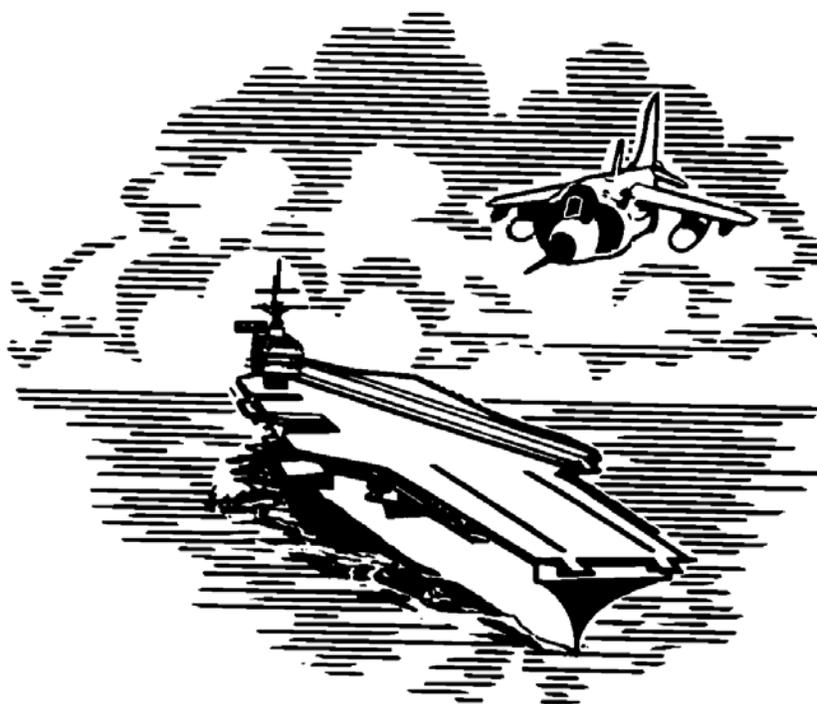




Audit Report



The Norway Air-Landed Marine Expeditionary Brigade Prepositioning Program

N2003-0079

02 September 2003

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7547/2002-0127

02 September 03

MEMORANDUM FOR THE NAVAL INSPECTOR GENERAL

Subj: **THE NORWAY AIR-LANDED MARINE EXPEDITIONARY BRIGADE
PREPOSITIONING PROGRAM (N2003-0079)**

Ref: (a) SECNAV Instruction 7510.7E, "Department of the Navy Internal Audit"

1. We have completed the subject audit. This report focuses on the operational relevance and related cost effectiveness of the Norway Air-Landed Marine Expeditionary Brigade (NALMEB) prepositioning program in today's strategic environment. The objective of the audit was to verify if the requirement for the program is valid.
2. We made four recommendations to the Commandant of the Marine Corps. The Marine Corps did not concur with our recommendations. Therefore, all 4 recommendations are considered undecided and are being directed to the Naval Inspector General (acting as the facilitator for the Under Secretary of the Navy), for resolution within 6 months of the date of this report, in accordance with Secretary of the Navy Instruction 5200.34D.
3. In accordance with reference (a), this audit may be selected for followup. Any requests for this report under the Freedom of Information Act must be approved by the Auditor General of the Navy, in accordance with reference (a).
4. We appreciate the cooperation and courtesies extended to our auditors.

A handwritten signature in black ink, appearing to read "Bill A. Roderick", with a horizontal line underneath.

BILL A. RODERICK
Assistant Auditor General
Manpower and Reserve Affairs Audits

Copy to:
UNSECNAV
General Counsel
DNS
ASN (M&RA)

**Subj: THE NORWAY AIR-LANDED MARINE EXPEDITIONARY BRIGADE
PREPOSITIONING PROGRAM (N2003-0079)**

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Executive Summary

Overview

In 1981, the United States and the Kingdom of Norway signed a bilateral agreement establishing the Norway Air-Landed Marine Expeditionary Brigade (NALMEB) prepositioning program. The purpose of the program was to substantially decrease the Marines' deployment time and to allow for the rapid reinforcement of the northern flank of Norway in the event of a Soviet invasion. The bilateral agreement called for the preposition of equipment and 30 days of supplies in central Norway to support a Marine expeditionary brigade force structure of about 14,000 Marines. The program's prepositioning objective (PO) consisted of about \$415 million of equipment and supplies including ground support equipment, air and ground ammunition, and other support equipment. At the time of our audit, about \$304 million of the PO was actually on hand. For details, see Exhibit A of this report.

This audit was conducted from 23 July 2002 to 21 May 2003 to verify if the requirement for the program was justified. The audit was conducted as a result of a Naval Audit Service business risk assessment, "Risk Assessment of Navy and Marine Corps Presence Located Outside the Continental United States," N2002-0061 of 17 July 2002. The objective of the business risk assessment was to identify Navy and Marine Corps presence located outside the continental United States and relate the need for this presence to current military strategy and other readiness requirements. This was done so a determination could be made whether any of the overseas presence should be audited in the future. The review identified four high-business-risk overseas locations (including the NALMEB program) that were potential audit candidates for inclusions in future audit plans. Most of the conditions identified in this audit report existed as of July 2002 and still exist today.

Conclusions

The Marine Corps continues to store and maintain prepositioned inventory in Norway even though the strategic threat that rationalized the program ended with the demise of the Soviet Union. The Marine Corps plans to spend about \$45 million for operations and maintenance and about \$110 million to modernize through replacement of some of the prepositioned inventory during Fiscal Year (FY) 2003–FY 2008. The Marine Corps acknowledges that the threat to Norway no longer exists. However, they assume the program will continue with little change as long as other operational employments or uses for the program are identified.

We believe that the Marine Corps should discontinue supporting and maintaining the program. The prepositioned inventory capability present today is mainly intended to meet the original Cold War mission of the program. Also, none of the inventory is currently sourced to an approved or planned Joint Chiefs of Staff war scenario.

The Marine Corps has an opportunity to achieve savings by eliminating the prepositioned inventory in Norway. The Marine Corps could save about \$127 million to \$155 million by not operating and maintaining the program and canceling modernization contracts for ground equipment planned for replacement. Specifically, the Marine Corps could save its share of the operations and maintenance costs of about \$7.5 million annually or about \$45 million over the next 6 years. Additionally, the Marine Corps could avoid spending from \$82 million to \$110 million during FY 2003–FY 2008 by canceling planned modernization projects that will replace some of the prepositioned ground equipment. As discussed in this report, the prepositioned inventory is excess to Marine Corps-wide requirements, and therefore it is unnecessary to modernize this equipment through replacement.

We also concluded that the Marine Corps could achieve additional savings by using the excess prepositioned inventory (less ground ammunition, which is part of the War Reserve Material Requirement) to satisfy existing Marine Corps-wide shortages, and by canceling procurements for replenishing NALMEB inventory.

Corrective Actions

To correct the conditions noted in this report, we made four recommendations to the Commandant of the Marine Corps. These recommendations pertain to terminating the NALMEB program; redistributing prepositioned inventory to satisfy other Marine Corps-wide deficiencies, and canceling modernization projects and related procurements that replenish prepositioned inventory shortages. We received responses from the Commandant of the Marine Corps that did not concur with the recommendations. Therefore, we consider them undecided and are directing them to the Naval Inspector General (acting as the facilitator for the Under Secretary of the Navy), for resolution.

Federal Manager's Financial Integrity Act

The Federal Manager's Financial Integrity Act of 1982, as codified in Title 31, United States Code, requires each federal agency head to annually certify to the effectiveness of the agency's internal and accounting system controls. We did not review the actual day-to-day operations of the NALMEB program. Instead, we limited our review of the Marine Corps stewardship as it relates to the efficiency and effectiveness of the NALMEB program. Recommendations 1, 2, 3, and 4 address efficiencies that could be achieved by terminating the NALMEB program, and therefore, are considered internal control weaknesses. In our opinion, the weaknesses identified are significant enough to be considered for reporting in our next annual memorandum of material internal control weaknesses to the Secretary of the Navy.

Section A

Introduction

Background

In the late 1970s, the Department of Defense's (DoD's) strategic focus was protecting the North Atlantic Treaty Organization (NATO) and the world from the Soviet Union. In 1981, the Marine Corps and our NATO partner, the Kingdom of Norway, signed a bilateral agreement establishing a prepositioning program. The strategic environment was such that the defense of NATO's northern flank was the focus. Equipment and supplies were positioned in central Norway to reduce the reaction time and allow U.S. and allied forces to rapidly reinforce in the event of a Soviet invasion. The prepositioned equipment and 30 days of supplies were designed to support a Marine Expeditionary Brigade force structure of about 14,000 Marines. Due to the type of campaign envisioned, this force was oriented toward light infantry units and aviation units. This became the Norway Air-Landed Marine Expeditionary Brigade (NALMEB) prepositioning program, which the Marine Corps still maintains today. Similar to the current Maritime Prepositioned Force (MPF) concept, Marine forces would fly into central Norway with the remaining required equipment, marry up with the prepositioned equipment and supplies, and begin operations. The program's prepositioning objective (PO) establishes the type and quantity of equipment and supplies prepositioned in Norway. The development of the PO is primarily a U.S.-led action. The PO contains about \$415 million of equipment and supplies including ground support equipment, air and ground ammunition, and other support equipment to support the defense of Norway. During our audit, about \$304 million of the PO equipment and supplies were actually on hand. See Exhibit A of this report for details. The majority of the difference (about \$111 million) between the PO (\$415 million) and onhand balance (\$304 million) was attributed to aviation ammunition that was recently withdrawn for a military operation.

Since the early 1980s, the worldwide strategic balance and the defense environment in Europe have changed drastically. With the demise of the Soviet Union, NATO's strategic focus changed from the northern flank of Europe (Norway) to central and southern Europe. In the 1990s, U.S. strategic planning began to focus on both the Middle East and Asian coasts. In reaction to these changes in strategic planning, questions were raised within the U.S. Government over the continued need for the program. In 1995, the Department of Defense Inspector General (DoDIG) recommended elimination of the program. DoDIG concluded that the requirement to preposition equipment and supplies in Norway was no longer valid. However, because of political considerations the program remained intact. Also, in 1995, Norway and the U.S. modified the bilateral agreement, making several improvements to the program. Norway agreed to increase their share of the costs to operate and maintain the program and to allow for the use of the program's prepositioned inventory for out-of-Norway missions but within the European area of responsibility (AOR). The Marine Corps also agreed to rotate almost-unused equipment with used items from their operating forces. These changes were mainly made

because Congress, through the House National Security Committee, raised questions about the need of the program in the post-Cold War era. Recently, Norway agreed to the option for allowing the prepositioned inventory to be used for out of European AOR missions as well.

Questions remain today about the need for the program in the current strategic environment. In fact, both the current Quadrennial Defense Review (QDR) and Defense Planning Guidance (DPG) place a more strategic focus on the Middle East and Asian coasts and include a new defense strategy built around the concept of a “capabilities-based” approach rather than a specific adversary in a specific geographic area approach. Additionally, the current DPG calls for a review of all DoD-wide prepositioned programs including the NALMEB program. Because of these continuing questions, the Marine Corps contracted with the Center for Naval Analyses (CNA) in 2002 to conduct a study of the program for about \$300,000. The objective of the study was to determine the operational relevance, alternative uses, and potential future force structures for the program based upon the strategic environment changes and the potential operational missions. The study was completed in June 2003, subsequent to the issuance of the utilization report dated 21 May 2003. We reviewed CNA’s final report and determined that it did not contain any new information that would have us change our conclusions concerning the need for the NALMEB program in the current strategic environment.

Objective

The objective of the audit was to verify if the requirement for the NALMEB prepositioning program is justified.

Scope and Methodology

We performed the audit from 23 July 2002 to 21 May 2003 in accordance with generally accepted government auditing standards. We evaluated the necessity of the prepositioned inventory stored in Norway as part of the program from a military strategic standpoint. To do this, we reviewed the original and current requirement for the program. We then looked at how the program had changed since the end of the Cold War era. Finally, we reviewed current U.S. strategy and how the program relates to it. Exhibit B of this report shows the activities that we visited or contacted during the audit.

The NALMEB prepositioned inventory includes eight classes of inventory plus aviation support equipment. The inventory includes food rations, unit and major end items of ground equipment, construction material and repairables and consumables. During our audit, the onhand balance was short of the PO by about \$111 million, as shown in the table below. For additional details, see Exhibit A of this report.

<u>PO</u>	<u>Onhand Balance</u>	<u>Shortage</u>
\$415 million	\$304 million	\$111 million

The majority of the difference between PO and onhand balance was attributed to aviation ammunition that was recently withdrawn and transferred for a military operation.

We reviewed the Joint Officers Staff Guide and the Joint Publication for Campaign Planning, which provides guidance and principles governing military campaign planning, and identifies the importance of Operational Plans (OPLANS) and Concept Plans (CONPLANS) and their supporting documentation, identifying forces and supplies (including source of supply) in the deliberative planning process. We also reviewed the current QDR and DPG, which delineate the current national defense strategy.

We examined policies and guidelines relative to the management of the program and also the role of prepositioned inventory relating to support of any active or planned war scenarios. To ascertain whether the prepositioned inventory was planned for any current active war plan, we met with program management personnel and combatant command personnel from Marine Forces Atlantic (MARFORLANT) and Marine Forces Europe (MARFOREUR). We reviewed OPLANS and CONPLANS scenarios related to the European theater and discussed these plans with combatant command personnel.

We reviewed DoD directives, Marine Corps orders, publications, and supply manuals, and discussed supply issues relative to the program's prepositioned inventory with program personnel and MARFOREUR and MARFORLANT command personnel. We did this to determine if any portion of prepositioned inventory is part of the War Reserve Material Requirement (WRMR) and otherwise excess to Marine Corps peacetime and training requirements. We also obtained Marine Corps active forces authorized and onhand balances for combat essential principal end items (PEI) of ground equipment. The equipment authorized and onhand balances were accumulated at equipment rather than active force level. We obtained this data from the Marine Corps Readiness Equipment Module (MCREM), which provides an enhanced view of equipment readiness for Marine Corps ground equipment. We compared active force equipment procurements identified in MCREM to the onhand, prepositioned inventory of ground equipment.

We obtained documentation that showed that the program's prepositioned inventory was used to support eight out-of-area training exercises/operations during the 7-year period of 1996 through 2002. We also evaluated a cost analysis, which demonstrated an economical advantage of using the program's prepositioned inventory for out-of-area operations/exercises vice using inventory stored in the United States.

We calculated the monetary benefits that the Marine Corps could achieve by terminating the NALMEB program. To do this, we first obtained the Marine Corps and Norway burden-sharing agreement to determine the Marine Corps cost relative to the operation and maintenance of the program. We also obtained the FY 2002 actual costs and the FY 2003–FY 2008 budgeted costs to operate and maintain the program. We then reviewed 6 of these projects valued at about \$110 million that will replace 933 pieces of the prepositioned equipment as shown in Exhibit C of this report. We obtained the quantities and unit prices, and the year that the funding will be made available for these

projects from the applicable Marine Corps Systems Command modernization project managers. For five of the six projects, funding is to begin in FY 2004–FY 2008. Funding for the remaining project began in FY 2003.

We also identified other scenarios in which the Marine Corps could achieve additional monetary benefits using the excess prepositioned inventory to satisfy Marine Corps-wide shortfalls.

- Operating Unit Procurements. We obtained operating unit shortages and identified FY 2003 procurements to satisfy those shortages from MCREM. We compared the operating unit equipment shortages and purchases to the onhand program prepositioned inventory balances to determine if the program's equipment could satisfy the procurements.
- Depot repairs. We first obtained data from the Depot Level Maintenance program module of the Material Capabilities Decision Support System to obtain the quantities and the FY 2003 funded repairs for major end items of ground equipment turned into the Depot. We then compared the equipment repairs funded by the Depot to onhand program inventory balances to determine if the program's equipment and supplies could be used to cancel repairs.

We obtained FY 2003 procurements of Class IX repairables and consumables and FY 2003 through FY 2008 procurements of Aviation Support Equipment and matched the procurement files against the prepositioned inventory to determine if they could be used to cancel those procurements.

There were no previous audits of the program within the last 5 years by the Naval Audit Service, DoDIG, or the General Accounting Office. Consequently, we did not perform any followup.

The Naval Audit Service is an independent internal audit organization reporting to the Under Secretary of the Navy.

Section B

Finding, Recommendations, and Corrective Actions

Finding

Eliminating Prepositioned Inventory in Norway Provides an Opportunity for Savings

Synopsis

The Marine Corps continues to store and maintain prepositioned inventory valued at about \$304 million in Norway in support of the Norway Air-Landed Marine Expeditionary Brigade (NALMEB) program even though the strategic threat that rationalized the program no longer exists. The Marine Corps plans on spending about \$45 million for operations and maintenance and about \$110 million to modernize, through replacement of some of this inventory during Fiscal Year (FY) 2003–FY 2008. While the Marine Corps acknowledges that the threat to Norway no longer exists, they assume the program will continue with little change as long as other missions or uses for the program are identified. However, since the prepositioned inventory capability present today is mainly intended to meet the original Cold War mission of the program and none of the inventory is currently sourced to an approved or planned Joint Chief of Staff war scenario, the Marine Corps should discontinue supporting and maintaining the program. The Marine Corps could achieve savings of about \$45 million over the next 6 years, or about \$7.5 million per year for the operation and maintenance of the program. Additional savings of about \$82 million to \$110 million during the execution of the FY 2003–FY 2008 Future Years Defense program could be achieved by canceling the planned modernization projects. Furthermore, the prepositioned inventory could be used to satisfy existing Marine Corps equipment and supply shortfalls resulting in additional savings.

Discussion of Details

Background and Pertinent Guidance

In the late 1970s, the Department of Defense's (DoD's) strategic focus was protecting the North Atlantic Treaty Organization (NATO) and the world from the Soviet Union. In 1981, the United States and the Kingdom of Norway signed a bilateral agreement establishing the NALMEB program. The purpose of the program was to substantially decrease the Marines' deployment time and to allow for the rapid reinforcement of the northern flank of Norway in the event of a Soviet Union invasion. The bilateral agreement called for the prepositioning of equipment and 30 days of supplies in central

Norway to support a Marine expeditionary brigade force structure of about 14,000 Marines.

A prepositioning objective (PO) was developed that established the type and quantity of equipment and supplies prepositioned in Norway. The development of the PO was predominately a U.S.-led action. The prepositioned inventory was tailored to support an air-heavy but otherwise light, brigade-size force due to the threat environment envisioned. The PO was for about \$415 million of equipment and supplies including ground support equipment, air and ground ammunition, and other support equipment to support the defense of Norway. During our audit, about \$304 million of the PO equipment and supplies was actually onhand. See Exhibit A of this report for details. The majority of the difference (about \$111 million) between the PO (\$415 million) and onhand balance (\$304 million) was attributed to aviation ammunition that was recently withdrawn and transferred for a military operation.

Both the current Quadrennial Defense Review (QDR) and Defense Planning Guidance (DPG) emphasize the Middle East and Asian coasts and include a new defense strategy built around the concept of a “capabilities-based” approach rather than a specific adversary in a specific geographic area approach. The QDR was born amid congressional frustrations about the slow progress in military reform and policy changes following the end of the Cold War. A review is conducted every 4 years and includes a comprehensive examination of the national defense strategy, force structure, force modernization plans, infrastructure, budget plan, and other elements of the defense program and policies of the United States. The first QDR was dated May 1997 and the current QDR is dated 30 September 2001.

The DPG is issued by Secretary of Defense and contains defense strategy and guidance for key planning and programming priorities to execute that strategy. It reflects military advice and information recommended by Chairman Joint Chief of Staff and military services and is the final product of the planning phase and the basis for the programming phase. The current DPG is for FY 2004–FY 2009.

The Joint Doctrine for Campaign Planning Guidance, dated 25 January 2002, provides guidance and principles governing the planning of military campaigns at combatant command and subordinate joint force levels. The publication discusses the importance of deliberate planning in the military campaign process and identifies two critical planning documents, the Operational Plan (OPLAN) and the Concept Plan (CONPLAN). Time-phased force and deployment data (TPFDD) files identify forces and supplies (including the source of the supply) in support of OPLANs and in some cases CONPLANs.

Audit Results

Focusing the Marine Corps Prepositioned Equipment Strategy on Today's Threats Provides Opportunity for Savings

The Marine Corps continues to store and maintain prepositioned inventory valued at about \$304 million in Norway in support of the NALMEB program even though the strategic threat that rationalized the program no longer exists. Both the Marine Corps and Norway share the cost for the operation and maintenance of the program. Review of the burden sharing agreement shows that the total operations and maintenance costs for FY 2002 was about \$12.7 million with the Marine Corps share totaling about \$6.4 million. During FY2003–2008, total operations and maintenance costs are projected at about \$90 million with the Marine Corps share of about \$45 million, or about \$7.5 million per year. The Marine Corps also plans to modernize, through replacement, some of this prepositioned inventory at a cost of about \$110 million during FY 2003–FY 2008. See Exhibit C for details.

The worldwide strategic balance and the defense environment in Europe changed drastically with the demise of the Soviet Union in the 1980s. The strategic military focus shifted from the northern flank of Europe (Norway) to Central and Southern Europe. In the 1990s, the U.S. strategic planning began to focus on the Middle East and Asian littorals. The planning also included fighting and winning two simultaneous major regional contingencies. To reflect these strategic changes, DoD substantially reorganized defense forces and strategic postures. For example, U.S. Air Force Europe in the 1990s determined that U.S. Air Force expeditionary units and NATO partners would be better served from a more central location like Luxembourg than from Norway. As a result, four of nine collocated operating bases in Norway were closed and all the war reserve material was withdrawn.

More recently, as referenced in the FY 2001 QDR, a new defense strategy is being built around the concept of a “capabilities-based” approach rather than a specific adversary in a specific geographic area approach. This defense strategy reflects the fact that the U.S. cannot know with confidence who will pose threats to vital U.S. interests or those of U.S. allies and friends decades from now. Also, faced with growing instability in the Middle East and tensions in Asia, the U.S. military is reassessing its overseas bases and prepositioning options as part of the DPG for FY2004–FY2009. With continued focus on the Middle East and Asian regions, DoD’s strategic posturing continues to include moving prepositioned inventory out of the European theater to the Middle East and Asian regions. For example, as recommended by the FY 2003–2007 DPG, the U.S. Army is redistributing critical war fighting stock prepositioned in Europe to afloat stock near the Middle East and Asian coasts.

Although the focus of the U.S. military strategy has changed dramatically over the last 20 years, the NALMEB program, designed to support a Cold War strategic threat, still exists today. The program has changed very little in response to these military strategic

changes and the prepositioned inventory capability present today is still designed to meet the Cold War requirement of the 1981 bilateral agreement.

Reasons the Marine Corps Continues to Store Equipment and Supplies in Norway

We asked both NALMEB program managers and Marine Forces Atlantic (MARFORLANT) and Marine Forces Europe (MARFOREUR) personnel why the Marine Corps continued to support the program. They all acknowledged that the strategic threat to Norway no longer exists today. However, they also assume that the program will continue, because they maintain that:

- It is cost effective to use the prepositioned inventory for within and out-of-the-European area of responsibility (AOR) mission operations and training exercises rather than using inventory stored in the United States. As a result, the Marine Corps is exploring other available operational employment options to best chart the way ahead for the future of the program.
- Even if the prepositioned inventory is no longer required to support the rapid reinforcement of the northern flank of Norway, the inventory is not excess to the Marine Corps needs. They further state that the prepositioned inventory is part of the Marine Corps War Reserve Material Requirement (WRMR). Therefore, they maintain that the prepositioned equipment currently planned for modernization through replacement continues to be a valid requirement.
- Terminating the program would be a bad political move on the part of the United States because the Norwegians highly value the program. The political gain the United States receives from the program in terms of Foreign Military Sales and insuring friendship with a loyal NATO ally significantly outweighs the cost of the program.

We reviewed the Joint Doctrine for Campaign Planning Guidance, dated 25 January 2002, and obtained and reviewed all current European Command AOR OPLANs and CONPLANs scenarios. We also held meetings with responsible Marine Corps NALMEB program managers and combatant command personnel from MARFORLANT and MARFOREUR. We asked them about the role of the prepositioned inventory in any current approved or planned war scenario both within and outside the European AOR. We also discussed the role of the prepositioned inventory in any future mission operation. Based on our reviews and discussions, we determined that none of the prepositioned inventory is currently sourced to an approved or planned Joint Chief of Staff War scenario. We also learned that the war plan that originally rationalized the program in 1981 had not been active or updated for about the last 8 to 10 years.

We do not see a compelling reason for the Marine Corps to keep the current mix of prepositioned inventory in Norway primarily to support other operational employments either within or outside the European AOR. As stated previously, the requirement to

preposition inventory in Norway is no longer valid and the program's force structure and preposition storage location is not consistent with current operational planning. With DoD facing continued budget constraints and a much wider range of military risks, continued funding of an outdated war plan needs to be reevaluated. Furthermore, NALMEB program managers stated that even if other operational employments were identified for the program, there were little or no expectations that a significant change to the current mix of the prepositioned inventory would occur. Therefore, we maintain that any changes to the inventory mix will only be made to support the outdated Cold War mission of 1981.

We also question the economic attractiveness of using the prepositioned inventory for operational employments outside the European AOR in lieu of inventory stored in the U.S. We reviewed the transportation cost analysis that was prepared to show the savings DoD achieved for withdrawing and using prepositioned inventory from Norway rather than using inventory stored in the United States. The prepositioned inventory was used for the first time to support a contingency operation, "Noble Anvil," which occurred in Tazar, Hungary. The analysis showed that DoD would save either \$1.4 million or \$600,000 in transportation costs depending on whether a C-141 or C-17 aircraft were used to transport inventory from the U.S. to Hungary. The savings were based on the number of flights that were required to transport the inventory for each type of plane and the number of required flight hours. The airlift cost was then determined by using the hourly flight cost as computed by the U.S. Transportation Command (TRANSCOM). We determined, however, that about 50 percent of the hourly flight costs included TRANSCOM's fixed costs. TRANSCOM's fixed costs should have been deducted from the total costs before the airlift costs were determined. Fixed costs by their very nature are incurred by an activity regardless of any specific action. We determined, by using only the variable portion of the flight hour costs, that DoD would save only about \$500,000 if a C-141 aircraft was used and only about \$85,000 if a C-17 aircraft were used. Furthermore, given that the prepositioned inventory has been only used outside of Norway a few times since the bilateral agreement was modified in 1995, we question the economic effectiveness of this operational employment option for the future of the program.

We disagree with the Marine Corps notion that prepositioned inventory is not excess to their needs. As stated previously, the prepositioned inventory in Norway was designed for a specific threat that no longer exists. Also, according to Navy and Marine Corps Publication (NAVMC Pub) 2926 of 31 May 2001, "NALMEB Prepositioning Objective," the prepositioned inventory, except for ground ammunition, is considered Contingency Retention Stock, and by definition exceeds the requirements for mobilization, force expansion, or reconstitution. Normally, retention stock is allocated for either reutilization or disposal unless a determination was made that the inventory would be retained for specific contingencies. However, as stated previously, none of the prepositioned inventory is currently sourced to any approved or planned war plan. Additionally, the prepositioned inventory is excess to the Marine Corps peacetime requirements. From the Marine Corps Readiness Equipment Module (MCREM), authorized peacetime requirements for Active forces and onhand balances were obtained. MCREM provides

an enhanced view of Marine Corps equipment readiness for ground equipment. We compared authorized and on-hand balances as shown in MCREM to the on-hand, prepositioned inventory of ground equipment and found 56 line item matches. Sixteen of the matches were excluded from further review, because new replacements items under the Marine Corps modernization program would satisfy any item shortfalls. For the remaining 40 line item matches, we selected the first 16 item matches, or 40 percent, for further review. We determined the stock status including both the cumulative authorized and onhand balances for the active forces as well as any planned procurements. Review showed that the onhand and on-order quantities met or exceeded the authorized peacetime requirements for all 16 line items. We therefore concluded that the prepositioned inventory exceed the peacetime requirements.

We also disagree that the entire inventory is part of the Marine Corps WRMR. As stated previously, none of the prepositioned inventory is currently sourced to an approved or planned war scenario. Also, according to Marine Corps Order P-4400.39H dated 12 March 2002, "War Reserve Material Policy Manual," and Marine Corps War Publication 4-11.7 dated 29 February 1996, "Marine Air Ground Task Force Supply Operations," the NALMEB prepositioned inventory is not part of the WRMR except for the ground ammunition. According to NAVMC Pub 2926, while the ground ammunition is part of the NALMEB prepositioning objective, the ground ammunition was not procured specifically for the NALMEB program and is part of Marine Corps WRMR.

We did not validate any political difficulties involving Norway accepting termination of the program. We contend that any political judgments concerning the future of the program are best left to DoD and/or the State Department.

An Opportunity for Savings Exists by Eliminating Prepositioning of Equipment and Supplies in Norway

We determined that the Marine Corps has an opportunity to save at least \$127 million to \$155 million by not operating and maintaining the program and canceling modernization contracts for prepositioned equipment planned to be replaced. The Marine Corps could achieve additional savings by using the excess prepositioned equipment to satisfy existing Marine Corps-wide shortfalls.

The Marine Corps and Norway share the costs to operate and maintain the program. According to the burden sharing agreement, during FY2003–2008, total operations and maintenance costs are projected at about \$90 million. The Marine Corps share of these costs is about \$45 million or about \$7.5 million per year. The Marine Corps could save its share of about \$45 million over 6 years or about \$7.5 million annually in operations and maintenance funds by eliminating the program.

The Marine Corps plans to modernize, through replacement, designated ground equipment, including some of the prepositioned equipment in Norway during FY 2003–FY 2008. We maintain, however, that the Marine Corps should not modernize through replacement any of this prepositioned equipment because, as discussed

previously, the prepositioned inventory is excess to the Marine Corps requirements and is not part of the WRMR. We reviewed six modernization projects valued at about \$110 million that replace 933 pieces of the prepositioned equipment as shown in Exhibit C of this report. We concluded that the Marine Corps could potentially save between \$82 million and \$110 million by not modernizing through replacement this prepositioned equipment during FY 2003-FY 2008.

- We are providing low and high ends in potential savings (\$82 million to \$110 million) because it is likely that the Government will incur an undeterminable amount of costs for terminating one of the six modernization contracts because contractor work had already begun in FY 2003. Contract DAAE07-99-C-M007 replaces four classes of trucks with seven-ton trucks known as Medium Tactical Vehicle Replacements (MTVR). The NALMEB program's portion of this contract includes 252 trucks costing about \$42 million. During FY2003, the contractor started work on 200 of the trucks valued at about \$28 million. Because this is a multi-year contract with minimum quantities and work had already begun on 200 trucks, the Government will be liable for some termination costs associated with the work that the contractor already began. However, the termination costs cannot be determined until the order is canceled and the costs are negotiated by both the contractor and contracting officer. To be conservative, we figured the low end of the savings by deducting the total value (\$28 million) of the 200 trucks in which the contractor started work in FY 2003 (\$110 million - \$28 million = \$82 million).

The Marine Corps could achieve additional savings by using the prepositioned inventory (less ground ammunition) to satisfy existing Marine Corps-wide shortfalls. The Marine Corps could cancel existing active force procurements and Supply Depot repairs of ground equipment returned by active forces.

- We obtained operating unit shortages from MCREM and identified FY2003 procurements that would satisfy these shortages. We compared the operating unit equipment shortages and purchases to the onhand balances of the prepositioned inventory. Review showed that the prepositioned inventory could satisfy planned procurements. For example, the Marine Corps plans to procure 10 100-kilowatt generator sets costing \$40,000 each. Currently, the prepositioned inventory includes 20 of these generator sets that could be used to satisfy the shortage of 10 sets resulting in savings of about \$400,000.
- Marine Corps depots repair major end items of ground equipment that are turned in by the operating and reserve units. We obtained FY2003 funded repairs for major end items of ground equipment turned into the depot from the Depot Level Maintenance program module of the Material Capabilities Decision Support System. We compared the equipment repairs funded by the depot to the onhand balances of the prepositioned inventory to determine if any prepositioned assets could be used to cancel planned repairs. Review showed depot repairs averted, resulting in savings. For example, 33 medium towed howitzers are scheduled for

repair during FY2003, with an estimated repair cost of about \$140,000 each, or a total repair cost of about \$4.6 million. The prepositioned inventory includes 18 of these medium towed howitzers that could be used to avert repairs costing about \$2.5 million (18 howitzers x \$140,000 in repair costs).

- The previous two bullets discuss potential savings for only major end items of ground equipment (Class VII). We also determined that planned procurements could be cancelled using existing prepositioned inventory for aviation support equipment, Class IX secondary depot repairables, and planned procurements to satisfy prepositioning objective shortages.

As shown above, the Marine Corps could realize cost savings relative to the redistribution of the excess prepositioned inventory. However, the Marine Corps would need to perform a detailed review of the redistribution process to include consideration of disposal costs, equipment condition, and status of outstanding procurements. For example, the procurements and depot repairs we identified in MCREM and the depot-level maintenance program were limited to only FY2003, and as a result, some of these FY2003 procurements and depot repairs may have already occurred and could not be cancelled.

Recommendations

We recommend that the Commandant of the Marine Corps:

1. Terminate the NALMEB program.
2. Prepare a comprehensive statement encompassing disposal costs, equipment condition, and status of outstanding procurements and repairs of the excess onhand ground equipment and supplies, and identify NALMEB program items that would satisfy outstanding procurements and repairs for FY2003 and the out years.
3. Cancel the planned modernization procurements associated with the replacement of NALMEB equipment, subject to negotiated termination costs for one of the six modernization projects.
4. Cancel all procurements that replenish NALMEB preposition inventory shortages.

Corrective Actions

Management responses are summarized below, along with our comments. The complete text of the management responses is in the Appendix.

Marine Corps general responses to Recommendations 1 through 4. The Marine Corps does not concur with the recommendations. The Marine Corps acknowledges that the NALMEB program is outdated, but rather than terminate, they want to

restructure the program to make it more relevant. To this end, the Marine Corps tasked the Center for Naval Analysis (CNA) to identify potential “out of area” missions in the European Command and Central Command areas for NALMEB prepositioned equipment. The Marine Corps maintains that a restructured and transformed NALMEB program (1) is a cost-effective way of forward positioning equipment and supplies as a “hub for power projection” and (2) supports DPG and QDR objectives of supporting agile and flexible forces.

Naval Audit Service comment on responses to Recommendation 1 through 4.

We contend that the NALMEB program inventory, even with potential mission changes, is still prepositioned to support an outdated Cold War mission, and as such, is excess to Marine Corps needs. CNA asserted that the cornerstone of the NALMEB prepositioning program will continue to be its original mission, the reinforcement of Norway against an outdated Cold War strategic threat.

Norway is not near a perceived theater of operations and, therefore, is not the best location to stage prepositioned equipment. Both the DPG and QDR suggest the need for more prepositioning towards the Indian Ocean and Arabian Gulf. New missions for NALMEB would require maintaining additional equipment and be even more costly. The Marine Corps currently stores and maintains inventories valued at about \$304 million. CNA estimates that at least \$39 million in additional engineering and motor transport assets would be needed to satisfy the requirements of new out-of-area missions.

Section C

Status of Recommendations and Potential Monetary Benefits

RECOMMENDATIONS							MONETARY BENEFITS (In \$000s)				
¹ Find- ing	Rec. No.	Page No.	Subject	² Status	Action Command	Target Completion Date	³ Cate- gory	Claimed Amount	Agreed To	Not Agreed To	⁴ Appro- priation
1	1	14	Terminate the Norway Air-Landed Marine Expeditionary Brigade (NALMEB) program	U	Under Secretary of the Navy	Note 5	B	45,296		45,296	17x1106 Various
1	2	14	Prepare a comprehensive statement encompassing disposal costs, equipment condition, and status of outstanding procurements and repairs of the excess onhand ground equipment and supplies, and identify NALMEB program items that would satisfy outstanding procurements and repairs for Fiscal Year 2003 and the out years	U	Under Secretary of the Navy	Note 5					
1	3	14	Cancel the planned modernization procurements associated with the replacement of NALMEB equipment, subject to negotiated termination costs for one of the six modernization projects	U	Under Secretary of the Navy	Note 5	B	110,000		110,000	17x1109 Various
1	4	14	Cancel all procurements that replenish NALMEB preposition inventory shortages	U	Under Secretary of the Navy	Note 5					

1/ + = Indicates repeat finding

2/ O = Recommendation is open with agreed-to corrective actions pending; C = Recommendation is closed with all agreed-to action completed; U = Recommendation is undecided with resolution efforts in progress

3/ A = One-time potential funds put to better use; B = Recurring potential funds put to better use for up to 6 years; C = Indeterminable/immeasurable

4/ = Includes appropriation (and subhead if known)

5/ = The Naval Inspector General (acting as the facilitator for the Under Secretary of the Navy), has these undecided issues for resolution action within 6 months of the date of the report, as required by Secretary of the Navy Instruction 5200.34(Series).

Exhibit A

Equipment and Supplies Stored in Norway

Inventory Classification	Description	Prepositioning Objective Value	Onhand Value	Difference
Ground Support Equipment and Supplies				
Class I	Subsistence (Rations)	\$3,050,315	\$2,837,081	(\$213,234)
Class II	Individual Equipment and Supplies	31,601,914	\$29,034,347	(\$2,567,567)
Class III	Petroleum, Oil, and Lubricants (POL)	\$306,620	\$136,789	(\$169,831)
Class III	Compressed Fuel	\$450,643	\$372,438	(\$78,205)
Class IV	Construction Material	\$502,163	\$502,100	(\$63)
Class VII	Principal End Items	\$130,206,667	\$131,846,374	\$1,639,707
Class VIII	Medical/Dental Material	\$4,636,874	\$3,026,741	(\$1,610,133)
Class IX	Batteries, Repairables and Consumables	\$6,488,769	\$5,293,391	\$(1,195,378)
	Total Ground Support Equipment and Supplies	\$177,243,965	\$173,049,261	(\$4,194,704)
Other Equipment and Supplies				
ASE	Aviation Support Equipment	\$31,137,441	\$17,844,959	(\$13,292,482)
Class V (W)	Ground Ammunition	\$82,568,925	\$86,611,119	\$4,042,194
Class V (A)	Aviation Ammunition	\$124,015,484	\$26,861,056	(\$97,154,428)
	Total Other Equipment and Supplies	\$237,721,850	\$131,317,134	(\$106,404,716)
	Total Equipment and Supplies Stored in Norway	\$414,965,815	\$304,366,395	(\$110,599,420)

Exhibit B

Activities Visited or Contacted

- Joint Chiefs of Staff (J4), Washington, DC
- Headquarters Marine Corps, Washington, DC
- Marine Corps Forces Atlantic, Norfolk, VA
- Marine Corps Forces Europe, Stuttgart, Germany
- Marine Corps Material Command, Albany, GA
- Marine Corps Systems Command, Quantico, VA
- Blount Island Command, Jacksonville, FL
- Naval Air Systems Command, Patuxent River, MD
- Air Force Audit Agency European Area Audit Office, Ramstein, Germany
- Transportation Command, Scott Air Force Base, IL
- American Embassy, Oslo, Norway
- Center for Naval Analysis, Alexandria, VA

Exhibit C

Ongoing and Planned Modernization Projects

Type of Equipment included in the Modernization Projects	Quantity of Equipment Ordered	Planned Procurement Amount (\$000)	Planned Procurement By Fiscal Year
Medium Tactical Vehicle Replacement (MTVR) ¹	252	\$41,883	2003/2004
High Mobility Multi-Wheeled Vehicle (HMMWVA2)	542	\$39,613	2007
Logistics Vehicle Support Replacement (LSVR)	71	\$20,590	2008
Extended Boom Forklift	46	\$4,591	2004
7.5 ton Crane	17	\$1,831	2006/2008
25 ton Crane	5	\$1,145	2006/2008
Total Procurements FY 2003 – FY 2008	933	\$109,653	

¹ Modernization Contract (DAAE07-99-C-M007) replaces 5-ton trucks with 7-ton trucks, known as Medium Tactical Vehicle Replacements. The NALMEB portion includes 252 trucks valued at \$42 million. Work has begun in FY 2003 on 200 valued at \$28 million of the 252 trucks. Given that work has begun and that the contract is a multi-year contract with minimum quantities, cancellation of the 200 trucks would involve invoking the termination for convenience clause of the contract. As a result, we cannot determine what portion of the \$28 million could be saved through negotiation. The work on the remaining 52 trucks costing \$14 million occurs in FY 2004 and is not subject to termination costs.



DEPARTMENT OF THE NAVY
HEADQUARTERS UNITED STATES MARINE CORPS
2 NAVY ANNEX
WASHINGTON, DC 20380-1776

IN REPLY REFER TO:

7500/02-0127
RFR-50
23 June 2003

From: Commandant of the Marine Corps
To: Assistant Auditor General for Manpower and Reserve Affairs
Audits

Subj: NAS DRAFT AUDIT REPORT - THE NORWAY AIR-LANDED MARINE
EXPEDITIONARY BRIGADE (NALMEB) PREPOSITIONING PROGRAM
(2002-0127)

Ref: (a) NAS memo 7547/2002-0127 of 21May03
(b) CNA Study Report CRM D0007800.A1

1. Reference (a) transmitted the subject draft report for review
and requested Marine Corps comments.

2. The following comments are provided:

a. Recommendation 1. "We recommend that the Commandant of the
Marine Corps terminate the NALMEB program."

Recommendation 2. "We recommend that the Commandant of the
Marine Corps prepare a comprehensive statement encompassing
disposal costs, equipment condition, and status of outstanding
procurements and repairs of the excess onhand ground equipment and
supplies, and identify NALMEB Program items that would satisfy
outstanding procurements and repairs for FY2003 and the out
years."

Recommendation 3. "We recommend that the Commandant of the
Marine Corps cancel the planned modernization procurements
associated with the replacement of NALMEB equipment, subject to
negotiated termination costs for one of the six modernization
projects."

Recommendation 4. "We recommend that the Commandant of the
Marine Corps cancel all procurements that replenish NALMEB
preposition inventory shortages."

(1) The Marine Corps does not concur in the
recommendations. While we agree that "times have changed", that
does not mean that termination of NALMEB is a better alternative

Management Response from Commandant of the Marine Corps

than restructuring the program to fulfill current and emerging requirements.

(2) The draft report notes that the NALMEB program was established during the Cold War to allow for rapid reinforcement of the northern flank of Western Europe in the event of a Soviet invasion. The report goes on to point out that there have been major geopolitical shifts since then, and raises the question of whether a need exists for the continuance of the program. The Marine Corps agrees that the NALMEB program must undergo changes in light of current day realities, and efforts are underway to reassess and transform the program. In the message *CMC Washington DC R 051800Z MAY 03, Subj: Maritime Prepositioning Transition*, the Deputy Commandant of the Marine Corps for Plans, Policy and Operations addressed the transformation of NALMEB with the following statement:

3.B. (U) THE CENTER FOR NAVAL ANALYSES IS ANALYZING THE TRANSFORMATION OF NALMEB TO ASSIST US IN REFINING OUR GEO-PREPOSITIONING "OUT-OF-AREA" FOCUS. OUR GOAL IS TO TRANSFORM THE NALMEB PROGRAM TO MEET A BROADER RANGE OF MISSIONS THAN ORIGINALLY INTENDED. TRANSFORMATION WILL INCLUDE GREATER ALIGNMENT WITH THE MARITIME PREPOSITIONING CONCEPT OF OPERATIONS AND REFINEMENT OF THE NALMEB EQUIPMENT LIST IN ORDER TO INCREASE THE STRATEGIC AGILITY OF MARINE AND COALITION FORCES...

(3) NALMEB is an established 22 year-old program that has enhanced US-Norway relations, and a restructure NALMEB will continue to benefit both countries. The US benefits by maintaining forward-deployed, ready-to-use equipment and supplies, and Norway benefits by the presence of US equipment and supplies that retain the mission of functioning in the defense of Norway.

(4) NALMEB is a very cost effective way of forward positioning equipment and supplies as a "hub for power projection". It is cost effective because costs are shared by Norway. There are also some cost, as well as time, savings because Norway is in many cases closer to potential areas of operations than CONUS.

(5) Restructuring NALMEB supports the transformation called for in the Defense Planning Guidance (DPG) and the Quadrennial Defense Review (QDR). Forward deployment, innovation, the support of agile and flexible forces, are all objectives that are called for in transforming the Defense posture.

(6) The DoD concept is to deter forward, with prepositioning providing much of the ability to accomplish forward deterrence. NALMEB fits into such conceptual thinking. Planning is currently underway within the Marine Corps to develop a concept

to integrate NALMEB and MPF into a 21st Century forward-deployed asset. The CNA study (Ref (b)) just completed is one of the first foundational documents to support this integration.

(7) The audit recommendations are inconsistent with DoD guidance and with the most practical and feasible alternatives for transitioning NALMEB, as articulated in the CNA Study Report (Ref (b)). The Marine Corps commissioned Reference (b) prior to the announcement of this audit, specifically to develop options for the restructuring of NALMEB. As recommended in that study report, NALMEB Transformation will be taken to the MROC at the earliest possible time, and termination of the Program, as recommended in reference (a), is not an option at this time.

2. The following comments on specific findings from the draft report are provided:

a. NAS finds "little strategic value" in NALMEB because "none of the prepositioned inventory is currently sourced to an approved or planned Joint Chief of Staff War scenario."

Comment: NALMEB prepositioned war reserve assets were actually used in operations and training exercises more than other Service prepositioning programs that are sourced to OPLANS and CONPLANS. In placing greater value on actual use of assets, rather than planned use, the Marine Corps sees significant value in the NALMEB assets. This is in line with the FY 2001 QDR "capabilities-based approach rather than a specific adversary in a specific geographic area approach". Since 2001 NALMEB assets have been used in four contingency operations.

b. NAS identifies NALMEB equipment as excess and not part of War Reserve Materiel.

Comment: NAS cites two outdated references, NAVMC 2926 and MCWP 4-11.7 to demonstrate that NALMEB assets (less ammunition) are not war reserve material. NAVMC 2926 erroneously identifies NALMEB assets as contingency retention stocks, which are quantities of an item greater than the Approved Acquisition Objective (AAO) for which there is no predictable demand. Current USMC logistic policy, MCO 4490.1, *Class VII Material Requirements Determination*, clearly identifies NALMEB assets as part of the AAO. The order equates the AAO to the war materiel requirement (WMR). Currently, the USMC AAO Integrated Planning Team does consider NALMEB when recommending AAO levels. The program use shows demand for the assets. MCWP 4-11.7 (dated 29 Feb 96), *USMC doctrine for MAGTF Supply Operations*, does not count prepositioned stocks as part of

the WMR. Current War Reserve Materiel policy in paragraph 4002.2.a of MCO P4400.39H (dated 12 Mar 02) does identify NALMEB assets as War Reserve Material Stocks. This policy is further clarified in two messages: CMC 271825Z AUG 2002, *HQMC Ground Equipment Interim Sustainment, War Reserve Planning, and Regeneration Guidance*; and CMC 111044Z APR 2003, *NALMEB Geo-Prepositioned Asset Withdrawal Policy Clarification*. The inconsistencies in the older publications will be corrected in their next updates.



R. F. Kassel
By Direction of the
Commandant of the Marine Corps