

# *Evaluation*



# *Report*

OFFICE OF THE INSPECTOR GENERAL

## EQUIPMENT PRE-POSITIONED AFLOAT

Report No. 97-054

December 20, 1996

**DEPARTMENT OF DEFENSE**

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### **Acronyms**

CINC	Commander in Chief
GAO	Government Accounting Office
MAGTF	Marine Air-Ground Task Force
MDSS II	MAGTF Deployment Support System II



**INSPECTOR GENERAL**  
DEPARTMENT OF DEFENSE  
400 ARMY NAVY DRIVE  
ARLINGTON, VIRGINIA 22202-2884



December 20, 1996

MEMORANDUM FOR AUDITOR GENERAL, DEPARTMENT OF THE ARMY

SUBJECT: Evaluation Report on Equipment Pre-positioned Afloat  
(Report No. 97-054)

We are providing this report for the Army's information and use.

We considered management comments on a draft of this report in preparing the final report. The Army's comments were fully responsive; therefore, additional comments are not required.

We appreciate the courtesies extended to the evaluation staff. Questions on the evaluation should be directed to Captain A. L. Lawson, U.S. Navy, Evaluation Program Director, at (703) 604-9555 (DSN 664-9555) or Lieutenant Colonel Gary L. Williams, U.S. Army, Evaluation Project Manager, at (703) 604-9566 (DSN 664-9566). See Appendix F for the report distribution. The evaluation team members are listed inside the back cover.

A handwritten signature in black ink that reads "Robert J. Lieberman".

Robert J. Lieberman  
Assistant Inspector General  
for Auditing

## Office of the Inspector General, DoD

Report No. 97-054  
(Project No. 6RB-0011)

December 20, 1996

### Equipment Pre-positioned Afloat

#### Executive Summary

**Introduction.** Pre-positioning of war reserve materiel afloat supports the geographic combatant commanders and speeds response to force requirements in the theaters. Reliance on pre-positioned equipment has increased considerably in recent years with the drawdown of forces.

Today, pre-positioning afloat programs include 14 Army ships with unit equipment, supplies, and munitions; 1 Navy hospital ship; 3 Air Force ships with munitions; 13 Marine ships with unit equipment, supplies, and munitions; and 3 Defense Logistics Agency ships with bulk fuel.

**Evaluation Objective.** The evaluation objective was to assess the effectiveness of the Army, Air Force, and Marine Corps inventory procedures for war reserve afloat programs.

**Evaluation Results.** The Army has not yet fully developed inventory management procedures for afloat pre-positioning. The Army rapidly expanded its program to pre-position equipment afloat without first publishing criteria, policy, plans, and doctrine. As a result, the Army may not be able to ensure effective management of materiel pre-positioned afloat in support of the combatant commanders. The Marine Corps, with 12 years of pre-positioning afloat experience, has adequate management systems that produce reliable inventory data. The Air Force, with a smaller program, has adequate management systems, uses the Marines Corps data system, and has similarly reliable inventory of afloat munitions. See Part I for a discussion of the evaluation results.

**Summary of Recommendation.** We recommend that the Army publish and implement updated materiel management policies for its pre-positioning afloat program.

**Management Comments.** The Army plans to publish and implement updated management policies for its pre-positioning afloat program. Although not required to comment, the Air Force provided clarification regarding port locations and munitions requirements. Details on managements' comments are in Part I of the report, and the full texts of managements' comments are in Part III.

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## **Part I - Evaluation Results**

### Evaluation Background

**Purpose of Pre-positioning Afloat Equipment.** Pre-positioning equipment, supplies, and munitions afloat supports the war fighting requirements of the combatant commanders in chief (CINCs) to meet forward presence and crisis response missions by ensuring rapid deliveries of war reserve materiel. Each of the Services (Army, Navy, Air Force, and Marine Corps) pre-positions materiel afloat, and the Defense Logistics Agency pre-positions common fuel supplies afloat. Pre-positioning of war reserve materiel afloat speeds response to the CINCs by overcoming two fundamental deployment problems. First, pre-positioning reduces reliance on relatively slow sealift deliveries from the continental United States to theaters. Second, pre-positioning avoids the high cost of the large airlift required to deliver sizable quantities of unit equipment in time to meet the CINCs' needs. For this evaluation, we limited the scope of our review to the Army, Air Force, and Marine Corps pre-positioning programs.

**Changes that Affected Pre-positioning War Reserve Materiel.** DoD pre-positioning programs have changed significantly since the end of the cold war. The DoD Mobility Requirements Study, January 1992, addressed the post-cold war environment and concluded that DoD needed to pre-position more heavy combat capabilities. The pre-positioning of those capabilities is necessary to meet the national military objectives to stop enemy advances early, reduce risks, and speed the successful conclusion of major contingencies. Key to this new philosophy is rapid force projection from the United States or other locations overseas to meet growing regional threats and crises. The DoD reliance on pre-positioning afloat programs increased significantly during the 1990's. The table shows the increase and projected increase in Army and Marine Corps pre-positioning ships.

#### Pre-positioning Ships

<u>Organization</u>	<u>1990</u>	<u>1996</u>	<u>2000</u>
Army	4	14	16
Air Force	3	3	3
Marine Corps	<u>13</u>	<u>13</u>	<u>16</u>
<b>Total</b>	<b>20</b>	<b>30*</b>	<b>35</b>

\*Excludes one Navy hospital ship and three Defense Logistics Agency bulk fuel ships.

## Pre-positioning Afloat Programs

**Department of the Army.** Prior to Operation Desert Storm, the Army had four ships in its pre-positioning program. In 1992, the Army began expanding the Army Pre-positioned Afloat program when tasked to provide needed combat and support capabilities pre-positioned at sea. The Army established an "interim" force of seven ships to provide the combat equipment for a heavy brigade, along with field artillery and air defense capabilities. Today, the program consists of a total of 14 ships, a combination of Military Sealift Command charter ships and Government-owned Ready Reserve Fleet ships. To perform scheduled inventories and equipment maintenance, the Army is establishing a maintenance facility at the Naval Weapons Station, Charleston, South Carolina.

**Department of the Air Force.** The Air Force afloat pre-positioning program was established in 1980 and included three ships carrying ammunition, equipment, and supplies. Today, the program consists of three Military Sealift Command charter ships in the Mediterranean Sea, the western Pacific Ocean, and the Indian Ocean. The program supports air munitions requirements for the combatant CINCs. Scheduled unloading of vessels, inspection, and inventory of munitions has been performed at the Naval Weapons Station, Concord, California; Military Ocean Terminal, Sunny Point, North Carolina; and some overseas locations.

**Marine Corps.** Responding to a lack of readily available, heavy, fast-transit sealift, the Marine Corps Maritime Prepositioning Force program began in 1979 and became fully operational in 1985. Today, the program consists of 3 squadrons, comprised of 13 Military Sealift Command charter ships in the Mediterranean Sea, the western Pacific Ocean, and the Indian Ocean. The program supports ground combat and combat support equipment and 30 days of sustainment for three Marine Corps air-ground task forces (MAGTF) of about 18,530 Marines each. Scheduled inventory and maintenance of equipment on those ships is performed ashore at Blount Island in Jacksonville, Florida.

Appendix C provides additional information on the three pre-positioning programs.

**Governing Directives.** The DoD, the Army, the Air Force, and the Marine Corps have established regulatory guidance for pre-positioning programs. DoD Directive 3110.6, "War Reserve Materiel Policy," April 25, 1994, establishes fundamental policy for war reserve materiel that is pre-positioned afloat. Army Regulation 710-1, "Centralized Inventory Management of the Army Supply System," February 1, 1988, prescribes policy, procedures, and responsibilities for managing and operating Army war reserve materiel programs. Air Force Policy Directive 25-1, "War Reserve Materiel," May 30, 1995, assigns responsibility for pre-positioned afloat war reserve materiel to the Air Force Deputy Chief of Staff, Logistics. Marine Corps Order P3000.17, "Maritime Prepositioned Force Planning and Policy Manual," May 14, 1992, provides service policies and guidance and assigns organizational responsibilities for planning and management of the Marine Corps pre-positioned afloat program.

## **Evaluation Results**

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### **Evaluation Objective**

The objective of this evaluation was to assess the Army, the Air Force, and the Marine Corps inventory procedures for pre-positioning afloat programs. Appendix A describes the evaluation process. Appendix B summarizes other coverage related to the evaluation objective, and Appendix D discusses additional matters of interest.

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## **Pre-positioning Afloat Policies and Management Controls**

Army policy for materiel pre-positioned afloat is incomplete. The Army rapidly expanded its pre-positioning afloat program without publishing updated governing policies and without establishing formal management control measures applicable to its pre-positioning afloat program. During the evaluation, the Army took corrective actions on most of the deficiencies by completing the doctrinal manual for afloat pre-positioning, creating a plan for the ashore maintenance process and for quality assurance and contractor surveillance, and establishing a management control program. However, the Army still needs to finalize and issue its overall regulatory policy. Without the foundation of finalized policy, the Army may not be able to effectively manage materiel pre-positioned afloat in support of the combatant commanders.

### **Army Management of Its Pre-positioning Afloat Program**

**Pre-positioning Afloat Policies.** The Army has not yet fully developed inventory management procedures for afloat pre-positioning. The primary Army war reserve implementing policy document has not kept pace with the development and needs of the program.

Army Regulation 710-1, "Centralized Inventory Management of the Army Supply System," February 1, 1988, chapter 6, "Management of War Reserves, Operational Projects, and Pre-positioning of Materiel Configured to Unit Sets," describes the roles and responsibilities for the pre-positioning of Army war reserve materiel. However, that policy is not current. Army Regulation 710-1 relates to land-based materiel and does not describe the management of equipment pre-positioned afloat under the current Army war reserve program. The Army and the combatant CINCs have no other official document to use in planning and measuring program performance. The updated version of the Regulation, which the Army expects to publish and distribute by early 1997, remains in draft.

The Army recognized the need for doctrinal policies to clarify and define specific responsibilities for the management of and operational functions for equipment pre-positioned afloat. To meet that need, during the evaluation, the Army published Field Manual 100-17-1, "Army Pre-positioned Afloat," on July 27, 1996. The manual should provide the framework for the operational management and employment of Army equipment pre-positioned afloat.

**Ashore Maintenance Plan.** The first ashore maintenance cycle for the Army equipment pre-positioned afloat began in October 1996. During our visits in March and April 1996 to Charleston, South Carolina, the Army did not yet have a published plan for conducting ashore maintenance of Army equipment pre-positioned afloat. The plan is necessary to provide Government and contractor

## Pre-positioning Afloat Policies and Management Controls

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personnel the guidance, policy, and procedures to maintain the Army's pre-positioned afloat equipment in a high state of readiness. The Army subsequently gave us a copy of its maintenance operational procedures manual dated April 26, 1996.

**Quality Assurance.** Most inventory management and maintenance of Army equipment pre-positioned afloat will be performed by contract. As of April 1996, the Army did not have a finalized quality assurance surveillance plan for oversight of contracted inventory and maintenance operations. However, the Army had developed a draft plan and scheduled Government personnel for contracting officer's representative training. The lack of emphasis on completing the quality assurance surveillance plan was evidence of the limited time and resources the Army devoted to planning for its first ashore maintenance cycle. Quality assurance needed more emphasis because all maintenance of pre-positioned afloat equipment below depot-level repair will be performed by a contractor. The Army subsequently gave us a copy of its completed quality assurance plan dated May 3, 1996.

**Management Control.** As of April 1996, Army managers of equipment pre-positioned afloat had not implemented a management control program as required by DoD Directive 5010.38, "Internal Management Control Program," April 14, 1987.\* Army managers of afloat assets were aware of the requirements for a management control program and intended to establish such a program in support of afloat pre-positioning. Subsequently, Army managers of pre-positioning afloat gave us documentation to demonstrate that, as of June 6, 1996, they had established adequate management controls.

## Air Force Management of Its Pre-positioning Afloat Program

The Air Force has viable management programs that also provide accurate inventory records and visibility of munitions pre-positioned afloat. The Air Force, which uses the Marine Corps data system, has published policies, documented procedures, and established adequate management systems that produce reliable inventory data. Our inventory of munitions planned for loading on the *Motor Vessel Buffalo Soldier* showed that the quantities and locations of munitions pre-positioned afloat specified in the Air Force accounting system were 100-percent correct. The accurate inventory records give the combatant CINCs and Air Force component commands reasonable assurance that the identified quantities of munitions are available for their mission assignments.

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\*Revised on August 28, 1996, and titled "Management Control (MC) Programs."

## Marine Corps Management of Its Pre-positioning Afloat Program

The Marine Corps has implemented a comprehensive system of management controls for its pre-positioning afloat program to include a quality assurance program at all levels of management. As a result, the Marine Corps has viable management programs that ensure reliable inventory records and provide visibility of assets pre-positioned afloat. With 12 years of pre-positioning afloat experience, the Marine Corps has published policies, documented procedures, and established adequate management control systems. Those systems produce reliable inventory data and equipment afloat maintained above a 90-percent readiness level. The management procedures and automated systems the Marine Corps uses are comprehensive and consistent. Results of our inventory of major end items aboard the *Motor Vessel Williams* showed that inventories were 100-percent accurate. The number of major end items reported as on hand and the precise stowage location aboard the ship were all correct. Additionally, the inventory results showed no discrepancies for supporting secondary items. We verified inventories of items packed in containers against system-generated inventory records. The verification showed only minor discrepancies. Because of the Marine inventory process, CINCs can rely on the data when planning for employment of afloat assets.

## Conclusion

The Army should accelerate establishment of policies, procedures, and plans for its afloat pre-positioning program similar to those employed by the Marine Corps. The Army will have a more effective program if it publishes updated regulatory policy, which is important to a pre-positioning afloat program, particularly in the planning and establishing stages when major investments must be made. Without responsibilities and functional operations clearly defined, the Army has no foundation to provide combatant commanders accurate, readily accessible information on inventory and the operational readiness status of assets.

## Recommendation, Management Comments, and Evaluation Response

**We recommend that the Army Deputy Chief of Staff, Logistics, immediately publish and implement the updated Army Regulation 710-1, "Centralized Inventory Management of the Army Supply System."**

**Army Comments.** The Army indicated that guidance has been and will be published on material management and operational policies for the

## **Pre-positioning Afloat Policies and Management Controls**

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pre-positioning afloat program. The Army expects to issue an updated Regulation 710-1 in April 1997. In the interim, the Army intends to publish guidance in December 1996. The complete text of the comments is in Part III.

**Air Force Comments.** Although not required to comment, the Air Force provided information on port locations and munitions requirements. The complete text of the comments is in Part III.

**Evaluation Response.** The Army's response meets the intent of the recommendation.

## **Part II - Additional Information**

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## Appendix A. Evaluation Process

### Scope

The original objectives of this evaluation were:

- o to assess the effectiveness of the Military Departments' war reserve pre-positioning afloat programs in meeting the forward presence and crises response elements of the Defense Planning Guidance for FY 1996-2000; and

- o to determine whether equipment requirements for pre-positioning are supported adequately by the proponents of the various afloat programs, have global utility, and support the CINCs.

Upon completion of the survey phase of the evaluation, we limited the scope to assessing the effectiveness of inventory procedures of the Army, Air Force, and the Marine Corps pre-positioning afloat programs. To assess effectiveness of those programs we:

- o determined inventory processes and procedures for Army, Air Force, and Marine afloat pre-positioning programs;

- o evaluated the accuracy of inventories of embarked equipment by conducting spot checks of pre-positioned afloat equipment during maintenance cycles; and

- o determined the maintenance process that ensures equipment readiness for the pre-positioning afloat programs.

We did not evaluate the effectiveness of the pre-positioning afloat programs of the Navy (one hospital ship) and the Defense Logistics Agency (three ships with bulk fuel).

### Methodology

We concentrated on and extensively reviewed the Marine Corps inventory procedures because the Marine Corps had the most experience with afloat pre-positioning programs.

We observed and evaluated inventory procedures for Marine Corps equipment pre-positioned afloat during a complete maintenance cycle at Blount Island, Florida, for one ship, the *Motor Vessel Williams*. The entire maintenance cycle, spanning about 2 months, included the unloading of all pre-positioned

equipment from the ship, complete inventory, corrective and preventive maintenance ashore, and loading of equipment back on the ship at the completion of the cycle.

Also, we observed and evaluated inventory procedures for Air Force munitions pre-positioned afloat during the initial week of a month-long loading of munitions aboard the *Motor Vessel Buffalo Soldier*.

We were not able to observe and physically verify inventory procedures of Army equipment pre-positioned afloat during the evaluation. Due to space limitations aboard ship, inventory accuracy can best be determined when equipment has been discharged from a ship. The Army afloat equipment was not scheduled to begin its first ashore maintenance cycle until October 1996, but we included the Army's program in this evaluation to determine whether the Army had made progress in improving shortfalls identified in the October 1995 report by the Inspector General, Department of the Army (see Appendix B, Summary of Related Coverage.) Although we were unable to physically verify any ship loads, we interviewed Army pre-positioning afloat managers; reviewed new data and information dated October 1995 through April 1996; and visited Charleston, South Carolina, the future site for inventory and maintenance management of Army equipment pre-positioned afloat.

We determined what measures the Army has taken to implement the recommendations in the Army's October 1995 report on Army war reserve materiel. Additional details are in Appendix D, Other Matters of Interest.

Complete verification of inventories of Army equipment afloat will not be possible until the Army unloads all of its pre-positioned equipment. Unloading of equipment and the Army's first ashore maintenance cycle began in October 1996 and will continue through June 1998.

We did not use computer-processed data to perform this evaluation.

**Evaluation Period and Standards.** We performed this evaluation from October 1995 through August 1996 in accordance with standards implemented by the Inspector General, DoD. The evaluation did not rely on computer-processed data or statistical sampling procedures. A list of organizations visited or contacted is in Appendix E.

## Management Control Program

DoD Directive 5010.38, "Internal Management Control Program," April 14, 1987,\* requires DoD organizations to implement a comprehensive system of

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\*Revised on August 28, 1996, and titled "Management Control (MC) Programs."

## Appendix A. Evaluation Process

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management controls that provides reasonable assurance that programs are operating as intended and to evaluate the adequacy of the controls.

**Scope of Review of the Management Control Programs.** We reviewed management control procedures for the Army, Air Force, and Marine Corps that relate to the recording and tracking of inventory for their afloat pre-positioning programs.

**Adequacy of Management Controls.** We identified a material management control weakness as defined by DoD Directive 5010.38. As of April 1996, the Army had not yet implemented a management control program for its afloat pre-positioning program. The Air Force and the Marine Corps have adequate management controls for their afloat pre-positioning programs.

**Army.** Risk assessments should occur as part of planning for implementation of a new program. Although Army afloat pre-positioning managers had not yet implemented a management control plan, Army officials were aware of the requirement and intended to establish such a program in support of afloat pre-positioning. Subsequently, Army managers of pre-positioning afloat furnished us a copy of a report dated June 6, 1996, documenting that they had established adequate management controls to provide reasonable assurance that property, funds, and other assets are safeguarded.

**Air Force.** The Air Force has a sufficient management control structure for the afloat pre-positioning program. The Air Force Materiel Command, responsible for the afloat pre-positioning program, has established war reserve materiel assets as an assessable unit in which to evaluate the operational procedures and processes of the afloat pre-positioning program.

**Marine Corps.** The Marine Corps has implemented a comprehensive system for management control. Blount Island Command's management control program is part of the management control program of the Deputy Commander for Logistics Operations, Marine Corps Logistics Bases, Albany, Georgia. Blount Island Command identifies actions taken to correct material weaknesses and to improve management controls. Quality assurance visits by higher level officials reinforce the management control program. Blount Island Command also provides an Annual Statement of Assurance to its higher level program managers.

**Adequacy of the Self-Evaluations of Applicable Management Controls.** Army afloat pre-positioning managers had not yet formalized an afloat pre-positioning management control plan; therefore, no self-evaluation had been performed. We did not assess the self-evaluation of applicable management controls for the Air Force or the Marine Corps pre-positioning programs because we found no material weaknesses in those programs.

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## **Appendix B. Summary of Related Coverage**

### **General Accounting Office**

**General Accounting Office (GAO) NSIAD-94-196R (OSD Case No. 9716), June 1994, "War Reserve Materiel."** The review assessed the amount of war reserves, pre-positioning of unit sets of equipment, and pre-positioning equipment afloat. Specifically, GAO evaluated the level of future DoD war reserves and pre-positioned equipment and supplies. The report concluded that the total requirements for war reserve assets have declined, while requirements for afloat pre-positioned assets have increased, primarily due to the requirement to place one Army brigade set of equipment afloat. The report further concluded that the Army's requirement to pre-position a brigade sets throughout the world might reduce some DoD surge sealift requirements. The report contains no recommendations.

**GAO/NSIAD-93-39 (OSD Case No. 9116), November 1992, "Military Afloat Prepositioning: Wartime Use and Issues for the Future."** The purpose of this project was to review the recommendations of the DoD Mobility Requirements Study, January 1992. Specifically, GAO determined how afloat pre-positioning was used during the Persian Gulf War, evaluated initiatives to improve afloat pre-positioning, and identified issues related to the DoD plan for the expansion of afloat pre-positioning. The review showed that afloat pre-positioning enabled DoD to begin delivering equipment and supplies to Saudi Arabia about 2 weeks earlier than if the equipment and supplies had been sealifted from the continental United States. The report highlighted several problems with afloat pre-positioning during the deployment, including some pre-positioned items that were not needed, and with inadequate automated asset tracking systems. The GAO stated that DoD needs to resolve several issues related to costs and operational effectiveness of the planned expansion of Army pre-positioning. The DoD generally concurred with the report findings. However, DoD management believed that the DoD Mobility Requirements Study fully addressed all the issues in the GAO recommendation. In response, the GAO maintained that the Mobility Requirements Study report of January 1992 did not answer all the issues.

### **Office of the Inspector General, DoD**

**Report No. 96-009, "The U.S. Marine Corps Maritime Prepositioning Force Enhancement Program," October 1995.** This project evaluated plans to expand and enhance the Marine Corps Maritime Prepositioning Force. The evaluation concluded that combatant CINCs support maritime pre-positioning;

## Appendix B. Summary of Related Coverage

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equipment to be added has been identified, is on hand, and available for embarkation; and that the Navy was determining the best means to acquire three additional ships. The report contains no recommendations.

**Report No. 94-143, June 1994, "Implementation of the Mobility Requirements Study."** The audit evaluated the implementation of the recommendations from the DoD Mobility Requirements Study, January 1992. The report recommendations were to validate the DoD total pre-positioning requirement, determine and control the amount of equipment and supplies that should be pre-positioned on ships, revise acquisition objectives for strategic sealift, and set goals for obtaining contributions from foreign governments. The Joint Staff's response to changes in assumptions used in volume I of the Mobility Requirements Study, was published in the Mobility Requirements Study Bottom-Up Review Update, March 28, 1995.

### Department of the Army

**Inspector General, Department of the Army, October 1995, "Assessment of Army War Reserve Materiel."** The Inspector General, Department of the Army, conducted an assessment of Army War Reserve Materiel from September 1993 and through March 1995. The report on the assessment identified major systemic issues, including that no single office had authority over Army war reserve materiel, visibility of quantities and readiness condition for war reserve materiel was inadequate, and the readiness of afloat combat support and combat service support equipment was questionable.

During the initial loading of equipment, several pieces of loaded equipment were not mission capable. When the Army unloaded equipment during Operation Vigilant Warrior, the actual mission-capable rate was significantly less than reported by the Army. Most of the equipment required organizational-level maintenance before it could be used, and about 10-percent required direct support or higher level maintenance. Further, several pieces of equipment were determined to be not cost-effective to repair.

The report recommended that the Vice Chief of Staff of the Army designate a lead proponent on the Army Staff for war reserve materiel and that the Army Materiel Command ensure that all pre-positioned equipment is loaded at the required maintenance standard. The report did not request comments from management.

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## Appendix C. Additional Background Information

### Pre-positioning Afloat Programs

Pre-positioning war reserve materiel afloat supports two of four pillars of the Defense Planning Guidance for FY 1996-2001, forward presence and crises response. The Defense Planning Guidance, a key document of the Planning, Programming, and Budgeting System, focuses on forces and programs in the outyears.

The Joint Strategic Capabilities Plan provides guidance to the CINCs and Service chiefs for accomplishing military tasks and missions based on current capabilities. The Joint Strategic Capabilities Plan apportions afloat pre-positioned ships in the various theaters to multiple CINCs for planning purposes. Afloat pre-positioning, by design, has global utility and supports multiple CINCs.

**Army Afloat Pre-positioning.** Army pre-positioning afloat consists of equipment for a heavy brigade, sustainment stocks, and operational project stocks embarked on 14 vessels. The vessels include five Roll-on/Roll-off ships with unit equipment for the brigade set, two Roll-on/Roll-off ships with combat service support unit equipment, two container ships with sustainment stocks, three Lighter Aboard Ship vessels with ammunition, a T-Class Auxillary Crane Ship, and a Heavy Lift Pre-positioning Ship with watercraft. The seven Roll-on/Roll-off ships with unit equipment are from the Ready Reserve Force and are interim vessels. The Army's afloat pre-positioning program will eventually include eight Large, Medium Speed Roll-on/Roll-off ships and an additional Heavy Lift Pre-positioning Ship.

The Army Materiel Command is the executive agent for the Army's afloat pre-positioning program. One of the command's subordinate organizations, the Industrial Operations Command, Rock Island, Illinois, is the responsible agent for the program. The mission to support maintenance operations relating to the Army afloat pre-positioning program is tasked to Combat Equipment Group-Asia and further to Combat Equipment Base-Afloat, both at Goose Creek, South Carolina, near Charleston. The Combat Equipment Base-Afloat is responsible to establish, develop, and maintain the capability and capacity to oversee and manage operations related to Army equipment pre-positioned afloat.

**Air Force Afloat Pre-positioning.** The Air Force afloat pre-positioning fleet employs three merchant mariner vessels of munitions to support the combatant CINCs' theater requirements.

Scheduled unloading of vessels, inspection, and inventory of munitions has been performed at the Naval Weapons Station, Concord, California, and at Military

## Appendix C. Additional Background Information

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Ocean Terminal, Sunny Point, North Carolina. Overseas locations are used to complete load requirements and for some maintenance actions. The Naval Weapons Station, Concord, California, is currently performing support functions ashore for Air Force munitions. Ship maintenance periods, normally every 51 months, have been accelerated to every 30 months to facilitate current Air Force munitions modernization efforts. The Naval Weapons Station unloads munitions, conducts inventory, performs inspections, and loads munitions back on the vessels at the end of the cycle. An Air Force management team from Armament Operations Branch, Hill Air Force Base, Utah, the program's executive agent, is responsible for the management and control of Air Force afloat pre-positioning. The management team provides on-site direction and controls operations during the ashore cycles for Air Force munitions pre-positioned afloat. Port facility personnel and Air Force military personnel unload and load the ships. Those personnel ship and receive munition assets to and from depots. Port facilities are used for temporary storage of munitions not requiring shipment to depots.

**Marine Corps Afloat Pre-positioning.** The Maritime Pre-positioning Force Program, provides 13 ships, divided into 3 squadrons. The ships forward deploy the equipment and supplies needed by Marine Corps forces. The ships provide sets of ground combat, combat support equipment, and sustainment supplies and aviation support materiel for a MAGTF for 30 days. The equipment can be unloaded in 3 days. The maritime pre-positioning ships have the capabilities to drive vehicles on and off, to store containerized and bulk cargo, and to provide fuel and water. Under the Marine Corps pre-positioning program, Marines and selected fly-in-echelon equipment, such as helicopters, can be airlifted to assemble with the equipment and supplies on the pre-positioning ships unloading at the deployment location. Under the Maritime Pre-positioning Force Enhancement Program, the Marine Corps will attain three additional ships, based on congressional approval, in the coming years.

Blount Island Command, Jacksonville, Florida, is the executive agent for the Marine Corps pre-positioning program, which includes responsibility for inventory procedures and maintenance. The Marine Corps maintenance program is accomplished by a contractor through both shipboard maintenance and ashore maintenance cycles that take place every 30 months.

## Pre-positioning Afloat Requirements

**Requirements Determination.** The focus on forward presence and crisis response missions drives peacetime planning--the Services equip and supply as they are going to fight. The Services calculate force requirements using standard military units with associated support organizations to determine the equipment and supplies necessary to carry out the National Military Strategy, that is, to execute two major regional contingencies nearly simultaneously.

**Army Pre-positioning Requirements.** The requirement for a heavy Army brigade afloat was derived from the 1992 DoD Mobility Requirements Study.

## Appendix C. Additional Background Information

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Army afloat assets came primarily from the drawdown of units in Europe. When the equipment was first loaded on the vessels in 1993, the Army used equipment immediately on hand rather than a systematic process to determine requirements. The Army used the most expedient way to load its vessels and to launch its "interim" pre-positioned afloat program. Since that time, the Army has unloaded, maintained, and reloaded the equipment on five of seven vessels in a configuration that more readily supports the needs of the CINCs. The pre-positioning afloat managers of the U.S. Central Command indicated that support for combat units received during Operation Vigilant Warrior in October 1994 was satisfactory. However, afloat combat support and combat service support assets were not employed. Although the Army has worked to correct its shortcomings related to determining what assets should be aboard each vessel, not all the vessels have been reconfigured because of the 30-month maintenance cycle for the vessels.

**Air Force Pre-positioning Requirements.** The Air Force pre-positioning afloat program supports ammunition requirements of the combatant CINCs. The pre-positioned ships as part of Air Force rapid response swing stock, are designed to fill the gaps in the CINCs' on-hand starter stocks. The requirements determination process is well defined and documented. The process is stable and effective because requirements are determined through a formal process involving the warfighter and the acquisition managers.

**Marine Corps Pre-positioning Requirements.** The Marine Corps has a comprehensive and effective process to determine its pre-positioning afloat program requirements. The process has been refined over the last 5 years. For example, the Marine Expeditionary Forces, which will actually use the equipment and supplies stowed aboard the ships, are assigned to requirements planning teams to help develop and validate requirements. In addition to the planning teams, an annual review of pre-positioning requirements, known as the "Tailoring Conference," takes place to determine revisions necessary due to changes in force structure, equipment modernization, and replacement of items and to validate key documents based on the combatant CINCs' force requirements. At the conclusion of the conference, acquisition of assets and resources are adjusted accordingly and requirements are published in a Headquarters, Marine Corps/Department of the Navy document. The document, Navy/Marine Corps 2907, "Maritime Prepositioning Force Prepositioning Objective," is revised annually at the conclusion of the tailoring conference. As a result, the Marine Corps has a common baseline for its pre-positioned afloat force structure and the capability to assist in future planning.

This process establishes a sense of "ownership" of the equipment pre-positioned afloat, and as a result, the equipment inventory has been refined and streamlined to better support the unit that employs the equipment.

### Pre-positioning Afloat Inventory Management

One objective of pre-positioning afloat inventory management is to ensure that the correct equipment and supplies are available to meet CINC readiness requirements. The inventory management procedures and automated system used by the Marine Corps are well developed and comprehensive. The Air Force, using the Marine Corps data system, has similarly reliable inventory procedures. The Army's procedures and system are still being developed.

**Marine Corps Inventory Management.** The Marine's resource management system is the MAGTF Deployment Support System II (MDSS II). The MDSS II is a microcomputer system that serves as the hub of the Marine Corps logistic systems. As part of inventory management and control, every item of equipment and associated supplies are tracked on the MDSS II by class category and stowage location. Inventory managers periodically review the accuracy of the data in the system and, when appropriate, make corrections.

We conducted a pre-download test of the MDSS II system and the Marine Corps inventory management program. The test consisted of a random sample of 73 major end items aboard the *Motor Vessel Williams*. Inventory results were 100-percent accurate for the combat-essential items selected. The test was a comparison of system-generated reports to a physical verification of the 73 selected items. Included in the test data were the item control number, status of the item (readiness condition), quantity required, quantity authorized and on hand, and the precise stowage location aboard the ship. In another random test of 26 major end items "mobile-loaded" with supporting secondary items, there were no discrepancies in 634 items associated with the 26 major end items. In addition to those tests, 5 containers packed with 9,098 items were verified against system-generated inventory records. Of the 9,098 items, we found 9,085. Thirteen items not found were nonessential and, therefore, did not affect the overall readiness rating. The Marine inventory process provides CINCs reasonable assurance that the data are highly reliable in planning crisis response missions.

**Air Force Inventory Management.** The Air Force uses the same automated system (MDSS II) as the Marine Corps. We spot-checked munition assets planned for loading on the *Motor Vessel Buffalo Soldier* to determine the accuracy of inventory of Air Force munitions pre-positioned afloat. Inventory records showing the temporary location of munitions at various points during the ashore cycle, as well as the final stowage locations were 100-percent accurate. The locations specified in the Air Force accounting system were all correct. The Air Force inventory process provides reasonable assurance that combatant CINCs' staffs and Air Force component commands know the exact quantities of munitions available for their mission assignments.

**Army Inventory Management.** In 1993, the Army assumed responsibility for an expanded pre-positioning afloat program and took immediate steps to load its available "interim" fleet with assets (equipment and supplies). Loading those assets was a complicated and difficult task because of the turbulent conditions under which the assets were received. Those conditions included a

time-sensitive, constrained loading of assets from the European theater base closings, responses to operations other than war, and a 30-month ships' schedule that prevented a systematic dock-side inventory of each ship. However, the Army attempted to gain control of its afloat inventory and asset visibility by using the MDSS II, the automated inventory accountability system used by the Marines. In 1995, the Army contracted with the developers of the MDSS II to create an Army-unique automated inventory system to meet Army requirements.

### **Pre-positioning Afloat Equipment Maintenance**

The goal of afloat equipment maintenance is to ensure that all items are in the highest operational condition. We looked extensively at the Marine Corps maintenance of equipment pre-positioned afloat because of the Marine Corps' experience factor and the availability of an ashore maintenance cycle during the evaluation period. Our consideration of maintenance of Air Force munitions was minimal because maintenance of munitions occurs at DoD depots and not at the site where the ship unloads. The first cycle of ashore maintenance of Army vehicles pre-positioned afloat began in October 1996.

**Marine Corps Maintenance Procedures.** Overall, the maintenance procedures for equipment pre-positioned afloat are managed effectively and result in high equipment readiness ratings. The maintenance for the afloat pre-positioned equipment is performed under contract with Allied Signal Technical Services Corporation. On a 30-month rotational basis, all equipment and supplies are unloaded from the ship, serviced, and repaired before reloading on the ship. The DoD readiness reporting system showed that the Marines reported 90 percent or above for its combat-essential equipment in the maritime pre-positioned force. The Marines have used feedback mechanisms, such as lessons learned to improve, streamline, and correct the maintenance management of pre-positioned afloat equipment.

**Marine Corps Shipboard Maintenance.** Procedures to manage equipment on board ship while at sea include day-to-day monitoring of equipment by contractor personnel. Rolling stocks, such as trucks, are stored with only inches to spare between each vehicle; therefore, any maintenance that requires maneuvering space is necessarily limited. Maintenance activities involve routine surveillance, visual technical inspection, observation for safety hazards, and minor repairs. During shipboard maintenance activities, when the Marine Corps identifies equipment as not mission capable, deficiencies are reported to Blount Island Command.

**Marine Corps Ashore Maintenance.** A contractor performs inspections, preventative maintenance, and modernization of equipment. A limited technical inspection and a fuel and oil analysis are performed on every vehicle. A total preventative maintenance check is conducted on any vehicle exercised or

## Appendix C. Additional Background Information

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employed since the last full maintenance cycle. Preventative maintenance is performed on all low-density vehicles and on a sample of high-density equipment.

**Marine Corps Quality Assurance.** The Marine Corps Quality Assurance Program is a coordinated effort that includes all levels of management and technical personnel. Participants are from Headquarters, Marine Corps; Logistics Division, Blount Island Command; Marine Expeditionary Forces; and contractor personnel. During the maintenance cycle, participants from those groups are on site to inspect work and to validate maintenance and inventory records. In addition to those efforts, the Marine Corps routinely conducts quality assurance inspections aboard ship. We reviewed records dated from 1994 through 1995 and found no corrective actions outstanding.

**Air Force Maintenance Procedures.** Maintenance of Air Force munitions pre-positioned afloat occurs at DoD depots and not at the site where munitions are unloaded from the pre-positioned ships. Maintenance protocol for munitions at the ashore site where the munitions are unloaded is limited to inspection and deficiency documentation, corrosion control, and requesting a replacement, instead of repair.

**Army Shipboard Maintenance.** After embarkation, the Army initially used the Marine Corps maintenance contract for shipboard caretaker operations. Beginning in April 1995, the Army switched to an Air Force contract field team contract for shipboard maintenance while afloat. On September 11, 1995, the new contractor, UNC Lear, assumed responsibility for Army assets aboard vessels. To perform the tasks aboard ship, the contractor has a shipboard section and mobile support teams that deploy to each ship twice a year.

**Army Ashore Maintenance.** The first maintenance cycle at Charleston, South Carolina, is scheduled for October 1996. Construction to modify a former Polaris Missile Repair Site is under way. Maintenance facilities (permanent structures) are being constructed, existing buildings are being modified, and the overall Military Construction Army program is reportedly on schedule and within budget. The final new construction, a building for use as a heavy-tracked vehicle maintenance facility, is scheduled for completion during late July 1997. Some additional staging areas and road improvements are planned for FY 1998. Ten "clam shelter" tents will be used until the permanent structures are available.

**Army Equipment Readiness.** Army equipment pre-positioned afloat is generally reported above 80-percent ready. Actual maintenance status and readiness condition of Army afloat equipment, particularly those combat service support assets not unloaded during Operation Vigilant Warrior, will not be known until that equipment is unloaded and operated. The actual readiness condition of equipment that has not been unloaded or exercised since it was placed on the ships remains unknown. The initial unloading and maintenance of combat service support equipment began with the first ashore maintenance cycle in October 1996.

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## Appendix C. Additional Background Information

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## Appendix D. Other Matters of Interest

### Pre-positioning Afloat Inventory Management

**Accuracy of Army Inventory.** Our evaluation of the Army inventory differed from that of the Marine Corps and the Air Force because the Army had no ships in port for an ashore maintenance cycle for us to examine and test inventory procedures and records. Therefore, we examined inventory records to determine how the data base was established, procedures to validate inventory, and actions to correct discrepancies. In addition, we interviewed managers and technicians associated with the pre-positioning afloat program to determine the accuracy of inventory for Army equipment pre-positioned afloat.

The Army War Reserve Deployment System established an asset baseline using MDSS II 1993 data. The data were gathered when equipment was loaded on ships in Saudi Arabia and Kuwait following Operation Vigilant Warrior in 1994 and subsequent exercises in Southwest Asia as well as from contractor inventories conducted aboard ships. During March and April 1996, the contractor, Stanley Associates, was building a new data base and was reconciling inventory records to establish accountability and to achieve visibility of equipment embarked on ships.

Inventory records for secondary items (such as camouflage nets) were not established when equipment was originally loaded in 1993. During Operation Vigilant Warrior in 1994, the Army unloaded equipment from five ships, maintained and reconfigured that equipment, adjusted stowage of secondary items, then loaded the equipment back aboard the ships. Even though the Army adjusted the stowage of secondary items, the Army still did not establish records to account for the stowage locations of secondary items. The importance of secondary items is paramount to the functional operation of the major end items; therefore, the Army needs to establish accountability and visibility of those items. When we asked Army pre-positioning afloat managers about the inventory discrepancies, they indicated that an accurate inventory of major and secondary items cannot be established until a full ashore maintenance cycle occurs. That cycle began in October 1996 and continues through June 1998.

### Equipment Maintenance Programs

**Army Shipboard Maintenance Plan.** We reviewed the shipboard maintenance plans for the *Motor Vessel Washington* and *Motor Vessel Wrath*. The shipboard maintenance plans for the vessels included a preventative maintenance work schedule afloat that listed shipboard maintenance tasks in October through December 1996. The fact that, during this period, both ships were scheduled to

## Appendix D. Other Matters of Interest

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be in port with all cargo discharged for the first ashore maintenance cycle casts doubt on the viability of the shipboard maintenance plan. Army pre-positioning managers addressed this issue following our April 1996 site visit.

**Army Shipboard Maintenance Status.** In June 1995, shipboard maintenance contract personnel reported 66 vehicles as not mission capable on the *Motor Vessel Washington*. Following transfer of responsibility to a new contractor, a status report in November 1995 listed all vehicles as fully mission capable. In March 1996, shipboard maintenance personnel reported 31 vehicles as not mission capable. Given an extremely limited ability to do repairs aboard ship, it is reasonable to conclude that the Army could not have remedied by November all deficiencies reported in June. The March 1996 maintenance report supports that assumption. Prior to October 1996, equipment on the *Motor Vessel Washington* and *Motor Vessel Wrath* had not been unloaded since the equipment was placed on the ships. As of October 26, 1996, the ashore maintenance cycle to determine the maintenance condition of those afloat assets was under way.

**Marine Corps Weekly Activity Reports.** Although the Marine Corps used several methods to conduct quality assurance, the Marine Corps did not prepare weekly activity reports as required in Marine Corps Command Order P4855.3, "Standard Operating Procedures for Quality Assurance of Services/Products in Support of the Maritime Prepositioning Ships Program," October 24, 1995. Although quality assurance at Blount Island Command works well, the lack of a formalized reporting method, such as a weekly activity report, does not provide data for a comprehensive analysis. The analysis is necessary to plan how resources should be used to correct problem areas and to track where processes are working well. The Marine Corps is formalizing its reporting process and preparing weekly activity reports at three levels.

**Marine Corps Program Evaluation Boards.** The Marine Corps did not strictly follow the processes specified in the maintenance contract to determine whether the Allied Signal Technical Services Corporation should receive award fees. The procedures the Blount Island Command used to determine the amount of award fees, although effective, were informal. The contract specifies that a program evaluation board review and evaluate contractor performance and produce a summary of the evaluation to the award determination officer. Instead, board members provided informal feedback in the form of electronic mail and handwritten comments. The Marine Corps has since drafted formalized procedures which went into effect on October 1, 1996.

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## **Appendix E. Organizations Visited or Contacted**

### **Office of the Secretary of Defense**

Director for Plans, Office of the Deputy Assistant Secretary of Defense (Requirements and Plans), Washington, DC

Director, Forces Projection Division, Office of the Director, Program Analysis and Evaluation, Washington, DC

### **Joint Staff**

Deputy Director for Plans and Resources, Office of the Director for Logistics (J-4), Washington, DC

Deputy Director for Strategy and Policy, Office of the Director for Strategic Plans and Policy (J-5), Washington, DC

Deputy Director for Joint Warfighting Capability Assessment, Office of the Director for Force Structure Resources and Assessment (J-8), Washington, DC

Pacific Command Division (J-33), Office of the Director for Operations (J-3), Washington, DC

Chief, Evaluation and Analysis Division, Office of the Director for Operational Plans and Interoperability (J-7), Washington, DC

### **Department of the Army**

Director, Management Control and Evaluation Programs, Office of the Assistant Secretary of the Army (Financial Management and Comptroller), Washington, DC

Office of Inspector General, Washington, DC

Director of Supply and Maintenance, Office of the Deputy Chief of Staff for Logistics, Washington, DC

Chief, Strategy Plans and Policy Division, Office of the Deputy Chief of Staff for Operations and Plans, Washington, DC

Force Readiness Division, Office of the Deputy Chief of Staff Operations and Plans, Washington, DC

Army Audit Agency, Alexandria, VA

Deputy Chief of Staff for Logistics and Operations, U.S. Army Materiel Command, Alexandria, VA

Commander, Industrial Operations Command, Rock Island, IL

Commander, Combat Equipment Group-Asia, Goose Creek, SC

## Appendix E. Organizations Visited or Contacted

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### Department of the Air Force

War and Mobilization Plans Division, Office of the Deputy Chief of Staff, Plans and Operations Chief, Washington, DC  
Chief, Combat Support Division, Office of the Deputy Chief of Staff Logistics, Washington, DC  
Chief, Logistics Plan Division, Office of the Deputy Chief of Staff Logistics, Washington, DC  
Chief, Armament Operations Division, Hill Air Force Base, UT  
Chief, Budget Integration Division, Hill Air Force Base, UT

### Marine Corps

Chief, Amphibious/Maritime Prepositioning Force Section, Deputy Chief of Staff for Plans, Policies and Operations, Washington, DC  
Chief, Logistics Plans and Operations Branch, Deputy Chief of Staff for Installations and Logistics, Washington, DC  
Commander, Blount Island Command, Jacksonville, FL

### Unified Commands

Office of the Inspector General, Headquarters, U.S. European Command, Vaihingen, Germany  
Office of the Inspector General, Headquarters, U.S. Pacific Command, Camp Smith, HI  
Office of the Inspector General, Headquarters, U.S. Atlantic Command, Naval Base Norfolk, VA  
Office of the Inspector General, Headquarters, U.S. Southern Command, Panama City, Panama  
Office of the Inspector General, Headquarters, U.S. Central Command, MacDill Air Force Base, FL  
Office of the Inspector General, Headquarters, U.S. Special Operations Command, MacDill Air Force Base, FL  
Office of the Inspector General, Headquarters, U.S. Transportation Command, Scott Air Force, IL  
Office of the Inspector General, Headquarters, Military Sealift Command, Washington, DC

### Other Defense Organization

Chief, Internal Review Group, Defense Logistics Agency, Fort Belvoir, VA

**Non-Defense Organization**

National Security and International Affairs, General Accounting Office,  
Washington, DC

**Non-Government Organization**

Stanley Associates, Jacksonville, FL

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## **Appendix F. Report Distribution**

### **Office of the Secretary of Defense**

Under Secretary of Defense for Acquisition and Technology  
Deputy Under Secretary of Defense (Logistics)  
Director, Defense Logistics Studies Information Exchange  
Under Secretary of Defense for Policy  
Under Secretary of Defense (Comptroller)  
Deputy Chief Financial Officer  
Director, Program Analysis and Evaluation  
Deputy Comptroller (Program/Budget)

### **Joint Staff**

Director, Joint Staff  
Director for Operations (J-3)  
Director for Logistics (J-4)  
Director for Strategic Plans and Policy (J-5)  
Director for Force Structure, Resources and Assessment (J-8)  
Inspector General, Joint Staff

### **Department of the Army**

Assistant Secretary of the Army (Financial Management and Comptroller)  
Director, Management Control and Evaluation Programs, Deputy Assistant Secretary  
of the Army for Financial Operations  
Inspector General, Department of the Army  
Auditor General, Department of the Army  
Director of Supply and Maintenance, Deputy Chief of Staff for Logistics  
Director, Strategy Plans and Policy, Deputy Chief of Staff for Operations and Plans  
Director, Readiness and Mobilization, Deputy Chief of Staff for Operations and Plans  
Chief, Internal Review and Audit Compliance, Headquarters, Army Materiel  
Command  
Commander, Industrial Operations Command, Rock Island, IL  
Commander, Combat Equipment Group-Asia, Goose Creek, SC

### **Department of the Navy**

Assistant Secretary of the Navy (Financial Management and Comptroller)  
Auditor General, Department of the Navy

## **Department of the Air Force**

Assistant Secretary of the Air Force (Financial Management and Comptroller)  
Director, Internal Management Control  
Auditor General, Department of the Air Force  
Inspector General, Department of the Air Force  
Director of Supply, Deputy Chief of Staff Logistics  
Chief, War and Mobilizations Plans Division, Deputy Chief of Staff, Plans and Operations  
Commander, Hill Air Force Base  
Chief, Armament Operations Division  
Chief, Budget Integration Division

## **United States Marine Corps**

Deputy Naval Inspector General for Marine Corps Matters/Inspector General of the Marine Corps  
Deputy Chief of Staff for Plans Policies and Operations (Marine Corps)  
Director, Logistics Plans, Policy and Strategic Mobility, Deputy Chief of Staff for Installations and Logistics (Marine Corps)  
Commander, Blount Island Command, Jacksonville, FL

## **Unified Commands**

Commander in Chief, U.S. Central Command  
Inspector General  
Director for Logistics  
Commander in Chief, U.S. Special Operations Command  
Inspector General, U.S. Special Operations Command  
Director for Logistics, U.S. Special Operations Command  
Inspector General, U.S. European Command  
Inspector General, U.S. Pacific Command  
Inspector General, U.S. Atlantic Command  
Inspector General, U.S. Southern Command  
Inspector General, U.S. Transportation Command  
Commander, Military Sealift Command

## **Other Defense Organizations**

Director, Defense Contract Audit Agency  
Director, Defense Logistics Agency  
Director, National Security Agency  
Inspector General, National Security Agency  
Inspector General, Defense Intelligence Agency

## **Appendix F. Report Distribution**

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### **Non-Defense Federal Organizations and Individuals**

Office of Management and Budget  
Assistant Director, National Security Analysis, General Accounting Office  
Technical Information Center, National Security and International Affairs Division,  
General Accounting Office

Chairman and ranking minority member of each of the following congressional committees and subcommittees:

Senate Committee on Appropriations  
Senate Subcommittee on Defense, Committee on Appropriations  
Senate Committee on Armed Services  
Senate Committee on Governmental Affairs  
House Committee on Appropriations  
House Subcommittee on National Security, Committee on Appropriations  
House Committee on Government Reform and Oversight  
House Subcommittee on National Security, International Affairs, and Criminal  
Justice, Committee on Government Reform and Oversight  
House Committee on National Security

## **Part III - Management Comments**

# Department of the Army Comments



DEPARTMENT OF THE ARMY  
OFFICE OF THE DEPUTY CHIEF OF STAFF FOR LOGISTICS  
500 ARMY PENTAGON  
WASHINGTON DC 20310-0500

NOV 1996

DALO-SMW

MEMORANDUM THRU

DEPUTY CHIEF OF STAFF FOR LOGISTICS

~~CHARLES R. INGERSON, LTC, GS, ADECC~~  
DIRECTOR OF THE ARMY STAFF

ASSISTANT SECRETARY OF THE ARMY (INSTALLATIONS, LOGISTICS AND ENVIRONMENT)

FOR INSPECTOR GENERAL, DEPARTMENT OF DEFENSE (ANALYSIS AND FOLLOWUP)

SUBJECT: Evaluation Report on Equipment Pre-positioned Afloat  
(Project No. 6RB-0011)--INFORMATION MEMORANDUM

1. This is in response to USAAA memorandum of 5 Nov 96 (Tab A), which asked ODCSLOG to respond to your memorandum of 23 Sep 96 (Encl to Tab A). Your memorandum requested that ODCSLOG review the draft evaluation report on Equipment Pre-positioned Afloat.
2. The Army's response to your memorandum is at Tab B.

2 Encls

A. DAVID MILLS  
Director of Supply  
Management  
Directorate for Supply  
and Maintenance

CF:  
VCSA  
CDR, USAMC  
SAIG-PA  
DALO-ZXA

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1. Recommendation. Army Publish and Implement Updated Materiel Management Policies for its Pre-Positioned AFLOAT Program. The Department of the Army has either published or has in publication clear guidance on materiel management and operational policies for the pre-positioning afloat program.

a. AR 710-1 is currently in publication with expected delivery to the field Apr 97. Interim guidance was briefed to the field on 16 Sep 96. Written interim guidance will be published under the DCSLOG's signature and distributed to the field by early December.

b. FM 100-17-1 Army Pre-positioned Afloat Operations, Jul 96, defines all operational aspects in the employment of the pre-positioned afloat program.

c. TM 38-470 Storage of AWR-3 Material Pre-positioned Afloat, July 1996, defines detailed care of supplies in storage guidance on the preservation of equipment stored aboard vessels.

d. All of the above mentioned publications will be periodically reviewed for refinement and update, incorporating lessons learned and advance storage techniques.

2. Equipment Readiness Comments:

a. The Army took advantage of the five-year Coast Guard dry dock requirement and completed a 100 percent Technical Inspection to TM -10 and TM -20 (TM -10/-20) standards and inventory of all assets on the Cape Douglas, Cape Hudson and Cape Horn between 20 May 96 and 21 Aug 96. Inventory and maintenance accuracy were validated. The Army will continue to refine inventories and equipment maintenance during the scheduled transload from the current fleet to the Large Medium Speed Roll-on Roll-off (LSMR) and during any opportunity such as the dry-docking operation and exercises.

b. Most equipment readiness problems detected during download operations were minor in nature and, if not already fixed, will be corrected by a USAMC Logistics Support Element (LSE) prior to handoff to the fighting force, during the transload process or by the on-board maintenance personnel. All maintenance requirements are documented.

## Department of the Army Comments

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Final Report  
Reference

During the Mar 96 Iron Falcon exercise, the Army downloaded and exercised a unit set of equipment. The downloaded equipment was in a better than 90-percent fully mission capable condition.

c. The Army Shipboard Maintenance Plan is a dynamic program. Numerous factors to include delayed LMSR deliveries and delayed departures based on regional political situations require fully burdened planning. Smart management requires a continual process of evaluating the ongoing shipboard maintenance program.

### 3. Inventory Management Comments:

a. Appendix D implies that Stanely Associates maintains the accountable records for the AWR-3 program. The official HQDA accountable record under AMCL-8A is the Standard Depot System. Positive and accurate accountability is constantly maintained.

b. The AWRDS database is being refined to incorporate the most recent AWRDS change, AWRDS 2.0. This change integrates a complete graphical asset representation of all equipment, Basic Issue Item & Set Kit and Outfit component level inventories, expanded cataloging data and several other initiatives.

4. Editing Comments: Page 2, Table 1, End state for the Army is 16 ships. Page 3, Table 2, does not accurately compare the three programs; not all costs are fully burdened. Page 3, The Army had four ships (3 LASH and one HLPS) prior to Operation Desert Storm. Page 22, Army Shipboard Maintenance, change Air Force to Marine Corps. Page 23, 80-percent ready requires definition, Fully Mission Capable or TM -10/-20 condition. The number 80 percent is an inaccurate generality. The Army's maintenance standard is defined by the equipment's -10/-20 Technical Manuals.

Revised  
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Revised  
Page 20  
Page 20

# Department of the Air Force Comments

Final Report  
Reference



DEPARTMENT OF THE AIR FORCE  
HEADQUARTERS UNITED STATES AIR FORCE  
WASHINGTON, D.C.

23 October 1996

MEMORANDUM FOR INSPECTOR GENERAL, DEPARTMENT OF DEFENSE

FROM: HQ USAF/LGSR  
1030 Air Force Pentagon  
Washington DC 20330-1030

SUBJECT: Evaluation Report on Equipment Pre-positioned Afloat (Project No. 6RB-0011) (Yr Ltr, dtd 23 Sep 96)

Please consider the following comments relating to the Air Force Pre-positioned ship program. These comments do not change the over all intent of the report but improve the technical accuracy.

Page 3, Pre-positioning Afloat Programs, Department of the Air Force: The last sentence "Scheduled unloading of vessels, inspection, and inventory of munitions is performed at the Naval Weapons Station (NWS), Concord, California" should be changed to read "Scheduled unloading of vessels, inspection, and inventory of munitions has been performed at the Naval Weapons Station, Concord, California, Military Ocean Terminal, Sunny Point (MOTSU), North Carolina as well as some overseas locations." Comment: The Air Force typically competes ship crossloads between NWS and MOTSU and both ports have performed ship crossloads. Overseas locations are used for container "top-offs" and some maintenance actions.

Revised

Page 18, Appendix C, Air Force Afloat Pre-positioning, second paragraph. Ship maintenance periods are 51 months, not 30 months. The Air Force accelerated the maintenance cycle only to facilitate our modernization efforts of the pre-position fleet. As mentioned previously, NWS is not the only facility to support the Air Force during scheduled maintenance periods. The last sentence should read "Port facility personnel along with AF Military personnel unload and load ships and ship and receive munition assets to and from depots. Port facilities may be used for temporary storage of munitions."

Revised  
Pages  
15-16

Page 19, Appendix C, Air Force Pre-positioning Requirements. After the first sentence "The Air Force pre-positioning afloat program supports ammunition requirements of the combatant CINCs." Insert the following sentence "The pre-positioned ships as part of the Air Forces Rapid Response Swing Stock, are designed to fill the gaps in the CINC's on-hand starter stock."

Revised  
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## Department of the Air Force Comments

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For additional information, please contact Ms Kate O'Sullivan, HQ USAF/LGSR, DSN 225-2840 or Lt Col Chris Walecka, HQ USAF/LGSR, DSN 227-3168.



ALLEN W. BECKETT, SES  
Chief, Combat Support Division  
Director of Supply  
DCS/Logistics

## Evaluation Team Members

This report was prepared by the Readiness and Operational Support Directorate,  
Office of the Assistant Inspector General for Auditing, Department of Defense

Thomas F. Gimble  
Salvatore D. Guli  
Rosemary V. Hutchison  
Captain A.L. Lawson, U.S. Navy  
Colonel Tim T. Turner, U.S. Air Force  
R. Marvin Cox  
Lieutenant Colonel Gary L. Williams, U.S. Army  
Warren G. Anthony  
Pamela Steele Nelson  
Nancy C. Cipolla  
Cristina Maria H. Giusti  
Mary M. Cleary