
AR	BREMERHAVEN	WG	9069	10625	$3,064.13	$6,875.60	$9,939.73	0.2884	0.6471
AR	BINDLACH	WG	9100	2230	$643.11	$1,443.07	$2,086.18	0.2884	0.6471

JONES COMMISSION REVIEW
DATA FOR DOD COMMISSARIES-FY88
SEMI-PERISHABLE PRODUCTS (DRY GOODS)
CENTRAL EUROPEAN REGION

SERVICE	COMMISSARY STORE	ST/ CNTR	ZIP	CASES REC'D	WHSG COST	+ TRANSP. COST	TOTAL DISTR. COST	COST PER CASE WHSG	TRANSP
AR	BAMBERG	WG	9139	11472	$3,308.39	$7,423.71	$10,732.10	0.2884	0.6471
AR	WUERZBURG	WG	9036	13063	$3,767.22	$8,453.27	$12,220.49	0.2884	0.6471
AR	WILDFLECKEN SUB-FAC	WG	9026	826	$238.21	$534.52	$772.73	0.2884	0.6471
AR	WORMS	WG	9058	5086	$1,466.74	$3,291.23	$4,757.97	0.2884	0.6471
AR	DARMSTADT	WG	9175	9445	$2,723.83	$6,112.00	$8,835.83	0.2884	0.6471
AR	VILSECK	WG	9100	3327	$959.47	$2,152.95	$3,112.42	0.2884	0.6471
**	Subtotal **			522834	$150,779.20	$338,333.84	$489,113.04	0.2884	0.6471
***	Total ***			672231	$193,863.54	$435,010.91	$628,874.45	0.2884	0.6471

	Marks	Per
Thruput warehousing charge	4.10	100 kg
Transportation and Delivery Charge	9.20	100 kg

Invoice rate of exchange	0.5169	S per dm
Kilogram equals	2.20462	lbs per kilo

Estimated weight per case 30 lbs per case

		Per Case
Thruput warehousing per cwt	$0.9613	0.2883
Transportation cost per cwt	$2.1571	0.6471

THE DORNBUSH GROUP

Corporate Headquarters:
5180 Phillip Lee Drive, SW
P. O. Box 44126
Atlanta, Georgia 30378 USA
Telephone (U.S.) 404-691-4031
FAX: 404-699-2607
TELEX: 810-751-8618

FACSIMILE TRANSMISSION COVER LETTER

Date: September 15, 1989 From: Robert Dornbush

To: Eldridge J. Vincent, Jr., LTC, USA
Deputy Staff Director
Jones Commission
1211 Fern St., Room A-100
Arlington, VA 22202

FAX NUMBER: (202) 693-2620

1 PAGES TO FOLLOW EXCLUDING THIS COVER SHEET.

IF YOU DO NOT RECEIVE ALL OF THE PAGES, PLEASE CALL AS SOON AS POSSIBLE.

PHONE (404) 691-4031. ASK FOR DAVID TURNER, THANK YOU.
FAX # (404) 699-2607

JONES COMMISSION REVIEW
DATA FOR DOD COMMISSARIES-FY88
SEMI-PERISHABLE PRODUCTS (DRY GOODS)
UNITED KINGDOM REGION

SERVICE	COMMISSARY STORE	ST/ CNTR	ZIP	CASES REC'D	WHSG COST	+ TRANSP. COST	TOTAL DISTR. COST	COST PER CASE WHSG	TRANSP.
** SERVICE COMPONENT AF									
AF	RAF MILDENHALL	UK	09200	2522	$609.82	$570.48	$1,180.30	$0.242	$0.226
AF	BURTONWOOD	UK	09200	344	$83.18	$77.81	$160.99	$0.242	$0.226
AF	MENDITH HILL STATION	UK	09210	3086	$746.19	$698.05	$1,444.24	$0.242	$0.226
AF	RAF ALCONBURY	UK	09238	12195	$2,948.75	$2,758.51	$5,707.26	$0.242	$0.226
AF	RAF UPPER HAYFORD	UK	09194	16976	$4,104.80	$3,839.97	$7,944.77	$0.242	$0.226
AF	RAF SCULTHORPE	UK	09048	743	$179.66	$168.07	$347.73	$0.242	$0.226
AF	RAF WETHERWFIELD	UK	00120	1630	$394.13	$368.71	$762.84	$0.242	$0.226
AF	RAF GREENHAM COMMON	UK	09150	6528	$1,578.47	$1,476.63	$3,055.10	$0.242	$0.226
AF	RAF FAIRFORD	UK	09125	4621	$1,117.36	$1,045.27	$2,162.63	$0.242	$0.226
AF	RAF LAKENHEATH	UK	09179	25633	$6.198.06	$5.798.18	$11,996.24	$0.242	$0.226
AF	RAF BENTWATERS	UK	09755	13702	$3,313.14	$3,099.39	$6,412.53	$0.242	$0.226
AF	RAF CHICKSANDS	UK	09193	4478	$1,082.78	$1,012.92	$2,095.70	$0.242	$0.226
** Subtotal **				92458	$22,356.34	$20,913.99	$43,270.33	$0.242	$0.226
** SERVICE COMPONENT NA									
NA	EDZELL	UK	09518	2002	$484.08	$452.85	$936.93	$0.242	$0.226
NA	HOLY LOCK	UK	09514	8125	$1,964.63	$1,837.88	$3,802.51	$0.242	$0.226
** Subtotal **				10127	$2,448.71	$2,290.73	$4,739.44	$0.242	$0.226

THE OFFICE OF THE ASSISTANT SECRETARY OF DEFENSE
WASHINGTON, D.C. 20301-4000

FORCE MANAGEMENT
AND PERSONNEL

Mr. Robert E. Dornbush
President and Chief Executive Officer
The Dornbush Group
5180 Phillip Lee Drive, S. W.
Atlanta, Georgia 30378

Dear Mr. Dornbush,

Thank you for taking time in your busy schedule to meet with members of the Jones Commission on Wednesday, 9 August 1989. As you were briefed, the congressional charter of the commission required that we look at all segments of the military commissary system to include the commercial sector of our industry.

The Jones Commission has been extended the authority to communicate directly with private sector firms to seek information, if that firm is willing to provide it voluntarily, without reimbursement from the government. I have enclosed a copy of the legal position provided to us on that subject.

As previously discussed, we are interested in cost elements of distribution segments for Central Europe, the United Kingdom as well as the Southeast United States. Attached at Enclosures are site breakdowns of each segment with the data you requested to conduct the analysis. The zip codes may not be precise but are in the general vicinity of the particular commissary store.

If possible, we would like the estimate provided as a cost per case with cost isolated between the transportation and remaining cost segment.

The system envisioned for the Southeast United States would be as follows: The government would own the inventory and buy products from vendors based on an inventory management model in its region computer. Computer to computer links between the contractor and government would operate similarly to the Proctor and Gamble System. The government would provide a remote site ordering and vendor bill paying function. The contractor (Dornbush Group) would perform the receipt, storage, issue, accounting and distribution functions similar to the service provided to Proctor and Gamble. Individual commissaries would order product from the distribution warehouse using dial up PDEDs or direct interface from store point-of-sale scanners to the contractor's computer. The contractor would deliver product to each store daily (6 per week) or less frequently as warranted by full car lot shipments. Contractor would provide documentation (electronic or paper) transferring accountability from the warehouse to the commissary store. All receipts from vendors would be in direct car lot

shipment from manufacturers. Shipments to Bermuda, Puerto Rico, Cuba and Panama would encompass van stuffing and delivery to the port of embarkation.

The system for Europe would be identical except government transportation would be used from the manufacturers to the warehouse site in Europe. The contractor can use one or more or its warehouse in Europe if proper accountability of government inventory can be maintained. 90% of Central Europe stores are south of Geissen in West Germany.

Should you need any additional information to prepare the estimate. Please have your staff assistant call me at (703)693-2208.

Sincerely,

Eldridge J. Vincent Jr., LTC, USA
Deputy Staff Director, Jones Commission

Enclosure 1 - Southeastern U.S.
Enclosure 2 - Central Europe
Enclosure 3 - United Kingdom
Enclosure 4 - Private Sector Guidelines

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JONES COMMISSION REVIEW
DATA FOR DOD COMMISSARIES-FY88
SEMI-PERISHABLE PRODUCTS(DRY GOODS)
SOUTHEASTERN UNITED STATES

SERVICE	COMMISSARY STORE	STATE/ COUNTRY	ZIP	TOTAL MONTHLY AVERAGE SALES($)	TOTAL CASES RECEIVED (DRY)	TOTAL CUBIC FT RECEIVED (DRY)
** SERVICE COMPONENT AF						
AF	MAXWELL	AL	36112	2007815	34420	44745
AF	GUNTER	AL	36114	904951	15514	20168
AF	PATRICK	FL	32925	3048201	52255	67931
AF	TYNDALL	FL	32403	1763567	30233	39303
AF	HURLBURT FIELD	FL	32542	1063755	18236	29177
AF	HOMESTEAD	FL	33039	2372190	40666	52866
AF	EGLIN	FL	32542	2884335	49446	64280
AF	AVON PARK	FL	33825	117651	2017	3227
AF	MACDILL	FL	33608	4862769	83362	108370
AF	MOODY	GA	31699	921124	15791	20528
AF	ROBINS	GA	31098	1545994	26503	34453
AF	KESSLER AFB	MS	39534	2767980	47451	61686
AF	COLUMBUS AFB	MS	39701	820007	14057	18275
AF	SHAW AFB	SC	29152	1319393	22618	29404
AF	MYRTLE BEACH AFB	SC	29577	910604	15610	20293
AF	CHARLESTON AFB	SC	29404	2347436	40242	52315
AF	ARNOLD AFB	TN	37389	338016	5795	7533
** Subtotal **				29995788	514216	674554
** SERVICE COMPONENT AR						
AR	HOWARD	CZ		627584	10759	13986
AR	ESPINAR	CZ		310125	5317	6912
AR	COROZAL	CZ		1901337	32594	42373
AR	REDSTONE	AL	35898	238298	4085	5311
AR	RUCKER	AL	36362	189372	3247	4221
AR	MCCLELLAN	AL	36205	1486508	25483	33128
AR	STEWART	GA	31314	1409332	24160	31408
AR	HUNTER	GA	31409	1021651	17514	22768
AR	GORDON	GA	30905	2112970	36223	47089
AR	GILLEM	GA	30050	2010296	34462	44801
AR	MCPHERSON	GA	30330	427593	7330	9529
AR	FORT BENNING	GA	31905	3429698	58795	76433
AR	MERRILL	GA	30533	25918	445	578
AR	BUCHANAN	PR		2031435	34825	45272
AR	JACKSON	SC	29207	2434788	41739	54261
** Subtotal **				19656905	336978	438070
** SERVICE COMPONENT MA						
MA	MCLB ALBANY	GA	31704	479264	8216	10681
MA	PARRIS ISLAND	SC	29905	635482	10894	14162

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JONES COMMISSION REVIEW
DATA FOR DOD COMMISSARIES-FY88
SEMI-PERISHABLE PRODUCTS(DRY GOODS)
SOUTHEASTERN UNITED STATES

SERVICE	COMMISSARY STORE	STATE/ COUNTRY	ZIP	TOTAL MONTHLY AVERAGE SALES($)	TOTAL CASES RECEIVED (DRY)	TOTAL CUBIC FT RECEIVED (DRY)
** Subtotal **				1114746	19110	24843
** SERVICE COMPONENT NA						
NA	BERMUDA	BM		351855	6032	7841
NA	GUANTANAMO BAY	CU		521011	8932	11611
NA	MAYPORT	FL	32228	980586	16810	21853
NA	KEY WEST	FL	33040	405078	6944	9028
NA	JACKSONVILLE	FL	32212	247859	4249	5524
NA	ORLANDO	FL	32862	1762779	30219	39285
NA	CECIL FIELD	FL	32215	537178	9209	11971
NA	KINGS BAY	GA	30600	347146	5951	7736
NA	ATHENS	GA	30601	209178	3586	4662
NA	ROSSEVELT RDS	PR		713854	10238	15909
NA	NWS CHARLESTON	SC	29405	928217	15912	20686
NA	CHARLESTON	SC	29408	750823	12871	16733
NA	PENSACOLA	FL	32508	2071200	35506	46158
NA	WHITING FIELD	FL	32570	322776	5533	7193
NA	NEW ORLEANS	LA	70140	762987	13080	17004
NA	GULFPORT	MS	39301	446645	7657	9954
NA	MERIDIAN	MS	39301	330364	5663	7362
NA	MEMPHIS	TN	38054	1509158	25871	33633
** Subtotal **				13198694	224263	294143
*** Total ***				63966133	1094567	1431610

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JONES COMMISSION REVIEW
DATA FOR DOD COMMISSARIES-FY88
SEMI-PERISHABLE PRODUCTS(DRY GOODS)
CENTRAL EUROPEAN REGION

SERVICE	COMMISSARY STORE	STATE/ COUNTRY	ZIP	TOTAL MONTHLY AVERAGE SALES($)	TOTAL CASES RECEIVED (DRY)	TOTAL CUBIC FT RECEIVED (DRY)
** SERVICE COMPONENT AF						
AF	FLORENNES	BE	09000	83033	1423	1850
AF	RAMSTEIN AB	WG	09012	2490337	42691	55499
AF	SOESTERBERG	NE	09011	431551	7234	9404
AF	WOENSDRECHT	NE	09000	0	0	0
AF	SPANGDAHLEM AB	WG	09123	790874	1356	1763
AF	SEMBACH AB	WG	09130	597985	10251	13326
AF	RHEIN-MAIN AB	WG	09057	1486937	25490	33138
AF	TRIER	WG	09000	12877	221	287
AF	LANDSTUHL POST	WG	09690	0	0	0
AF	HESSISCH-OLDENDORF	WG	09669	116909	2004	2605
AF	HAHN AB	WG	09109	1076596	18456	23992
AF	[illegible]	[illegible]	[illegible]	822082	14092	18321
AF	VOGELWEH	WG	09012	1483003	25423	33050
AF	PRUEM	WG	09692	44162	756	981
** Subtotal **				9436346	149397	194216
** SERVICE COMPONENT AR						
AR	CHIEVRES	BE	09088	719541	12335	16036
AR	SCHINNEN	NE	09011	475100	8145	10588
AR	SCHWABACH	WG	09200	97229	1667	2167
AR	SCHWAEBISCH G	WG	09281	221507	3797	4937
AR	SCHWAEBISCH H	WG	09025	110525	1895	2463
AR	SCHWEINFURT	WG	09033	826010	14160	18408
AR	SOEGEL	WG	09100	35058	601	782
AR	PATCH	WG	09131	666439	11390	14807
AR	WERTHEIM	WG	09047	148060	2538	3299
AR	WIESBADEN	WG	09057	1686031	11425	14852
AR	WILDFLECKEN	WG	09026	262739	2704	3515
AR	PANZER	WG	09100	2651	46	59
AR	ERLANGEN	WG	09696	201013	3346	4480
AR	DEXHEIM	WG	09100	83101	1424	1852
AR	ZWEIBRUECKEN	WG	09052	537808	9220	11985
AR	HELMSTEDT	WG	09100	14254	244	317
AR	BAD KRUEZNACH	WG	09252	314565	5393	7011
AR	ROBINSON	WG	09154	978896	16781	21815
AR	REGENSBURG	WG	09100	11905	204	265
AR	NEW ULM	WG	09178	399597	6850	8905
AR	PIRMASENS	WG	09052	451836	7745	10096
AR	RHEINBERG	WG	09100	122158	2094	2722
AR	BAD AIBLING	WG	09098	116909	2004	2605
AR	NECKARSULM	WG	09100	20655	354	460
AR	OSTERHOLZ-SCHARMBECK	WG	09000	341882	5860	7619
AR	KITZINGIN	WG	09700	580280	9947	12931

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JONES COMMISSION REVIEW
DATA FOR DOD COMMISSARIES-FY88
SEMI-PERISHABLE PRODUCTS(DRY GOODS)
CENTRAL EUROPEAN REGION

SERVICE	COMMISSARY STORE	STATE/ COUNTRY	ZIP	TOTAL MONTHLY AVERAGE SALES($)	TOTAL CASES RECEIVED (DRY)	TOTAL CUBIC FT RECEIVED (DRY)
AR	NEUBRECKE	WG	09100	58517	1003	1304
AR	KIRCHGOENS	WG	09700	99412	1704	2215
AR	BABENHAUSEN	WG	09100	158857	2723	3540
AR	AUGSBURG	WG	09178	980817	16813	21858
AR	ASCHAFFENBURG	WG	09162	493738	8464	11003
AR	ANSBACH	WG	09177	654646	11222	14589
AR	AMBERG	WG	09452	112163	1922	2499
AR	HERZO	WG	09100	83490	1431	1860
AR	BAD KISSIGEN	WG	09330	146484	2511	3264
AR	GIEBELSTADT	WG	09700	79556	1364	1773
AR	MUNICH	WG	09108	571618	9799	12739
AR	GERMERSHEIM	WG	09000	41808	717	932
AR	MCCULLY	WG	09100	32242	553	718
AR	GELNHAUSEN	WG	09091	260090	4459	5796
AR	MAINZ	WG	09185	493464	8459	10997
AR	GARMISCH	WG	09053	117633	2016	2621
AR	GRAFENWOEHR	WG	09114	400334	6863	8922
AR	FULDA	WG	09146	434430	7447	9681
AR	GIESSEN	WG	09169	1031800	17688	22994
AR	MANNHEIM	WG	09086	1259450	21590	28067
AR	LUDWIGSBURG	WG	09154	190666	3269	4249
AR	GOEPPINGEN	WG	09061	221229	3792	4930
AR	MUENSTER	WG	09100	49477	848	1103
AR	FUERTH	WG	09696	1592510	27300	35490
AR	BERLIN	WG	09742	1186125	20333	26433
AR	BERCHTESGADEN	WG	09100	99806	1711	2224
AR	BAUMHOLDER	WG	09034	832287	14267	18548
AR	KARLSCRUBE	WG	09164	603424	10345	13448
AR	BAD HERSFELD	WG	09146	116976	2005	2607
AR	KING	WG	09700	85060	1458	1895
AR	FRANKFURT	WG	09757	1618717	27749	36074
AR	FLIEGERHORST	WG	09700	82615	1416	1841
AR	KELLY	WG	09107	335116	5745	7469
AR	HOHENFELS	WG	09173	113733	1950	2535
AR	ILLESHEIM	WG	09140	229983	3943	5125
AR	IDAR OBERSTEIN	WG	09000	56127	963	1251
AR	HAHAU	WG	09165	1567237	26866	34927
AR	HEILBRONN	WG	09176	450121	7716	10030
AR	FLENSBURG	WG	09100	34599	593	771
AR	FISCHBACH	WG	09700	19458	334	434
AR	HEIDELBERG	WG	09102	1567237	26866	34927
AR	BAD TOELZ	WG	09050	125453	2150	2796
AR	CRAILSHEIM	WG	09751	97595	1673	2175
AR	BUEREN	WG	09100	40424	693	901
AR	BUEDINGEN	WG	09100	108344	1858	2415

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JONES COMMISSION REVIEW
DATA FOR DOD COMMISSARIES-FY88
SEMI-PERISHABLE PRODUCTS(DRY GOODS)
CENTRAL EUROPEAN REGION

SERVICE	COMMISSARY STORE	STATE/ COUNTRY	ZIP	TOTAL MONTHLY AVERAGE SALES($)	TOTAL CASES RECEIVED (DRY)	TOTAL CUBIC FT RECEIVED (DRY)
AR	BREMERHAVEN	WG	09069	619783	10625	13812
AR	BINDLACH	WG	09100	130109	2230	4832
AR	BAMBERG	WG	09139	669206	11472	14914
AR	WUERZBURG	WG	09036	762020	13063	16982
AR	WILDFLECKEN SUB-FAC	WG	09026	48206	826	1074
AR	WORMS	WG	09058	296670	5086	6611
AR	DARMSTADT	WG	09175	550946	9445	12278
AR	VILSECK	WG	09100	194092	3327	4325
** Subtotal **				31631649	522834	681774
*** Total ***				41067995	672231	875990

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JONES COMMISSION REVIEW
DATA FOR DOD COMMISSARIES-FY88
SEMI-PERISHABLE PRODUCTS(DRY GOODS)
UNITED KINGDOM REGION

SERVICE	COMMISSARY STORE	STATE/ COUNTRY	ZIP	TOTAL MONTHLY AVERAGE SALES($)	TOTAL CASES RECEIVED (DRY)	TOTAL CUBIC FT RECEIVED (DRY)
** SERVICE COMPONENT AF						
AF	RAF MILDENHALL	UK	09200	147108	2522	3278
AF	BURTONWOOD	UK	09200	20050	344	447
AF	MENDITH HILL STATION	UK	09210	180002	3086	4012
AF	RAF ALCONBURY	UK	09238	711387	12195	15854
AF	RAF UPPER HAYFORD	UK	09194	990305	16976	22069
AF	RAF SCULTHORPE	UK	09048	43375	743	966
AF	RAF WETHERSFIELD	UK	09120	95108	1630	2119
AF	RAF GREENHAM COMMON	UK	09150	380789	6528	8486
AF	RAF FAIRFORD	UK	09125	269530	4621	6007
AF	RAF LAKENHEATH	UK	09179	1495246	25633	33322
AF	RAF BENTWATERS	UK	09755	799292	13702	17813
AF	RAF CHICKSANDS	UK	09193	261192	4478	5821
** Subtotal **				5393384	92458	120194
** SERVICE COMPONENT NA						
NA	EDZELL	UK	09518	116789	2002	2603
NA	HOLY LOCH	UK	09514	473938	8125	10562
** Subtotal **				590727	10127	13165
*** Total ***				5984111	102585	133359

DEFENSE LOGISTICS AGENCY
HEADQUARTERS
CAMERON STATION
ALEXANDRIA, VIRGINIA 22304-6100

16 MAY 1989

IN REPLY REFER TO DLA-P

SUBJECT: Improving the Acquisition Process -- Buying Best Value

TO: Heads of HQ DLA Principal Staff Elements
Commanders of DLA Supply Centers
Commanders of DLA Service Centers
Commanders of DLA Defense Depots
Commanders of DCAS Regions

1. In his 1 May 1989 memorandum (enclosed), the Deputy Secretary of Defense affirms his commitment to apply Total Quality Management and 'Best Value' contracting as key elements in our quest for increasing productivity. He subscribes to these concepts, being institutionalized in the DoD's acquisition process by the Under Secretary of Defense for Acquisition (USD(A)), as the cornerstones of the Department's acquisition process.

2. I fully support the applications of these concepts as described by the Deputy Secretary of Defense. The vision and leadership path he directs will allow us to continue on our present course of seeking excellence in the acquisition process and to build and expand upon these efforts with increasing fervor. Please give his memorandum the widest possible dissemination in your organization.

Charles McCausland

1 Encl

CHARLES McCAUSLAND
Lieutenant General, USAF
Director

WASHINGTON, D.C. 20301

1 MAY 1989

MEMORANDUM FOR SECRETARIES OF THE MILITARY DEPARTMENTS
CHAIRMAN, JOINT CHIEFS OF STAFF
UNDER SECRETARIES OF DEFENSE
ASSISTANT SECRETARIES OF DEFENSE
COMPTROLLER
GENERAL COUNSEL
INSPECTOR GENERAL
DIRECTOR, ADMINISTRATION AND MANAGEMENT
DIRECTORS OF THE DEFENSE AGENCIES

SUBJECT: Improving the Acquisition Process — Buying Best Value

The Department of Defense must continuously seek measures to increase productivity in the defense acquisition process to live within budget constraints without jeopardizing national defense and readiness. Recently, the Under Secretary of Defense for Acquisition (USD(A)) took action making Total Quality Management (TQM) and "Best Value" contracting key elements in the quest for increased productivity. I subscribe to these concepts as the cornerstones of the Department's acquisition process.

Inherent in TQM is the notion that all acquisition functions can profit from a total commitment to continuous process improvement. This commitment begins with fostering a climate that demands, recognizes, and rewards excellence. Those contractors who provide "Best Value" to the government by consistently demonstrating, through performance on production contracts, an ability to deliver on time while consistently improving quality and reducing cost should be rewarded for their accomplishments. Within DoD, development and retention of a competent, dedicated, and well trained work force must be ensured. Each person in the Department must treat quality as his or her direct responsibility. All Departmental personnel are expected to strive for continuous process improvement and foster excellence in acquisition. Further, the TQM process requires that we be a knowledgeable customer in dealing with defense producers both at home and abroad. This entails carefully articulating realistic and cost effective contract requirements and encouraging suppliers to provide efficient, innovative means to meet these requirements. Simply stated, all suppliers must understand fully what we expect of them in terms of efficient performance, firm delivery requirements, and uncompromising quality. They, in turn, should expect and receive

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a timely, fair, and professional response in a streamlined proposal evaluation and contract award process, followed by firm, fair, and responsive contract administration.

DoD will continue to use competition to bring about an environment conducive to the pursuit of TQM. To the extent practical, suppliers should expect a stable DoD business relationship, but clearly understand that failure to honor their contractual commitments will result in the reduction or elimination of future DoD business. Well crafted competitions should not be looked upon as a threat, but rather, as opportunities for the most efficient and highest quality producers to gain and maintain increased DoD business. As we structure our competitions, past performance, including quality, cost and delivery should be more significant determinants in contract award decisions.

The USD(A) will integrate and prioritize the many ongoing and worthwhile improvement efforts aimed at getting more for our DoD dollars by improving the total acquisition process.

Donald J. Atwood

SEC. 824. TEST PROGRAM FOR USE OF SIMPLIFIED PROCEDURES IN THE COMPETITIVE AWARD OF CERTAIN CONTRACTS ON THE BASIS OF QUALITY FACTORS

(a) TEST PROGRAM.—The Secretary of Defense shall conduct a test program under which the Secretary of a military department or the head of a Defense Agency, notwithstanding section 2305(b)(4)(A)(ii) of title 10, United States Code, may award a contract for the procurement of property or services primarily on the basis of design or technical quality factors after evaluation of competitive proposals without discussions with offerors.

(b) PROCUREMENT OF PROPERTY OTHER THAN COMMERCIAL PRODUCTS.—The Secretary of a military department or the head of a Defense Agency may award a contract for the procurement of property or services, other than commercial items, under the test program as provided in subsection (a) if the Secretary or agency head—

●S 1352 PCS

(1) specifically reserves, in the solicitation issued in connection with the procurement, the right to accept an initial proposal without discussions;

(2) evaluates all offers on the basis of the evaluation criteria specified in the solicitation;

(3) awards the contract to the contractor that demonstrates that—

(A) the design and technical features of the property offered by the contractor are superior in quality or performance to the property offered by the other offerors; and

(B) there is a low risk of—

(i) delay in delivery of the property to the military department or Defense Agency concerned;

(ii) increase in the cost of the property to such military department or Defense Agency; and

(iii) failure of the property to meet the performance criteria under the contract; and

(4) determines that—

(i) the price contained in the offer submitted by the contractor awarded the contract is fair and reasonable; and

(ii) the product offered by the contractor at that price represents the best value to the Government in relation to other offers received in connection with the procurement.

(c) PROCUREMENT OF COMMERCIAL PRODUCTS.—The Secretary of a military department or the head of a Defense Agency may award a contract for the procurement of commercial products under the test program as provided in subsection (a) if the Secretary or agency head determines that—

(1) the price contained in the offer submitted by the contractor awarded the contract is fair and reasonable; and

(2) the product offered by the contractor at that price represents the best value to the Government in relation to other offers received in connection with the procurement.

(d) PERIOD OF TEST PROGRAM.—Contracts may be awarded under the test program during a 3-year period prescribed by the Secretary of Defense. Such period shall commence not later than 270 days after the date of the enactment of this Act.

(e) DESIGNATION OF DEPARTMENT OF DEFENSE PARTICIPANTS.—The Secretary of Defense shall designate the organizations within the Department of Defense that will participate in the test program. The Secretary shall designate

each organization on the basis of the total dollar value of the procurement actions taken by such organization in the fiscal year ending September 30, 1989, and such other factors as the Secretary considers appropriate. The total dollar value of all procurement actions taken during such fiscal year by all organizations so designated may not exceed the amount equal to 30 percent of the dollar value of all procurement actions taken by the Department of Defense in such fiscal year.

(f) LIMITATION.—(1) No contract for the acquisition of a major system may be awarded under the test program.

(2) As used in the section, the term "major system" shall have the same meaning as is provided in section 2302(5) of title 10, United States Code.

(g) REPORT.—Not later than 270 days after the expiration of the 3-year period prescribed pursuant to subsection (d), the Secretary of Defense shall submit to the Committees on Armed Services of the Senate and the House of Representatives a report on the test program. The report shall include any recommendations for legislation that the Secretary considers appropriate regarding the competitive award of contracts without discussions with offerors.

(h) DEFINITION.—In this section:

(1) The term "commercial product" shall have the same meaning as is provided in section 822(g)(1) of this Act.

4065/28
LFS-1X099

MARINE CORPS COMMISSARY SYSTEM
CENTRAL DISTRIBUTION CENTER OPERATIONS

DISCUSSION:

The Marine Corps commissary system is centrally managed by Headquarters Marine Corps, Code (LFS). The Marine Corps commissaries are centrally managed by the East Coast Commissary Complex (ECCC) at MCB, Camp Lejeune and the West Coast Commissary Complex (WCCC) located at MCAS, El Toro. Each complex operates a Central Distribution Center (CDC) in support of the respective complex stores.

The West Coast CDC was established in 1979 and currently supports 7 stores. CDC support to the Iwakuni Commissary began in 1983 and the Kaneohe Bay, Hawaii store has its own Remote Distribution Center (RDC). The East Coast CDC was established in 1982 and currently supports 5 stores. The Albany Commissary and the Quantico Commissary have RDC's.

The use of CDC's centralizes ordering, receiving and pricing, improves fill rates, and eliminates the need for large contiguous warehouse operations in support of individual commissaries. The transportation costs normally paid from Trust Fund are offset by redistribution allowances.

The benefits of supporting retail operations by using Central Distribution Centers would seem to be clear. Retail industry operates exclusively with one form or another of central distribution support. A comparison of military CDC operations to retail CDC operations must take into account the factor that commercial grocers have the final say on how a product is to be delivered to its outlets. The military system allows the manufacturer a great deal of leeway on delivery methods.

Marine Corps Distribution Allowances FY88

- Total amount of distribution allowance $285,131.
  - -- WCCC CDC $242,994.
  - -- ECCC CDC $42,137.
- Number of vendors involved with distribution allowances.
  - -- WCCC (90 vendors)
  - -- ECCC (9 vendors)

  total (99 vendors)
  - --- WCCC total vendors 237 = 38% participation
  - --- ECCC total vendors 300 = 3% participation

DISCUSSION:

In order to put the varying participation in redistribution allowances into perspective it is advantageous to briefly describe several factors that impact on the situation. The Central Distribution Center operated in support of the West Coast Commissary Complex was established some three years prior to the East Coast operation, supports more stores, and is twice as large. The West Coast stores include operations geographically remote, in high desert areas, thus limiting back haul opportunities for manufacturers and increasing breakdown risk. Negotiations resulted in full truckloads replacing costly partial deliveries. In addition, delivery schedules were adjusted to reduce the number of deliveries required, thus saving the manufacturer shipping costs. The WCCC was quick to realize that in select circumstances, the use of the CDC could greatly benefit a manufacturer. The joint realization of available benefits led to negotiations resulting in a redistribution allowance being paid to the Marine Corps for providing the service. The East Coast operation was last to consolidate and currently has limited space to offer tangible benefits of redistribution to a large number of manufacturers. The East Coast CDC will doubled in size following a FY91 improvement project and two current RDC's will be closed. It is anticipated the participation in the benefits of redistribution will greatly increase on the East Coast following the completion of the scheduled project.

DISTRIBUTION COSTS ANALYSIS:

- Distribution costs

  -- Labor - 31 people- $967,879 total

  --- WCCC $543,407

  --- ECCC $424,472

  -- Transportation - $286,000

  --- WCCC $183,000

  --- ECCC $103,000

  -- Commissary Management Information Systems (CMIS) (Analysis of processing Costs)

  --- Processing charges normally run about $1,400 per month for each complex based on Customer Invoice System (CIS) charges.

COST PER CASE ANALYSIS:

- The following analysis develops the cost per case to operate the Marine Corps Central Distribution Center located at the West Coast Commissary Complex, El Toro, CA. All figures reflect FY88 year end results.

-- Labor Cost	$543,407	
-- Transportation Costs	$184,000	(includes trailer maintenance)
-- CMIS costs	$16,820	
TOTAL	$744,227	
Cases shipped-	1,961,874	

Total cost divided by cases shipped $\frac{\$744,227}{1,961,874}$.

equals a cost per case of 38 cents

Cost per case analysis less redistribution allowance earned.

Total cost of $744,227-$242,994 (RDA) = $501,233.

Total cost divided by cases shipped $\frac{\$501,223}{1,961,874}$.

equals a cost per case of 26 cents