

INTERNET DOCUMENT INFORMATION FORM

A . Report Title:Defense Depot Maintenance Use of Public-Private Partnering Arrangements

B. DATE Report Downloaded From the Internet June 1998

C. Report's Point of Contact: (Name, Organization, Address, Office Symbol, & Ph #

United States General Accounting
National Security and International Affairs
Division
Washington, DC 20548

D. Currently Applicable Classification Level: Unclassified

E. Distribution Statement A: Approved for Public Release

F. The foregoing information was compiled and provided by:
DTIC-OCA, Initials:__JC__ **Preparation Date:**12 June 1998

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May 1998

DEFENSE DEPOT MAINTENANCE

Use of Public-Private Partnering Arrangements





United States
General Accounting Office
Washington, D.C. 20548

National Security and
International Affairs Division

B-279126

May 7, 1998

Congressional Requesters

This report responds to your requests for information regarding the use of partnering arrangements between the Department of Defense (DOD) and private sector contractors to use excess capacity at military service repair depots. Specifically, this report discusses (1) the legal framework under which partnering can occur and (2) the types of current partnering arrangements and the services' and industry's views of such arrangements. As agreed with your offices, we focused our review on Army and Air Force depots.

Background

Although there is no generally agreed upon definition of partnering, for purposes of this report, partnering arrangements include, but are not limited to (1) use of public sector facilities and employees to perform work or produce goods for the private sector; (2) private sector use of public depot equipment and facilities to perform work for either the public or private sector; and (3) work-sharing arrangements,¹ using both public and private sector facilities and/or employees. Work-sharing arrangements share similar characteristics to the customer-supplier partnerships on which we have previously reported.² Partnering arrangements exclude the normal service contracting arrangements where contract personnel are used to supplement or assist depot personnel in performing work in depot facilities.

DOD spends about \$13 billion, or 5 percent of its \$250 billion fiscal year 1997 budget, on depot maintenance, which includes repair, rebuilding, and major overhaul of weapon systems, including ships, tanks, and aircraft. The Army has five depots managed by the Industrial Operations Command (IOC), and the Air Force has five depots managed by the Air Force Materiel Command (AFMC).³ The Navy's three aviation depots and four shipyards are managed by the Naval Air and Sea Systems

¹In these work-sharing arrangements, the public and private sectors share the workload for a particular program. A depot is assigned work through normal Army channels and industry performs work pursuant to a government contract.

²Partnerships: Customer-Supplier Relationships Can Be Improved Through Partnering (GAO/NSIAD-94-173, July 19, 1994).

³The 1995 Base Realignment and Closure process designated two of these depots for closure — the Air Force's San Antonio and McClellan Air Logistics Centers. The closures have been delayed until the year 2001.

Commands. Also, a significant amount of depot repair activities is performed at various private contractor facilities.

Depots operate through a working capital fund. The fund is used to finance a depot's cost of producing goods and services for its customers. The fund is reimbursed through customer payments for the goods and services provided and is to be self-sustaining and operate on a break-even basis over the long term.

Defense spending and force structure reductions during the 1980s and 1990s resulted in substantial excess capacity in both public and private sector industrial repair and overhaul facilities. Some of DOD's excess depot maintenance capacity has been reduced through the base realignment and closure process. However, the services and the private sector continue to have large industrial facilities and capabilities that are underused. We have reported and testified that reducing such excess capacity and resulting inefficiencies could save hundreds of millions of dollars each year.⁴ Navy officials state that they have already significantly reduced excess capacity by closing three of six aviation depots and four of eight shipyards.

To address its excess capacity problem, DOD continues to seek legislative authority for additional base closures under a base realignment and closure type process. However, due to congressional concerns over local social and economic impacts of such closures and questions regarding the savings and experiences from previous closures, such authority has not been provided. There is also a continuing debate between the Congress and the administration over where and by whom the remaining depot workloads will be performed. Central to this debate has been DOD's efforts to rely more on the private sector for depot maintenance and statutory provisions that (1) require public-private competitions for certain workloads, (2) limit private sector workloads to 50 percent of the available funding for a particular fiscal year, and (3) require maintaining certain core capabilities in the public depots.

DOD, the Congress, and the private sector have shown an interest in partnering arrangements as another tool to address the problems of excess capacity and declining workloads. DOD agrees with partnering concepts and discusses partnering in both the Defense Planning Guidance, which contains guidance for the services to develop their strategic plans, and in the fourth comprehensive Quadrennial Defense Review, a report required

⁴Defense Outsourcing: Challenges Facing DOD As It Attempts to Save Billions in Infrastructure Costs (GAO/T-NSIAD-97-110, Mar. 12, 1997) and Air Force Depot Maintenance: Privatization-in-Place Plans Are Costly While Excess Capacity Exists (GAO/NSIAD-97-13, Dec. 31, 1996).

by the Military Force Structure Review Act of 1996, which was included in the National Defense Authorization Act for Fiscal Year 1997. In the Defense Planning Guidance, DOD directs the services to encourage commercial firms to enter into partnerships with depots to reduce excess capacity, overhead burdens, and maintain critical skills. In the Quadrennial Defense Review, DOD states that it will use in-house facilities to partner with industry to preserve depot-level skills and use excess capacity.

Results in Brief

A number of statutory provisions enacted primarily during the 1990s provide, under certain conditions, the authority and framework for partnering arrangements. Various provisions of title 10 of the United States Code allow the services to sell articles and services outside DOD for limited purposes and under certain conditions.⁵ The Army has this authority for many of its industrial facilities under section 4543 of title 10. The Army controls the sales authority under this provision. The authority for the remaining DOD industrial facilities, including those of the Air Force, is contained in 10 U.S.C. 2553. It requires the Secretary of Defense to designate which facilities will have the authority to sell articles and services outside of DOD. Under both provisions, the goods or services sold must not be available commercially in the United States and providing these goods and services must not interfere with a facility's military mission. Due in part to these differing authorities, the extent to which the Army and the Air Force pursue partnering arrangements varies.

The Army has designated depots that may sell articles and services outside of DOD and has developed criteria for determining when such goods and services are not commercially available. As shown in appendix II, at the time of our review the Army had established 13 partnering arrangements using both the sales statutes in title 10 and work-sharing arrangements not requiring specific legislation. Army and private sector officials state that partnering has improved operational efficiencies at their respective facilities and that they are pursuing additional partnering opportunities.

The Secretary of Defense has delegated to the Secretary of the Air Force the authority to designate which facilities may sell articles and services outside of DOD. However, the Air Force Secretary has not made any such designations nor developed criteria to determine whether a good or service is available from a domestic commercial source. There have been

⁵There are additional authorities that may be used by a DOD activity to sell goods or services such as 22 U.S.C. 2770 for the sale of items to be incorporated into end items to be sold to foreign countries. This report only concerns the provisions cited by DOD as authority for partnering.

several private sector and depot proposals to enter into partnering arrangements but none have been approved. The Commander of the Air Force Materiel Command states that he is not opposed to partnering, but he is not willing to enter into such arrangements unless savings can be demonstrated.

Statutory Authority Exists Under Which Partnering Can Occur

A number of statutory provisions enacted primarily during the 1990s provide, within limitations, the authority and framework for partnering. Specifically, provisions in title 10 permit working capital funded activities, such as public depots, within specified limits, to sell articles and services to persons outside DOD and to retain the proceeds. Central among these limitations is that any goods or services sold by the depots must not be available commercially. Also, the National Defense Authorization Act for Fiscal Year 1995 authorized the Secretary of Defense to conduct activities to encourage commercial firms to enter into partnerships with depots. Further, section 361 of the National Defense Authorization Act for Fiscal Year 1998, provides that the Secretary of Defense shall enable public depots to enter into public-private cooperative arrangements, which shall be known as "public-private partnerships" for the purpose of maximizing the utilization of the depots' capacity. However, the 1998 Authorization Act does not appear to have expanded the services' ability to enter into such arrangements since section 361 did not contain any specific sales or leasing authority for use in partnering.⁶ Table 1 shows the major provisions in title 10, along with relevant sections in the 1995 and 1998 National Defense Authorization Acts, which facilitate partnering.

⁶Section 361 did amend the provision at 10 U.S.C. 2471 to provide that the proceeds from leases of excess equipment and facilities could be used by the leasing military department.

Table 1: Laws That Provide Authority for Partnering at Public Depots

Provision	Date enacted	Relevant terms
Title 10 Section 2208	1962	Permits the Secretary of Defense to establish DOD working capital funds.
Subsection 2208(j)	1991	Permits depots to sell articles or services outside DOD if purchaser is fulfilling a DOD contract and the contract is awarded pursuant to a public-private competition.
Title 10 Section 4543	1993	Authorizes Army industrial facilities to sell articles or services outside DOD for specified purposes and under certain conditions, including that the goods or services not be commercially available in the United States and the sale will not interfere with the facility's military mission. The proceeds are to be credited to the funds incurring the costs of manufacture or performance.
Title 10 Section 2553	1994	Permits the Secretary of Defense to designate DOD industrial facilities, other than Army facilities governed by section 4543, to sell articles or services outside DOD under conditions similar to those set forth in 4543. The proceeds are to be credited to the funds incurring the costs of manufacture or performance.
Title 10 Section 2471	1994	Allows the secretary of a military department, under certain conditions, to lease excess depot equipment and facilities to a person outside DOD.
Title 10 Section 2667	1956	Allows the leasing of nonexcess equipment and facilities of a DOD activity to a person outside DOD. The proceeds may be used by the leasing military department.
1995 National Defense Authorization Act Section 337	1994	Directs the Secretary of Defense to encourage commercial firms to enter into "partnerships" with depots.
1998 National Defense Authorization Act Section 141	1997	Authorizes a 2-year pilot program under which Army industrial facilities may sell articles and services to persons outside DOD without regard to their commercial availability in support of DOD weapon systems.
Section 361		Adds section 2474 to title 10, establishing Centers of Industrial and Technical Excellence at existing depots and permitting receipts from public-private "partnerships" to be credited to depots' accounts. Amends 10 U.S.C. 2471 to permit proceeds from leases of excess equipment and facilities to be used by the leasing military department.

Partnering Arrangements at Depots

The Army and the Air Force, for various reasons, view partnering arrangements differently. The Army believes that there are substantial opportunities within its legal authority to enter into contractual arrangements with private sector companies for the sale of goods and services. It has entered into a number of such arrangements using this authority. The Air Force believes such opportunities are very limited and has not entered into any such arrangements.

The Army has entered into partnering arrangements under the legislation covering sales of goods and services. A sales arrangement is a contract between a depot and a private firm whereby a depot provides specific goods and services. The Army has designated which depots may sell articles and service outside of DOD and has issued specific implementing guidance. In 1995, the U.S. Army Depot Systems Command (now IOC) issued policy guidance for its facilities to enter into sales, subcontracts, and teaming arrangements with private industry. In July 1997, IOC developed the criterion for determining commercial availability. Under the criterion, a customer must certify that the good or service is not reasonably available in sufficient quantity or quality in the commercial market to timely meet its requirements. Cost cannot be a basis for determining commercial availability.

The Army has also entered into a number of work-sharing arrangements that do not require specific legislative authority. They differ from a sales arrangement in that there is no contract between a depot and a private firm.

The Air Force has not approved any proposed partnering arrangements. The Secretary of Defense has delegated to the Secretary of the Air Force the authority to designate which depots may sell articles and services outside of DOD. However, the Air Force Secretary has not made any such designations nor developed criteria to determine whether a good or service is available from a domestic commercial source. Air Force officials state that 10 U.S.C. 2553, like the corresponding Army sales statute (10 U.S.C. 4543), prohibits the Air Force from selling articles or services if those articles or services are available from a domestic commercial source. However, unlike the Army, Air Force officials believe the restriction prohibits the sale of almost any product or service their depots could provide.

Army Partnering Arrangements Using Existing Legislation

Army depots have entered into a number of partnering arrangements under the current statutory framework and within the context of the public-private workload mix for depot maintenance. These arrangements include sales under 10 U.S.C. 4543 and subcontracting under 10 U.S.C. 2208(j). Red River, Tobyhanna, and Anniston Army Depots all have ongoing arrangements with private industry to provide services such as testing and repair of communications equipment; development of training devices; testing of circuit card assemblies; and overhaul, conversion, and grit blasting of tracked vehicles. For example, table 2 lists

sales statute partnering initiatives that are underway at the Anniston depot as of July 1997.

Table 2: Partnering Initiatives Using the Sales Statutes

Project	Sales statutes	Partner	Dollar value of contract
Amphibious assault vehicle	10 U.S.C. 4543	United Defense Limited Partnership	\$181,000
AGT 1500 Turbine engine/recuperator	10 U.S.C. 4543	Allied Signal	\$867,000
FOX nuclear, biological, and chemical reconnaissance vehicle maintenance and upgrade	10 U.S.C. 4543	General Dynamics Land Systems	\$2.4 million
Hercules	10 U.S.C. 4543	United Defense Limited Partnership	\$52,000
M113 grit blast/test track	10 U.S.C. 4543 10 U.S.C. 2208(j)	United Defense Limited Partnership	\$1.96 million
Base operations/base logistics	10 U.S.C. 4543	General Dynamics Land Systems	\$40,000

In each of these sales arrangements, the Army has awarded the private sector company a contract to perform a certain scope of work. The contractor then makes a business decision to have the depot perform a portion of that work under the sales statutes. The sale is accomplished by a contract between the depot and the private sector firm that allows the depot to be reimbursed for costs associated with fulfilling the contract. These costs are estimated by maintenance personnel and are based on direct labor, materials, and in-house support costs. The contractor must pay the depot in advance for performing the service, and the depot reimburses its working capital fund to cover these estimated costs.

For illustrative purposes, the FOX vehicle upgrade and M113 grit blast/test track partnering arrangements are described in more detail below.

FOX Vehicle Maintenance and Upgrade Project

Following award of the FOX vehicle upgrade contract to General Dynamics Land Systems, Anniston representatives informed the contractor that the depot had facilities and capabilities that could meet the contractor's needs and provide for substantial facility cost savings and other benefits. In January 1997, officials from Anniston and General Dynamics Land Systems agreed to partner on the upgrade of 62 FOX reconnaissance vehicles. The partnering agreement included a 4-year contract with the depot under 10 U.S.C. 4543. Under the contract, the depot performs asbestos removal, grinding, welding, machining, cleaning and finishing, and prime and final

paint operations. Under the terms of the contract with the Army, General Dynamics Land Systems does the upgrade using the depot's facilities. Depot facilities are provided to General Dynamics Land Systems as government-furnished property under its contract with the Army and revert back to the Army when the contract is complete.

Depot personnel stated that this partnering arrangement has resulted in (1) a lower total cost for the combined work performed, (2) sustainment of core depot capabilities, and (3) overhead savings from using underutilized facilities. The depot has received about \$1 million for its efforts on the first eight vehicles. The contractor stated that this project is a good example of a mutually beneficial program; the contractor reports that it would have cost more to perform the depot's share of the work at another location. The contractor also reports that it is spending \$450,000 to upgrade buildings at the depot and that it will occupy 27,000 square feet of otherwise vacant or underutilized space. A General Dynamics Land Systems official stated that by occupying space at the Anniston depot there was a savings to the program cost.

M113 Grit Blast/Test Track Project

The partnering arrangement on the M113 grit blast/test track project was entered into under 10 U.S.C. 4543 and 2208(j). The Army was seeking a way to meet its fielding schedule for the M113 and asked United Defense Limited Partnership if it could partner with the Anniston depot to help meet fielding requirements. Under this partnering arrangement, United Defense Limited Partnership contracted with the depot to perform grit blasting on the vehicle hulls and the depot provided use of its test track facilities pursuant to a subcontract with the contractor under 10 U.S.C. 2208(j).

Army officials stated that this partnership will allow them to meet the fielding schedule and reduce overall program costs. Contractor officials stated by using the depot's grit blasting and test track facilities, the need to build facilities to perform these functions was negated.

Army's Work-Sharing Partnering Arrangements

The Army and private sector defense firms have established noncontractual partnering relationships by sharing workloads. Army program managers generally determine the mix of work between depots and private sector contractors. On any particular workload, either a depot or a private sector firm could receive all or part of the work. Under the Army's work-sharing partnering arrangements, a depot and a contractor share specific workloads, based on each party's strengths. The private

sector firms' share of the workload is performed pursuant to a contract with the activity supporting the program. Thus, there are no contracts directly between depots and private sector firms; however, there are memorandums of understanding and detailed agreements on how the partnerships will operate. These agreements generally provide mechanisms to mitigate risks, mediate disputes, and standardize work processes. Discussion of such arrangements at Anniston and Letterkenny depots follows.

Anniston Army Depot

General Dynamics Land Systems, the original equipment manufacturer for the Abrams tank, and Anniston entered into a work-share partnering arrangement to upgrade the tank. Anniston and the contractor jointly initiated the Abrams Integrated Management XXI program in 1993 to mitigate a number of problems, including a declining depot-level maintenance workload, limited production of new Abrams tanks, and fleet sustainment. The goal of this arrangement was to unite the tank industrial base expertise in armored vehicle restoration, make needed improvements, and extend the life of the fleet while reducing the dollars required to support the fleet. The Army approved the arrangement based on its objectives and projected benefits and awarded General Dynamics Land Systems a contract on a sole-source basis for its share of the work.

Under this arrangement, the depot disassembles the vehicles, prepares the hull and turret for reassembly, and performs component restoration and overhaul, and then the contractor uses these components for assembly, system integration, and testing. According to depot officials, this partnering strategy retains core capabilities by allowing the depot to maintain its current skill base and reduces overhead costs through additional labor hours. A contractor representative cited benefits from the partnering arrangement such as developing new programs and creating additional business opportunities.

Letterkenny Army Depot

The Paladin program is a work-share partnering arrangement between Letterkenny Army Depot and United Defense Limited Partnership. In 1991, the Army determined that full-scale production of the Paladin, a self-propelled howitzer, would be maintained within the private sector. However, due to factors such as cost growth and quality concerns, potential offerors were encouraged to use government facilities to the maximum extent practical. United Defense Limited Partnership proposed that the Letterkenny depot partner with it on reconfiguring the Paladin, which would include the contractor doing its portion of the work at the depot. United Defense Limited Partnership won the contract in April 1993,

and the "Paladin Enterprise" was formed in May 1993. Both parties signed a memorandum of understanding that established the roles and rules of the partnership.

Under this arrangement, the depot performs chassis and armament overhaul, modification, and conversion to the new configuration. The contractor is required to provide most of the Paladin-unique chassis components, a new turret, subsystems for automatic fire control, and the integration of all components.

According to depot officials, all participants in this arrangement are benefiting from the dual use of the depot. Specifically, depot officials reported that collocating the contractor at the depot has resulted in numerous savings, including \$15 million in cost avoidance by eliminating material processing through the Defense Logistics Agency, and renovation of a government warehouse at the contractor's expense valued at \$3.4 million. Contractor representatives stated that this arrangement has allowed the contractor to remain in the tracked vehicle market and to retain critical skills and technology that will be needed when DOD resumes new vehicle production. The contractor is looking for additional partnering opportunities and believes that its experience with Paladin will enhance its ability to partner on future contracts.

None of the Army's partnering arrangements reviewed included the leasing of excess or nonexcess depot equipment or facilities as permitted under sections 2471 and 2667 of title 10. However, there are a number of partnering arrangements in which depot facilities are provided to contractors as government-furnished property for the performance of the contracts.

Air Logistics Centers Not Partnering

The Air Force has not approved several proposals for its depots to provide products or services to the private sector. For example, in January 1997, ABB Autoclave Systems, Inc., on behalf of Porsche Engineering Services, requested the use of Warner Robins Air Logistics Center's fluid cell press to form door panels. The press manufacturer stated that the depot and Cessna had the only fluid cell presses with the table size needed to produce these door panels. However, the Cessna press was not available. The Center's Commander requested approval from AFMC to enter into this partnering arrangement with Porsche. In April 1997, AFMC denied the request because it believed that it did not have the authority to enter into such a partnering arrangement since the Secretary of the Air Force had

not designated any depots to enter into such arrangements nor issued implementing guidance to use in determining commercial availability.

In another case, the Oklahoma City Air Logistics Center had excess capacity in its engine test cell and proposed to AFMC that it enter into a partnering agreement with Greenwich Air Services, Inc. Under the terms of the agreement, Greenwich would lease the test cell facilities for testing commercial high bypass turbofan engines. The Center believed that this arrangement would more fully use its test cell, thereby reducing excess capacity. Greenwich also viewed the arrangement as a "win-win" proposal that would defray or delay a capital investment expense and increase its product line. However, AFMC did not approve the request because the Secretary of the Air Force had not designated any depot to enter into sales arrangements nor issued implementing guidance to use in determining commercial availability.

The Commander, AFMC, stated that he is neither a proponent nor opponent of partnering arrangements. However, he would consider approving such arrangements if it could be demonstrated that they would save money. He stated that his approach to cost reduction is (1) identify what is excess and divest it, (2) lease any underused capacity, and (3) then, and only if dollar savings can be demonstrated, explore partnering opportunities.

Conclusions

In an era of reduced defense procurement, commercial contractors have become more interested in sharing repair and maintenance workloads with depots. Additionally, depots, in an effort to reduce overhead costs and retain core capabilities, are willing to enter into partnering arrangements with the private sector.

A legal framework and the authority to enter into partnering arrangements exist in title 10. These authorities differ in some respects between the Army and the Air Force as do their approach to partnering. The Army has used this legislation, as well as work sharing, to initiate several partnering arrangements which, according to Army and contractor officials, have been mutually beneficial. The Air Force, on the other hand, has not initiated any partnering arrangements, citing the lack of a designation from the Secretary of the Air Force identifying which logistics centers may use the sales statutes and the legislative requirement that the good or service provided by the depot not be commercially available. The Air Force, unlike the Army, has not developed criterion to determine commercial

availability, and in the absence of such criterion, has been reluctant to enter into any sales arrangements.

Recommendation

Considering DOD's expressed support of partnering, we recommend that the Secretary of the Air Force designate the Air Logistics Centers that may use the sales statutes and provide implementing guidance to include criteria for determining the commercial availability of goods or services provided by the centers.

Scope and Methodology

To develop information on the legal framework under which partnering can occur, we identified and reviewed legislation, DOD and the services' policies and procedures, and talked to the services' Offices of General Counsel. We surveyed the services to determine what partnering arrangements were ongoing or had been proposed at their depots, and the services' views of such arrangements.

In addition, we interviewed officials at the Office of the Secretary of Defense; Air Force Headquarters, Washington, D.C.; Army Headquarters, Washington, D.C.; the Naval Sea Systems Command, Arlington, Virginia; the Naval Air Systems Command, Patuxent River, Maryland; the Army Material Command, Alexandria, Virginia; Air Force Materiel Command, Wright-Patterson Air Force Base, Ohio; and the Army's IOC, Rock Island, Illinois; and the Army's program manager for Abram tanks. We also visited the Ogden Air Logistics Center, Hill Air Force Base, Utah, and the Anniston Army Depot, Anniston, Alabama.

To obtain private sector views on partnering, we interviewed officials and obtained information from Lockheed Martin, Arlington, Virginia; General Dynamics Land Systems, Anniston, Alabama; United Defense Limited Partnership, Arlington, Virginia.; and United Defense Limited Partnership-Steel Products Division, Anniston, Alabama.

We did not independently verify the benefits reported by the depots and the contractors; however, we did obtain documentation related to and supporting the reported figures.

We conducted our review between June 1997 and February 1998 in accordance with generally accepted government auditing standards.

Agency Comments and Our Evaluation

DOD concurred with our findings and recommendation and provided a number of comments that it characterized as technical. Where appropriate, we made minor changes and clarifications in response to these comments. However, we believe that one of the comments warrants further discussion. DOD commented that the definition of partnering varies and that the Air Force has done many projects that could be considered partnering. As an example, DOD cited an agreement between Warner Robins Air Logistics Center and Lockheed Martin Corporation for repair services for the LANTIRN navigation and targeting systems. During our review, we discussed the LANTIRN project with officials from Warner Robins. It was explained that the project was to be implemented in two phases, with phase I being a firm-fixed price contract awarded to Lockheed Martin for the repair of 40 items. According to Warner Robins officials, this contract was essentially the same as any contract the Center enters into except the contractor would perform the work at Center facilities. These officials stated that phase I of the LANTIRN project does not constitute a partnering arrangement. However, under phase II of the project, if approved, Lockheed would subcontract with the Center for repair services to the LANTIRN for foreign military sales. This would be considered a partnership arrangement as defined in our report, because it constitutes the use of public sector facilities and employees to perform work or produce goods for the private sector.

We are sending copies of this report to the Secretaries of Defense, the Army, the Air Force, and the Navy; the Director, Office of Management and Budget; and interested congressional committees. Copies will be made available to others upon request.

If you have any questions concerning this report, please contact me at (202) 512-8412. Major contributors to this report are listed in appendix III.



David R. Warren, Director
Defense Management Issues