# Improving the Combat Edge Through Outsourcing



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# Introduction

In the post-Cold War era, the Department of Defense must meet three major challenges:

- Readiness -- Our fighting forces must be prepared at all times to respond to threats to
  our national security interests anywhere in the world, participate in peacekeeping
  efforts, and provide humanitarian assistance. Readiness has been, and must remain,
  the Department's highest priority.
- Quality of Life -- Readiness depends on attracting top quality people and retaining
  them after they have developed technical and leadership skills. To do so, DoD must
  offer not only challenging and rewarding work, but also an appropriate quality of life,
  which encompasses the entire package of compensation, benefits, and work and living
  environments for military service personnel.
- Modernization -- Modernizing our forces is imperative for future readiness. The
  Department must increase investment to develop and acquire the weapons that will
  ensure our technological superiority.

DoD can meet these challenges today and free up the additional resources required for modernization in the future by managing its internal operations and particularly its support activities more efficiently. Support activities, broadly defined, represent a sizable portion of the defense budget. In FY 1996, DoD will spend approximately \$93 billion on operations and maintenance. These activities were largely established and organized during the Cold War when DoD had to depend predominantly on organic support. Such support was driven by the possibility of an extended conflict with a rival superpower and a less sophisticated private, commercial infrastructure.

Like the best companies and organizations in the United States, DoD has embarked on a systematic and vigorous effort to reduce the cost and improve the performance of its support activities. This report describes our initiative to determine where outsourcing, privatization, and competition can lower costs and improve readiness. It is submitted in response to Section 357 of the National Defense Authorization Act for Fiscal Year 1996, Public Law 104-106.<sup>2</sup>

In this report, outsourcing is defined as the transfer of a function previously performed in-house to an outside provider. Privatization is a subset of outsourcing which involves the transfer or sale of government assets to the private sector.

<sup>&</sup>lt;sup>2</sup> The reporting requirements contained in Section 357, and an explanation of where they are addressed in this report, is provided at Appendix 1.

# The Importance of Outsourcing and Competition to DoD

Our success in ending the Cold War has ushered in sweeping changes to the Department of Defense. The United States no longer faces a long and protracted conflict with a rival superpower. Instead, we must be prepared to fight and win two nearly simultaneous regional conflicts. These conflicts are often described as "come as you are" wars, meaning that there will be little lead time for mobilization or surge of production capability. They will require rapid transportation, tailored and flexible maintenance support, and greater reliance on private sector suppliers. These conflicts will be technology intensive. Technology has improved our lethality, precision, and mobility. As a result, victory will require dominating flows of information and communication. As our warfighting scenarios have changed, so too have attendant support functions. Best business practices, tempered by risk and threat assessments, must be used to determine where outsourcing, privatization, and competition can improve the performance of these activities.

#### New Challenges With a Smaller Budget

With the end of the Cold War, the Department of Defense has tailored its force structure and budget to meet the changed security threats. DoD's force structure today is roughly 30 percent smaller than it was in the 1980s. Our budget has also declined to about 60 percent (in real terms) of its peak in 1985. In FY 1997, DoD's budget amounts to \$243 billion. Within this budget, the Department must meet three challenges:

Readiness. During this drawdown of forces and budget, the Department provided full funding for readiness. The Department's actions ensured that U.S. forces have remained ready and prepared to defeat any adversary and perform required missions to meet our national security objectives. As the drawdown comes to an end, readiness indicators remain high.

Quality of Life. The quality of life for our military personnel is a paramount ingredient to attracting and retaining a dedicated, motivated force. The Department recognizes that a broad spectrum of services is required to meet the needs of service members and their families. The Department has therefore placed a high priority on ensuring that our personnel are adequately paid, housed, and otherwise supported.

Modernization. The U.S. armed forces are the best equipped in the world. As the Department's overall budget fell in the past decade, DoD reduced resources allocated to the purchase of new equipment and the modification and upgrade of existing systems. Between 1985 and 1996, the procurement budget declined by about 68 percent in real terms. In FY 1996, the Department's procurement budget totaled \$43 billion.

This reduction in the procurement budget came at little risk to our fighting forces. In fact, the Armed Services were able to maintain the average age of most weapons in the

hands of the fighting forces, even though they bought fewer new systems, by discarding their oldest equipment and redistributing newer equipment throughout the smaller force structure. However, this process is ending, and new equipment must be purchased. In addition, new technologies are now emerging that will dramatically increase the capabilities of our forces. In the coming years, therefore, the Department must increase funding for procurement to ensure our continued technological superiority in the future.

#### Sources of Funding

The commitment to reduce the federal deficit to zero by the year 2002 means that the Department cannot responsibly plan its future budget needs with the expectation of a significant sustained increase in its real "top line." Solutions to our funding challenge must be found within our current and projected (i.e. FYDP) budget topline. To this end, DoD has initiated a series of initiatives to increase the efficiency of its operations in order to gain more value for every dollar expended.

First, the Department has significantly reduced infrastructure costs through the base realignment and closure process (BRAC). In FY 1996, the BRAC budget crossed over from a net loss on DoD budgets to a net surplus. Over the next five years, BRAC will generate net savings of \$17.8 billion. DoD estimates that the results of the four rounds of base closures and realignments, when fully implemented, will produce annual savings of about \$5.5 billion.

Second, the Department has initiated a thorough reform of the acquisition process. Over the years, numerous blue ribbon panels and commissions have proposed reforming the defense-unique, slow-moving, and thus expensive, acquisition system. Today, we are implementing those changes. The Federal Acquisition Streamlining Act of 1994, the Federal Acquisition Reform Act of 1996, and the recently-signed DoD Directive 5000.1 and DoD Regulation 5000.2 will enable significant changes to DoD's procurement of goods and services. These initiatives, now in place, are beginning to show results and will lead to substantial efficiencies and savings in the future.

Third, the Department is now beginning a systematic review of its support operations to determine where competitive forces can improve overall performance at lower cost. Outsourcing, privatization, and business reengineering offer significant opportunities to generate much of the savings necessary for modernization and readiness.

Summarizing the challenge for the DoD, General John Shalikashvili, the Chairman of the Joint Chiefs of Staff, recently told the Senate Armed Services Committee that increasing funding for modernization:

... will take tough management decisions, innovation, and even revolutionary approaches, as well as your continued support to accomplish this challenging task within our top line budget projections. One answer lies in aggressively pursuing

institutional and business opportunities.

We must continue to push with all energy acquisition reforms, commercial offthe-shelf opportunities, privatization, outsourcing of non-core activities, and further reductions of our infrastructure.<sup>3</sup>

# Outsourcing: Objectives and Experience

The purpose of the Department's initiative is to sustain or improve readiness, generate savings for modernization, and improve the quality and efficiency of support to the warfighters.

To achieve these goals, the Deputy Secretary of Defense established a comprehensive, ongoing DoD-wide review to identify functions that could be outsourced, analyze them to determine where outsourcing is cost effective, and begin the outsourcing process. The review involves the senior civilian and military leadership in the Military Departments, Defense Agencies, and the Office of the Secretary of Defense.

Outsourcing, privatization, and competition offer the prospect of lowering costs and improving performance across a wide range of support activities. The Department's total budget for operations and support activities in FY 1996 amounts to approximately \$93 billion. Such activities will only be considered for outsourcing or privatization when they meet three conditions:

First, private sector firms must be able to perform the activity and meet our warfighting mission. DoD will not consider outsourcing activities which constitute our core capabilities.

Second, a competitive commercial market must exist for the activity. Market forces drive organizations to improve quality, increase efficiency, and reduce costs. DoD will gain from outsourcing and competition when there is an incentive for continuous service improvement.

Third, outsourcing the activity must result in best value for the government and therefore the U.S. taxpayer. Activities will be considered for outsourcing only when the private sector can improve performance or lower costs in the context of long term competition.

Analyses of Department activities are still underway. These assessments will likely determine that a number of activities are not appropriate candidates for outsourcing or competition. However, the remaining pool of candidates will be sizable, and we

<sup>&</sup>lt;sup>3</sup> Posture Statement by General John M. Shalikashvili, Chairman of the Joint Chiefs of Staff, before the Committee on Armed Services, United States Senate, March 5, 1996, p. 19.

expect that the potential for increased savings and improved performance will be significant, amounting to billions of dollars on an annual basis.

These savings will directly benefit modernization. To make this connection clear and to provide appropriate incentives to the Military Departments, the Deputy Secretary of Defense signed a memorandum on February 26, 1996, stating that the DoD Components will not have their outyear budgets reduced as a result of the savings they create through their initiatives, and that these savings should benefit modernization (see Appendix 2).

# Why Outsourcing and Competition Work

DoD stands to create the most significant savings and improve readiness when it can augment its internal capabilities with those available from competitive commercial markets. Outsourcing can introduce:

- Competitive forces. Competition drives organizations to improve quality, increase efficiency, reduce costs, and better focus on their customer's needs over time. For DoD, competition can lead to more rapid delivery of better products and services to the warfighter, thereby increasing readiness.
- Flexibility. Outsourcing provides managers with flexibility to determine the appropriate size and composition of the resources needed to complete tasks over time as the situation changes.
- Economies of scale and specialization. Firms that specialize in specific services generate a relatively larger business volume, which allows them to take advantage of scale economies. Often, these economies of scale mean that specialized service firms can operate and maintain state-of-the-art systems more cost-effectively than other firms or the government. Outsourcing to such firms provides a means for the government to take advantage of technologies and systems that the government itself cannot acquire or operate economically.
- Better management focus. In recent years, our nation's most successful companies have focused intensively on their core competencies -- those activities that give them a competitive edge -- and outsourced support activities. The activities that have been outsourced remain important to success, but are not at the heart of the organization's mission. Business analysts frequently highlight the fact that the attention of an organization's leaders is a scarce resource that should be allocated wisely. This is equally true for the Department of Defense.

#### Lessons from the Private Sector

The benefits of outsourcing and competition are apparent every day in our national economy; they are not theoretical or based on uncertain assumptions. Companies report that outsourcing provides the desired benefits. It enables the firms to focus on their core competencies; improve service quality, responsiveness, and agility; obtain access to new technologies; and employ more efficient business practices.

Over the past two decades, competitive forces in the private sector have revolutionized how companies obtain services. Entire new industries -- and companies -- have grown to meet this demand for specialized services across a range of functions: aircraft and ship maintenance, inventory management, accounting and finance, internal audit, data center operations, software maintenance, computer network support, applications development, telecommunications, transportation services, facility management, and benefits administration. In 1996, these service industries will generate an estimated \$100 billion in sales.

Surveys performed by a range of organizations for different purposes all document the trend to more outsourcing. For example:

- A 1994 study conducted by Pitney Bowes Management Services found that 77 percent of 100 *Fortune* 500 firms surveyed outsourced some aspect of their business support services.
- A 1992 study of 1,200 companies conducted by the Outsourcing Institute found that 50 percent of firms with information technology budgets over \$5 million are either outsourcing or actively considering it.
- A 1994 study conducted by KPMG-Peat Marwick of 309 Fortune 1,000 companies found that 48 percent outsourced warehousing functions.
- A 1994 study conducted by the Olsten Corporation of 400 firms found that 45 percent outsourced payroll management functions.

The experiences of individual companies further illustrate the prevalence of outsourcing in the private sector. Canon guarantees photocopier replacement within 24 hours, but outsources the delivery of this service. Avis operates one of the largest data processing systems in the world to handle rental car reservations, but outsources the data processing of its payroll. Chrysler manufactures engines, transmissions and exterior body skins internally, but outsources the remaining 70 percent of final product content. Similar examples exist in every successful American industry.

#### **Public Sector Experience**

Many state and local governments carry out effective programs to take advantage of the benefits of competition. Chicago, Indianapolis, Los Angeles, Philadelphia, and San Francisco among others have used competition and outsourcing to improve services and lower costs.

### DoD's Experience

Within the Department of Defense, experience demonstrates that competition and outsourcing have yielded both significant savings and increased readiness for each of the military services. As a result of cost comparisons conducted between 1978 and 1994 (under OMB Circular A-76 -- the Federal guidance on performance of commercial activities), the Department now saves about \$1.5 billion a year. On average, these competitions have reduced annual operating costs by 31 percent. The consistency of these results highlights the potential benefits to the Department from opening up a significant portion of the operations and support budget to competition.

Savings from A-76 Competitions, 1978 to 1994

| Service          | Competitions<br>Completed | Total Annual<br>Savings<br>(millions of FY 96<br>dollars) | Percent<br>Savings |
|------------------|---------------------------|---|--------------------|
| Army             | 510                       | 470   | 27%                |
| Air Force        | 733                       | 560   | 36%                |
| Marine Corps     | 39                        | 23  | 34%                |
| Navy             | 806                       | 411   | 30%                |
| Defense Agencies | 50                        | 13  | 28%                |
| Total            | 2,138                     | \$1,478   | 31%                |

Source: Center for Naval Analyses, based on analysis of DoD commercial activities data

<sup>&</sup>lt;sup>4</sup> Private sector entities won about half of these competitions; government activities won the other half.

These benefits have accrued across the range of DoD support activities. In aggregate, DoD currently outsources approximately 25 percent of base commercial activities, 28 percent of depot maintenance, 10 percent of finance and accounting, 70 percent of Army aviation training, 45 percent of surplus property disposal, and 33 percent of parts distribution, as well as substantial portions of other functions. Indeed, virtually every support function that the Department carries out is provided by the private sector at some location.

The Defense Logistics Agency's (DLA) Direct Vendor Delivery and Prime Vendor programs illustrate the savings and improvements in readiness that DoD has achieved through business reengineering and outsourcing. Under these programs, suppliers deliver products directly to their DoD customers, rather than to a DoD warehouse for storage and subsequent distribution. The programs have made a tangible contribution to readiness: reducing the need for DoD's own warehousing and transportation allows DLA to deliver supplies to warfighters cheaper and faster. In the case of pharmaceuticals, for example, DoD customers now receive their requested goods 75 to 90 percent faster (within 24 hours) and 25 to 35 percent cheaper. These programs not only save resources, but do the job better.

There are numerous other examples of outsourcing's beneficial results. The Air Force has successfully outsourced all support functions at Vance Air Force Base and several bases overseas. The Air Force also contracts for maintenance for the KC-10 and F-117 aircraft and for software in the B-1 and B-2 aircraft. The Army has created a government-industry team to upgrade the Palladin artillery system. The Navy outsources a substantial amount of ship repair -- including maintenance on its most advanced surface combatants.

#### **DoD's Outsourcing Initiative**

To maintain readiness and generate the resources required for modernization, the Department must continue on this path and, where appropriate, draw on the competitive forces found in the private sector. We cannot afford -- in either economic or military terms -- to perform the myriad of support functions in the absence of competition.

The Department's review has focused to date on six areas: materiel management, base commercial activities, depot maintenance, finance and accounting, education and training, and data centers.

#### Materiel Management

Building on the successes demonstrated by the Defense Logistics Agency's Prime Vendor and Direct Vendor Delivery programs, DoD has initiated a thorough review of materiel management which encompasses the actions by which DoD manages its supply

system.<sup>5</sup> Our review is focused primarily on three functions that account for a significant portion of the materiel management budget: disposal operations; distribution depots; and inventory control points.

**Disposal Operations.** DoD disposes of surplus or "worn out" equipment and other materiel -- valued at \$24 billion last year -- through transfers to eligible users [e.g., state and local governments] or sales to the public. We expect that the Department's reengineering efforts will permit placing many government disposal services in the competitive marketplace. In 1996 and 1997, for example, DoD plans to reengineer and/or privatize the sales of excess trucks and trailers, medical and dental equipment, and power distribution equipment, as well as various functions supporting those disposal operations. Such actions are estimated to increase revenues from surplus property sales by as much as 50 percent, decrease operating costs by more than 10 percent, and significantly reduce the need for new capital investment for property disposal functions.

**Distribution Depots.** In 1997, the Department plans -- on a pilot basis -- to privatize all functions at the distribution depots in Sacramento, California, and San Antonio, Texas.<sup>6</sup> In order to take advantage of recent improvements in the state-of-the-art physical distribution technology, DoD will encourage contractors at both sites to reengineer the distribution depot business processes, and evaluate the results for potential expansion to other distribution sites.

Inventory Control Points. Later this spring, the Department will complete the initial business case analyses for the Armed Services' inventory control points. This study will enable the Department to identify high pay-off/low risk functions.

#### Base Commercial Activities

Base commercial activities refer to those functions that are necessary to support, operate, and maintain DoD installations -- such as facilities maintenance, food services, local transportation and vehicle maintenance. DoD currently outsources about 25 percent of this workload.

At the present time, DoD Components are conducting cost comparisons -- studies that compare the cost of the government's "most efficient organization" with the cost of performance by private contractors -- encompassing about 150 functions at many different locations. Over the next two years, the Department expects to expand greatly the number of functions and locations being studied in search of opportunities to lower costs and improve performance.

Materiel management includes functions such as provisioning, cataloging, requirements determination, asset management, distribution, and disposal.

See the report of the 1995 Defense Base Closure and Realignment Commission and the July 8, 1995, letter from its Chairman to the Deputy Secretary of Defense.

#### **Depot Maintenance**

The Department's depot maintenance policy focuses on maintaining core capabilities in organic facilities. The core concept ensures that critical warfighting capabilities remain under the direct control of warfighters. In the area of depot maintenance, core capabilities consist of the facilities, equipment, and skilled personnel necessary to ensure a ready and controlled source of technical competence to meet the Joint Chiefs of Staff's contingency scenarios.

Subjecting non-core depot maintenance to the forces of competition will lower costs and improve readiness. Reliance on the private sector in this manner complements, but does not replace, organic capabilities. Further discussion of the Department's core policy and details of how DoD calculates core are provided in two accompanying reports submitted to the Congress.<sup>7</sup>

#### Finance and Accounting

DoD has initiated a robust campaign to increase use of the IMPAC purchasing card. The IMPAC is a VISA card issued by the Rocky Mountain Bank Card System, under a contract with the General Services Administration, and used throughout the Federal Government. Greater use of the card (permitted by the Federal Acquisition Streamlining Act) would dramatically reduce acquisition cycle time and the paperwork associated with making, and paying for, procurement actions -- thus reducing costs and improving timeliness. One study of purchases below \$25,000 within the Defense Logistics Agency estimated that use of the IMPAC card instead of purchase orders would reduce administrative expenses by over \$70 million in a five year period. In a second study, use of the IMPAC card to purchase automated data processing equipment reduced procurement cycle time (requisition to delivery) from an average of 29 days to less than 5 days.

The Department needs to reengineer some of its internal processes so that it can make maximum use of the IMPAC card's potential for reducing costs. Expanding use of the IMPAC card requires improved communication, coordination, and business practices in DoD's financial, logistics, and acquisition communities. The Department has established two teams to identify barriers and propose solutions: an Integrated Policy

Section 311 of the National Defense Authorization Act for Fiscal Year 1996 requires the two accompanying reports: one on comprehensive maintenance policy and another on the depot maintenance workloads, including the allocation of work between the Department's own depots and the private sector. DoD is submitting separately a report on depot maintenance personnel that is required by Section 312 of that Act.

<sup>&</sup>lt;sup>8</sup> IMPAC is an acronym for International Merchants Purchase Authorization Card.

Team (IPT) reporting to the Deputy Under Secretary of Defense (Acquisition Reform) and a Purchase Card Financial Management Team, reporting to the Under Secretary of Defense (Comptroller). These groups will complete their work this summer.

The Department has announced A-76 cost comparisons in three finance and accounting areas: debt and claims management; facilities, logistics, and administrative support at Defense Finance and Accounting Service sites; and bill paying for the Defense Commissary Agency. As required by the National Defense Authorization Act for 1996, the Department plans to carry out a pilot program for outsourcing nonappropriated accounting and, by October 1, 1996, complete a plan for outsourcing civilian pay.

The Department has also started to build an entirely new travel system using the best commercial practices. This system will streamline and improve the efficiency of the travel process through greater reliance on the private sector and commercial automation technologies. Opportunities for privatization include: increased use of full service commercial travel offices, use of off-the-shelf software, and the use of a commercial travel card.

#### **Education and Training**

The Gulf War demonstrated the increasing role of technology in the art of war. Such technology demands highly trained personnel in both operating and supporting roles, placing a premium on widespread and cost effective training. Technology has also changed teaching and training methodologies. Selected individual training programs can now be delivered through the use of telecommunications at remote locations -- a process termed "distance learning." Increasing the use of these advanced learning technologies can reduce the need for more expensive classroom training at centralized locations. The Department is evaluating how these new technologies affect training requirements and how private sector providers can help the Department in this area. The Department has met with industry to determine if it can adopt successful training management strategies from the private sector.

#### Data Centers

Over the last several years, DoD has achieved substantial economies and efficiencies in its data center operations. Through the base realignment and closure process, the Defense Information Systems Agency (DISA) is consolidating from 59 data centers to 16 larger defense megacenters (DMCs). DoD estimates that this consolidation, scheduled to be completed late in 1996, will produce net savings of \$474 million from FY 1994 through FY 1999, produce \$208 million in annual steady state savings thereafter, and eliminate 2,400 civilian positions. As a result of these consolidations, and associated process reengineering actions, 57 percent of the operating budget for DMCs in FY 1996 will be for contracted services. Further analysis of the Department's activities

in this area will be submitted to Congress, as requested by the Conference Report on H.R. 2126, the Department of Defense Appropriations Act, 1996.

The Department is also assessing opportunities for achieving economies and efficiencies in data center operations within the purview of the Military Departments. These actions will take place under Office of Management and Budget Bulletin 96-02, "Consolidation of Agency Data Centers."

#### Other Functions

Increasing the level of competition could prove valuable for many other DoD commercial functions. DoD will continue to evaluate opportunities for outsourcing.

#### Implications for Contracting

In order for the Department's initiative to be fully successful, DoD must make changes to its traditional approach to contracting for services. Early investigation or market research of services that may be available from the private sector is paramount. Frequently, the Department has prepared statements of work for bid before, or without, surveying the capabilities of the marketplace.

Similarly, well written, performance-based statements of work that contain output-oriented measures of performance are essential. DoD's statements of work have traditionally focused on inputs or detailed specifications and in many cases failed to provide a basis for evaluating contractor performance. These changes in the Department's approach to contracting for services are part of our ongoing effort to reform the acquisition process and related training provided to DoD's acquisition workforce.

#### The Involvement of Government Employees

The Department of Defense employs the same superior talent in its civilian workforce as in the military; indeed, DoD civilians consistently demonstrate impressive capabilities and dedication.

To the extent that activities are transferred outside the Department, employees will face dislocation. The Department is committed to making the transition as humane as possible. DoD actions significantly eased such transitions during the recent drawdown and BRAC rounds. Procurement regulations include a "right of first refusal" provision that is required for solicitations that may result in a conversion from in-house to contract performance. The Department's well-established Priority Placement Program (PPP) continues to find new positions for over 900 employees a month, thereby retaining

<sup>&</sup>lt;sup>9</sup> Federal Acquisition Regulation 7.305(c) and 52-207-3.

valuable investments in human capital. Also, the Defense Outplacement Referral System makes the resumes of DoD civilians and military available to over 18,000 private-sector employers.

DoD makes very effective use of Voluntary Early Retirement Authority, which enables people to enter retirement comfortably under a variety of situations. Also, the Department created the Voluntary Separation Incentive Payment, better known as the buyout. This Congressionally approved program has been used by over 78,000 employees, thereby avoiding a like number of layoffs. Between PPP and buyouts, the Department has been able to hold involuntary separations to less than nine percent of the positions eliminated over the past six years.

To make our employees affected by base realignments and closures more attractive job candidates, the Department sought and received Congressional approval for the Non-Federal Hiring Incentive. Initiated last fall, this program enables managers to provide funds for retraining and relocating DoD employees that they keep on the payroll for at least a year. On other fronts, the Department provides retraining to enable people to qualify for licenses and certificates needed to do their current jobs when they transfer to the private sector.

The FY 1996 National Defense Authorization Act provided additional flexibility by removing the 120-day limit on details at closing or realigning installations, permitting the payment of severance amounts in a lump sum rather than biweekly, providing continuing health coverage for employees facing a layoff, and permitting individuals in similar occupations to volunteer to replace others on reduction-in-force lists. <sup>10</sup>

These initiatives are successful, but the Department recognizes that further changes are needed to ease the transition while promoting workplace stability. To that end, it is encouraging suggestions for such changes from employee unions, professional associations, and all of the Components. Outsourcing, privatization, and competition are topics that spotlight sometimes conflicting goals among DoD Components, employees, and contractors. To maintain an appropriate balance, the Department recognizes that all such efforts need to motivate employees to maintain readiness, retain sufficient talent to complete future missions, and recognize the factors that historically have drawn people to public service.

#### Consultation

From the beginning of its outsourcing initiative in August 1995, the Department has actively sought input from private industry. DoD recognizes that it can learn a great deal from industry's extensive outsourcing experience.

<sup>&</sup>lt;sup>10</sup> Sections 1033 through 1036 of the Act.

In November 1995, the Department commissioned a Defense Science Board Task Force to ascertain which activities DoD is currently doing that could be performed by the private sector with greater efficiency, at lower cost, with higher quality. Companies, outside analysts, and numerous DoD organizations have briefed the Task Force. The Department expects the Task Force to issue its report in late April 1996.

In addition, a coalition of ten industry associations has provided the Department with their views and analysis on outsourcing issues.<sup>11</sup> The coalition has offered valuable information on how industry:

- selects functions for outsourcing or retention in house,
- chooses external suppliers,
- writes appropriate contract terms,
- monitors supplier performance, and
- assesses the results in terms of cost savings, improved efficiency, enhanced capabilities, and other potential benefits.

DoD also met with numerous industry representatives and other experts to discuss their outsourcing experiences and opportunities for further outsourcing by the Department. In addition, the Department has discussed its outsourcing initiative with representatives from the Office of Management and Budget and the General Accounting Office. We have also consulted with the United States Chamber of Commerce, the National Association of Women Business Owners, the National Minority Supplier Development Council, the National Industries for the Blind, and other organizations. DoD will continue to work with these and other organizations.

DoD has consulted and will continue to consult with Federal employees at a variety of levels. Under the Federal Government's commercial activities program, for example, DoD policy calls for employees and their union representatives to be notified and involved during the development, preparation, and review of performance work statements and management studies.

At the Department level, DoD has two avenues for consultation with unions. First, eight major unions have national consultation rights with the Department. DoD provides these unions with any revisions to its policies affecting civilian employees and considers their views regarding such revisions. Second, seven of these unions are Defense Partnership Council (DPC) members. DoD officials have provided information to DPC representatives on DoD's outsourcing and privatization initiatives. The Department expects the DPC to stay involved in these matters.

The coalition members are: Aerospace Industries Association, American Defense Preparedness Association, American Electronics Association, American Shipbuilding Association, Contract Services Association, Electronic Industries Association, National Security Industrial Association, Professional Services Council, Shipbuilders Council of America, and the U.S. Chamber of Commerce.

There are active labor-management partnerships at many activities throughout the Department where unions have bargaining rights. The partnerships are working together on various initiatives, such as those concerning outsourcing and privatization. For example, American Federation of Government Employee officials and Kelly Air Force Base managers formed a successful partnership recently, which was recognized with a National Partnership Award Honorable Mention Citation presented by Vice President Gore. Similarly, union and management representatives at McClellan Air Force Base are members of the Mission McClellan Executive Advisory Committee, which advises on matters related to the privatization and conversion of the base.

# Impediments to Benefiting from Outsourcing

Several statutes state a preference for private performance of commercial activities. Section 2462 of Title 10, United States Code, requires the Department to obtain services from private firms when they can provide them at lower cost. Section 357 of the National Defense Authorization Act for Fiscal Year 1996 requires the Secretary of Defense to endeavor to obtain commercial products and services from private sector sources.

Achieving the Department's goal -- relying more on outsourcing, privatization, and competition to generate savings for modernization and improve readiness -- is hindered by several statutory and regulatory provisions. Despite the clear policy statement in Section 2462, a variety of other laws, singly or in combination, have complicated, delayed, or discouraged outsourcing, privatization, and competition.

# Laws Affecting Depot Maintenance

DoD's depot maintenance policy is to conduct only the minimum workload at organic facilities that is necessary to preserve "core" capabilities. For other depot work, DoD believes drawing on the capabilities of the private sector could lead to more efficient operations. Balancing public and private sector depot maintenance workload would minimize costs and ensure requisite readiness. Provisions of law that impede achieving these benefits are:

# Section 2466 of Title 10, United States Code -- The 60:40 Rule

The Department has established a core depot maintenance policy based on maintenance capability requirements that are calculated to meet the Department's warfighting needs in the scenarios approved by the Joint Chiefs of Staff. Necessary depot-level workloads are then identified to sustain those capability requirements. In this way, the Department can ensure that the personnel, equipment, and facilities necessary to

support essential core requirements are being maintained. 12

In contrast, Section 2466 establishes an arbitrary percentage (60 percent) of depot maintenance that must be accomplished by Federal employees. The 60:40 split limits the Department's ability to manage depot maintenance in an efficient and cost-effective manner.

### Section 2464 of Title 10, United States Code -- Core Logistics Functions

Assuring victory at war demands minimizing risk for both operations and support. Therefore, the Department must determine which logistics capabilities are truly core to its warfighting mission and keep those core capabilities under its direct control. Sustaining core capabilities does not mean that all maintenance on mission essential equipment must take place in organic facilities. Maintenance of mission essential equipment can be, and is, outsourced successfully. Examples include various types of maintenance for the B-1, B-2, F-117, KC-10, U-2 aircraft, and numerous surface combatant ships. Private firms should be considered to perform depot work when such work can be done at low or acceptable risk to the warfighting mission and provide best value to the Department. Introducing competition among private firms for depot work that is not required to sustain core capabilities will reduce cost and improve quality. Core assessments need to be based on a consistent methodology involving assessments of both threats and risks. It is Department policy to review every two years core requirements and the workloads necessary to sustain those capabilities.

Section 2464, by contrast, arbitrarily defines core in terms of workload performed at specified facilities. This creates an artificial constraint that reduces the Department's ability to manage effectively its depot maintenance activities and facilities.

# Section 2469 of Title 10, United States Code -- The \$3 Million Rule

Section 2469 requires public/private competitions before any depot workload in excess of \$3 million can be transferred to the private sector. The Department believes that competitions normally should occur only between private firms. DoD believes that Government depots should compete against private firms only when private sector competition is inadequate.

<sup>&</sup>lt;sup>12</sup> A more detailed discussion of the Department's core depot maintenance policy is included in the accompanying report submitted pursuant to Section 311 of the FY 96 Defense Authorization Act.

# Section 2470 of Title 10, United States Code -- Other Federal Work

The Department believes that it should not compete with private industry by performing any depot maintenance work beyond that which is required for core capabilities. However, this provision encourages Government depots to maintain capacity over and above what is necessary to sustain core capabilities in order to compete for additional workloads.

# Laws Affecting Outsourcing in General

The Department is seeking to introduce the benefits of outsourcing, privatization, and competition throughout our support establishment. Several provisions of law impose unnecessary constraints on this process or preclude outright the ability to reduce costs, improve quality, and maintain readiness:

# Section 2461 of Title 10, United States Code -- General Outsourcing

The Department recognizes the need for Congressional oversight of its management of support operations. However, DoD believes that Section 2461's requirement for four separate reports is unnecessary. Moreover, the extensive "how-to" requirements create disincentives for DoD Components to pursue outsourcing. As a result, these provisions make it difficult to meet the requirements of other statutes to complete any cost comparison expeditiously. (Section 8037 of the Department of Defense Appropriations Act, 1996, which is a recurring provision, restricts the use of appropriations for cost comparisons) that are not completed within 24 months [for single functions] or 48 months [for multiple functions].)

# Section 2465 of Title 10, United States Code -- Firefighters and Security Guards

Firefighting and security guard functions must, by this provision, be performed by government personnel -- even in those locations where such services could be performed more efficiently by local municipalities or the private sector. Many military installations are next to or near local municipalities that could provide such services. This provision reduces management flexibility and, more significantly, diverts government personnel and resources from mission essential tasks.<sup>13</sup>

<sup>&</sup>lt;sup>13</sup> In addition, this provision is a significant problem at installations being closed or realigned where firefighting and security guard formerly provided by DoD personnel ceases to be available.

# Section 8020 of the Department of Defense Appropriations Act, 1996 -- 10 Employee Threshold

Experience demonstrates that studying more employees at one time produces proportionately greater recurring annual savings, and reduces the one-time study costs, on a per-person basis. <sup>14</sup> This provision however, requires the Department to go through a comparably detailed analysis of a function involving 10 employees as it does for those involving 1,000 or more. This is inefficient and unnecessary. A higher threshold would streamline decision making processes and ensure a greater return on taxpayer resources. Such thresholds are set by OMB Circular A-76 and need not be included in law.

#### Section 317 of the National Defense Authorization Act for Fiscal Year 1987 --Specific Installations

DoD believes that it should be able to consider outsourcing at all installations, unless there is a compelling rationale for exempting particular ones. The Department does not believe that there is such a rationale for exempting Crane Army Ammunition Activity, Crane, Indiana, and McAlester Army Ammunition Plant, McAlester, Oklahoma, from being evaluated for outsourcing, privatization, and competition.

#### Regulations

The Federal government has published formal policies on government performance of commercial activities since 1955. The current Federal guidance is Office of Management and Budget (OMB) Circular A-76. The A-76 Circular is a straightforward statement of the Executive Branch's preference for obtaining commercial services from private sources where it will achieve best value for the government.

A supplement to Circular A-76 sets forth detailed, "how-to" procedures for conducting cost comparisons to determine whether commercial activities should be performed under contract or in-house. DoD fully supports the requirement to perform cost comparisons before converting performance of a function from in-house to contractor. This is standard practice in industry and makes sound business sense.

The Office of Management and Budget has recently revised the A-76 supplement which it plans to release shortly. The revised supplement represents an improvement over the earlier version. Nevertheless, DoD remains concerned that the process is costly and time-consuming. DoD organizations typically take up to 24 months to complete simple cost comparisons, and 48 months for more complex ones. In the private sector, by

<sup>&</sup>lt;sup>14</sup> See Marcus, Alan J, <u>Analysis of the Navy's Commercial Activities Program</u> (Report CRM 92-226.10). Alexandria, VA: Center for Naval Analyses, July 1993.

contrast, these same tasks require only about 12 months. The long time lines for completing A-76 cost comparisons act as a strong disincentive to government managers. Moreover, DoD managers may be reluctant to dedicate resources -- A-76 cost comparisons can cost hundreds of thousands of dollars -- to the outsourcing decision making process if the benefits of the process will not be realized until years later. Such costs and time delays make it difficult for DoD to achieve its objectives. DoD intends to take full advantage of the new flexibility and streamlined cost comparison approaches offered by the new supplement.

#### Conclusion

DoD must continue to reduce its infrastructure and support costs to increase funding for modernization in the coming years. Introducing the competitive forces of the private sector into DoD support activities will reduce costs and improve performance.

Outsourcing is not a theory based on uncertain assumptions. Experience in DoD and the private sector consistently and unambiguously demonstrates how the competitive forces of outsourcing can generate cost savings and improve performance. One need only glimpse at the operations of our nation's most successful companies to see the dramatic benefits that they realize through outsourcing and competition.

Through its outsourcing initiatives, DoD has begun a long-term effort to streamline its support functions further. The success of the Department's initiatives today will help determine how well it supports the warfighters tomorrow.

# **Appendices**

Appendix 1: Extract from Section 357 of Public Law 104-106

Appendix 2: Memorandum from the Deputy Secretary of Defense to the Secretaries of the Military Departments, on Outsourcing and Privatization, dated February 26, 1996

Appendix 3: A-76 Commercial Functions and Civilian and Military Personnel

# Appendix 1

Extract from Section 357 of Public Law 104-106

# Extract from Section 357 of Public Law 104-106

The portion of Section 357 that requires this report states: 17

- "(d) Report.--(1) The Secretary shall identify activities of the Department (other than activities specified by the Secretary pursuant to subsection (b)) that are carried out by employees of the Department to provide commercial-type products or services for the Department.
- (2) Not later than April 15, 1996, the Secretary shall transmit to the congressional defense committees a report on opportunities for increased use of private-sector sources to provide commercial products and services for the Department.
  - (3) The report required by paragraph (2) shall include the following:
  - (A) A list of activities identified under paragraph (1) indicating, for each activity, whether the Secretary proposes to convert the performance of that activity to performance by private-sector sources and, if not, the reasons why.

A listing of "commercial" activities carried out by DoD personnel is contained in Appendix 3. The Department has not completed the analyses to determine which activities at which locations should be converted to performance by the private sector, beyond those already announced for conversion to the public. This report describes the considerations and processes that the Department is pursuing. The result will be specific decisions, over time, that will take account of which activities have an adequate competitive environment to provide for economical performance by private sector sources.

(B) An assessment of the advantages and disadvantages of using private-sector sources, rather than employees of the Department, to provide commercial products and services for the Department that are not essential to the warfighting mission of the Armed Forces.

An assessment of the advantages of using private sector sources is provided on pages 5 through 8. The Department believes that through judicious management [e.g., only relying on the private sector where an adequate competitive environment exists to provide for economical performance] there would be no disadvantages to using private sector sources to provide commercial products

<sup>&</sup>lt;sup>17</sup> The treatment of each reporting requirement in this report is explained in italics.

and services that are not essential to the warfighting mission of the Armed Forces.

(C) A specification of all legislative and regulatory impediments to converting the performance of activities identified under paragraph (1) to performance by private-sector sources.

A discussion of the statutory and regulatory impediments is provided on pages 15 through 19.

(D) The views of the Secretary on the desirability of terminating the applicability of OMB Circular A-76 to the Department.

OMB Circular A-76 is addressed on pages 18 and 19.

(4) The Secretary shall carry out paragraph (1) in consultation with the Director of the Office of Management and Budget and the Comptroller General of the United States. In carrying out that paragraph, the Secretary shall consult with, and seek the views of, representatives of the private sector, including organizations representing small businesses."

The Department consulted as prescribed by this provision. See also the discussion on page 14.

# Appendix 2

Memorandum from the Deputy Secretary of Defense to the Secretaries of the Military Departments, on Outsourcing and Privatization, dated February 26, 1996



#### DEPUTY SECRETARY OF DEFENSE

#### 1010 DEFENSE PENTAGON WASHINGTON, DC 20301-1010



#### MEMORANDUM FOR SECRETARIES OF THE MILITARY SERVICES

SUBJECT: Privatization and Outsourcing

As the Secretary has stated frequently, we are committed to maintaining a modern and ready force. This commitment will require, as planned, increased funding for the modernization of our equipment and systems.

Outsourcing and privatization provide a means to achieve this important objective. By drawing on the abilities of the commercial sector, we can provide more efficient and effective support, focus our efforts on what we do best, and redirect substantial resources to modernization.

I expect each of you to make outsourcing and privatization a priority within your Department. I further expect that you will reflect your outsourcing and privatization plans in your FY98-03 Program Objective Memorandum and highlight these plans in your POM presentation to the Defense Resources Board. Resources saved through these initiatives during the POM process will not be decremented from your outyear budgets and should instead be applied to your modernization priorities.

cc: Privatization and Outsourcing IPT

# Appendix 3

A-76 Commercial Functions and Civilian and Military Personnel

# A-76 Commercial Functions and Civilian and Military Personnel

|   | FTEs**           |                 |
|---|------------------|-----------------|
| FUNCTIONS*  | Civil <u>ian</u> | <b>Military</b> |
| G - Social Services G001 - Care of Remains of Deceased Personnel & Funeral Services | 20               | 28              |
| G001 - Care of Remains of Deceased Personner & Pulletin Services                    | 12,547           | 1,507           |
| G008 - Commissary Store Operation   | 760              | 14              |
| G010 - Recreational Library Services  | 6,489            | 2,087           |
| G011 - Morale, Welfare, and Recreation Services                                     | 565              | 53              |
| G012 - Community Services   | 11-              | 26              |
| G900 - Chaplain Activities and Support Services                                     | 919              | 2,716           |
| G901 - Housing Administrative Services  | 775              | 96              |
| G904 - Family Services  | 224              | 104             |
| G999 - Other Social Services  |                  |                 |
| H - Health Services   | 7.001            | 19,527          |
| H101 - Hospital Care  | 7,981            | 8,550           |
| H102 - Surgical Care  | 2,223            | 1,329           |
| H105 - Nutritional Care   | 1,872            | 3,899           |
| H106 - Pathology Services   | 2,080            |                 |
| H107 - Radiology Services   | 1,264            | 2,534           |
| H108 - Pharmacy Services  | 865              | 2,475           |
| H109 - Physical Therapy   | 186              | 1,025           |
| H110 - Materiel Services  | 2,057            | 2,279           |
| H111 - Orthopedic Services  | 126              | 325             |
| H112 - Ambulance Services   | 371              | 210             |
| H113 - Dental Care  | 2,001            | 6,971<br>746    |
| H114 - Dental Laboratories  | 139              |                 |
| H115 - Clinics and Dispensaries   | 2,303            | 5,996           |
| H116 - Veterinary Services  | 258              | 1,897           |
| H117 - Medical Records  | 1,512            | 586             |
| H118 - Nursing Services   | 2,050            | 9,468           |
| H119 - Preventive Medicine  | 390              | 394             |
| H120 - Occupational Health  | 639              | 230             |
| H121 - Drug Rehabilitation  | 584              | 299             |
| H999 - Other Health Services  | 1,091            | 2,529           |
| J - Intermediate, Direct or General Repair and Maintenance of Equipment             |                  |                 |
| J501 - Aircraft Maintenance   | 11,192           | 73,549          |
| J502 - Aircraft Engine Maintenance  | 66               | 997             |
| J503 - Missiles   | 332              | 1,934           |
| J504 - Vessels  | 2,004            | 8,141           |
| J505 - Combat Vehicles  | 551              | 36              |
| J506 - NonCombat Vehicles   | 920              | 32              |
| J507 - Electronic and Communication Equipment Maintenance                           | 1.532            | 11,104          |
| J510 - Railway Equipment  | 18               | 0               |
| J511 - Special Equipment  | 1,008            | 8               |
| J512 - Armament   | 655              | 1,347           |
| J513 - Armanicht J513 - Dining Facility Equipment                                   | 48               | 7               |
| J514 - Medical and Dental Equipment   | 227              | 670             |
| J515 - Containers, Textile, Tents, and Tarpaulins                                   | 99               | 25              |
| 1313 - Contamors, Toxino, Toxino, and Toxino  |                  |                 |

Sources: \* Functions - OMB Circular A76 Supplemental Handbook

<sup>\*\*</sup> FTEs (Full Time Equivalents) - DoD Commercial Activities Inventory Data Base (FY 1994)

| matter **   |                          |                 |
|---|--------------------------|-----------------|
| J - Intermediate, Direct or General Repair and Maintenance of Equipment | (Con't.) <u>Civilian</u> | <u>Military</u> |
| J516 - Metal Containers   | 10                       | 0               |
| J517 - Training Devices and Audiovisual Equipment                       | 42                       | 37              |
| J519 - Industrial Plant Equipment                                       | 26                       | 5<br>222        |
| J520 - Test, Measurement and Diagnostic Equipment                       | 84                       | 232             |
| J521 - Other Test, Measurement and Diagnostic Equipment                 | 35                       | 356             |
| J522 - Aeronautical Support Equipment                                   | 82                       | 985             |
| J999 - Maintenance of Other Equipment                                   | 790                      | 1,652           |
| K - Depot Repair, Maintenance, Modification, Conversion or              |                          |                 |
| Overhaul of Equipment   | 26,057                   | 839             |
| K531 - Aircraft K532 - Aircraft Engines                                 | 5,595                    | 170             |
| K533 - Missiles   | 2,751                    | 89              |
| K534 - Vessels  | 34,395                   | 307             |
| K535 - Combat Vehicles  | 4,546                    | 66              |
| K536 - NonCombat Vehicles   | 1,342                    | 54              |
| K537 - Electronic and Communication Equipment                           | 8,121                    | 205             |
| K538 - Railway Equipment  | 11                       | 0               |
| K539 - Special Equipment  | 407                      | 14              |
| K540 - Armament   | 1,658                    | 175             |
| K541 - Industrial Plant Equipment                                       | 3,962                    | 25              |
| K543 - Medical and Dental Equipment                                     | 45                       | 10              |
| K544 - Containers, Textile, Tents, and Tarpaulins                       | 6                        | 0               |
| K546 - Test, Measurement and Diagnostic Equipment                       | 604                      | 6               |
| K547 - Other Test, Measurement and Diagnostic Equipment                 | 373                      | 0               |
| K548 - Aeronautical Support Equipment                                   | 216                      | 1               |
| K999 - Other Depot Repair, Maintenance, Modification, Conversion or     |                          |                 |
| Overhaul of Equipment   | 2,369                    | 216             |
| P - Base Maintenance/Multifunction Contracts                            |                          | 44              |
| P100 - Installation Operation Contracts (Multi-function)                | 373                      | 41              |
| R - Research, Development, Test, and Evaluation (RDT&E) Support         | . ———                    |                 |
| R660 - RDT&E Support  | 4,559                    | 1,666           |
| S - Installation Services   |                          |                 |
| S700 - Natural Resource Services  | 147                      | 38              |
| S701 - Advertising and Public Relations                                 | 101                      | 149             |
| S702 - Financial and Payroll Services                                   | 23,717                   | 3,977           |
| S703 - Debt Collection  | 573                      | 10              |
| S706 - Bus Services   | 202                      | 88              |
| S708 - Laundry and Dry Cleaning   | 460                      | 11              |
| S709 - Custodial Services   | 1,499                    | 4               |
| S710 - Pest Management  | 494                      | 158             |
| S712 - Refuse Collection and Disposal Services                          | . 358                    | 13              |
| S713 - Food Services  | 1,093                    | 6,699           |
| S714 - Furniture Repair   | 87                       | 0               |
| S715 - Office Equipment Maintenance and Repair                          | . 90                     | 2               |
| S716 - Motor Vehicle Operation  | 4,295                    | 2,976           |
| S717 - Motor Vehicle Maintenance  | 3,300                    | 2,859           |
| S718 - Fire Prevention and Protection                                   | 9,731                    | 4,385           |
| S719 - Military Clothing  | 385                      | 154             |
| S724 - Guard Service  | 6,923                    | 18,007          |
|   | A                        | ppendix 3       |
| A 2 2   |                          | =               |

| a commence of  |                 |          |
|--|-----------------|----------|
| S - Installation Services (Con't.)   | <u>Civilian</u> | Military |
| S725 - Electrical Plants and Systems Operations and Maintenance                      | 1,882           | 1,071    |
| S726 - Heating Plants and Systems Operation and Maintenance                          | 2,450           | 163      |
| S727 - Water Plants and Systems Operation and Maintenance                            | 831             | 6        |
| S728 - Sewage and Waste Plants Operation and Maintenance                             | 872             | 310      |
| S729 - Air Conditioning and Refrigeration Plants                                     | 952             | 120      |
| S730 - Other Utilities Operation and Maintenance                                     | 763             | 340      |
| S731 - Supply Operations   | 8,351           | 10,999   |
| S732 - Warehousing and Distribution of Publications                                  | 49              | 1        |
| S740 - Transportation Management Services  | 2,772           | 4,820    |
| S750 - Museum Operations   | 98              | 34       |
| S760 - Contractor-Operated Parts Stores & Civil Engineering Supply Stores            | 2               | 0        |
| S999 - Other Installation Services   | 2,604           | 2,479    |
| Syy) - Otto: Installation of the   |                 |          |
| T - Other NonManufacturing Operations  |                 | ••       |
| T800 - Ocean Terminal Operations   | 680             | 30       |
| T801 - Storage and Warehousing   | 23,340          | 1,259    |
| T802 - Cataloging  | 466             | 4        |
|  | 517             | 315      |
| T803 - Acceptance Testing  | 1,683           | 842      |
| T804 - Architect-Engineering   | 628             | 198      |
| T805 - Operation of Bulk Liquid Storage  | 610             | 222      |
| T806 - Printing and Reproduction   | 2,402           | 1,905    |
| T807 - Visual Information  | 1,255           | 743      |
| T809 - Administrative Telephone Services   | 235             | 903      |
| T810 - Air Transportation Services   | 535             | 1,905    |
| T811 - Water Transportation Services   | 140             | 0        |
| T812 - Rail Transportation Services  | 1,624           | 740      |
| T813 - Engineering and Technical Services  | 323             | 2,895    |
| T814 - Aircraft Fueling Services   | 1,648           | 2,895    |
| T816 - Telecommunication Centers T817 - Other Communications and Electronics Systems | 1,234           | 1,413    |
| 7817 - Other Communications and Installation of Communications Systems               | 841             | 1,698    |
| T818 - Systems Engineering and Installation of Communications Systems                | 277             | 8        |
| T819 - Preparation and Disposal of Excess and Surplus Property                       | 3,628           | 1,544    |
| T820 - Administrative Support Services   | 119             | 3        |
| T821 - Special Studies and Analysis  | 585             | 1,345    |
| T900 - Training Aids, Devices, and Simulator Support                                 | 4,152           | 1,584    |
| T999 - Other NonManufacturing Operations   | 1,102           | _,       |
|  |                 |          |
| U - Education and Training   | 3               | 417      |
| U100 - Recruit Training  | 1,802           | 7,776    |
| U300 - Specialized Skill Training  | 137             | 2,595    |
| U400 - Flight Training   | 124             | 69       |
| U500 - Professional Development Training   | 2               | 72       |
| U510 - Professional Military Education   | 189             | 189      |
| U520 - Graduate Education, Fully Funded, Full-time                                   | 833             | 208      |
| U540 - Off-Duty (Voluntary) and On-Duty Education Programs                           | 76              | 1        |
| U600 - Civilian Education and Training   | 366             | 1,011    |
| U800 - Training Development and Support  | 469             | 560      |
| U999 - Other Training Functions  |                 |          |

| <ul> <li>W - Automatic Data Processing</li> <li>W824 - Data Processing Services</li> <li>W825 - Maintenance of ADP Equipment</li> <li>W826 - Systems Design, Development and Programming Services</li> <li>W999 - Other ADP Functions</li> </ul> X - Products Manufactured and Fabricated In-House | Civilian<br>4,688<br>202<br>6,443<br>303 | Military<br>1,635<br>192<br>2,256<br>13 |
|--|--|---|
| X - Products Manufactured and Pabricated in 1997   | 3,556                                    | 6                                       |
| X931 - Ordnance Equipment X932 - Products Made From Fabric or Similar Materials  | 1,115                                    | . 2                                     |
| X932 - Products Made From Fabric of Shifting Materials   | 33                                       | 0                                       |
| X933 - Container Products and Related Items  | 30                                       | 0                                       |
| X934 - Preparation of Food and Bakery Products<br>X935 - Liquid, Gaseous and Chemical Products   | 9  | 22                                      |
| <ul> <li>X - Products Manufactured and Fabricated In-House</li> <li>X936 - Rope, Cordage, and Twine Products; Chains and Metal Cable Products</li> </ul>   | 21                                       | 0                                       |
| X936 - Rope, Cordage, and Twine Products, Chains and World Caste Products  | 44                                       | 84                                      |
| X941 - Optical and Related Products  | 33                                       | 6                                       |
| X942 - Sheet Metal Products  | . 2                                      | 4                                       |
| X944 - Machined Parts X999 - Other Products Manufactured and Fabricated In-House   | 39                                       | 0                                       |
| Z - Maintenance, Repair, Alteration, and Minor Construction of Real Property   |  |   |
| Z991 - Maintenance and Repair of Family Housing Buildings and  | 1,944                                    | 34                                      |
| Structures Z992 - Maintenance and Repair of Buildings and Structures Other Than Family Housing   | 14,370                                   | 5,518                                   |
| 2992 - Maintenance and Repair of Grounds and Surfaced Areas  | 3,529                                    | 1,677                                   |
| Z993 - Maintenance and Repair of Grounds and Surfaced Areas  | 63                                       | 3                                       |
| Z997 - Maintenance and Repair of Railroad Facilities Z998 - Maintenance and Repair of Waterways  | 70                                       | 0                                       |
| Z999 - Other Maintenance, Repair, Alteration, and Minor<br>Construction of Real Property   | 5,016                                    | 2,388                                   |
| Total  | 336,890                                  | 302,956                                 |