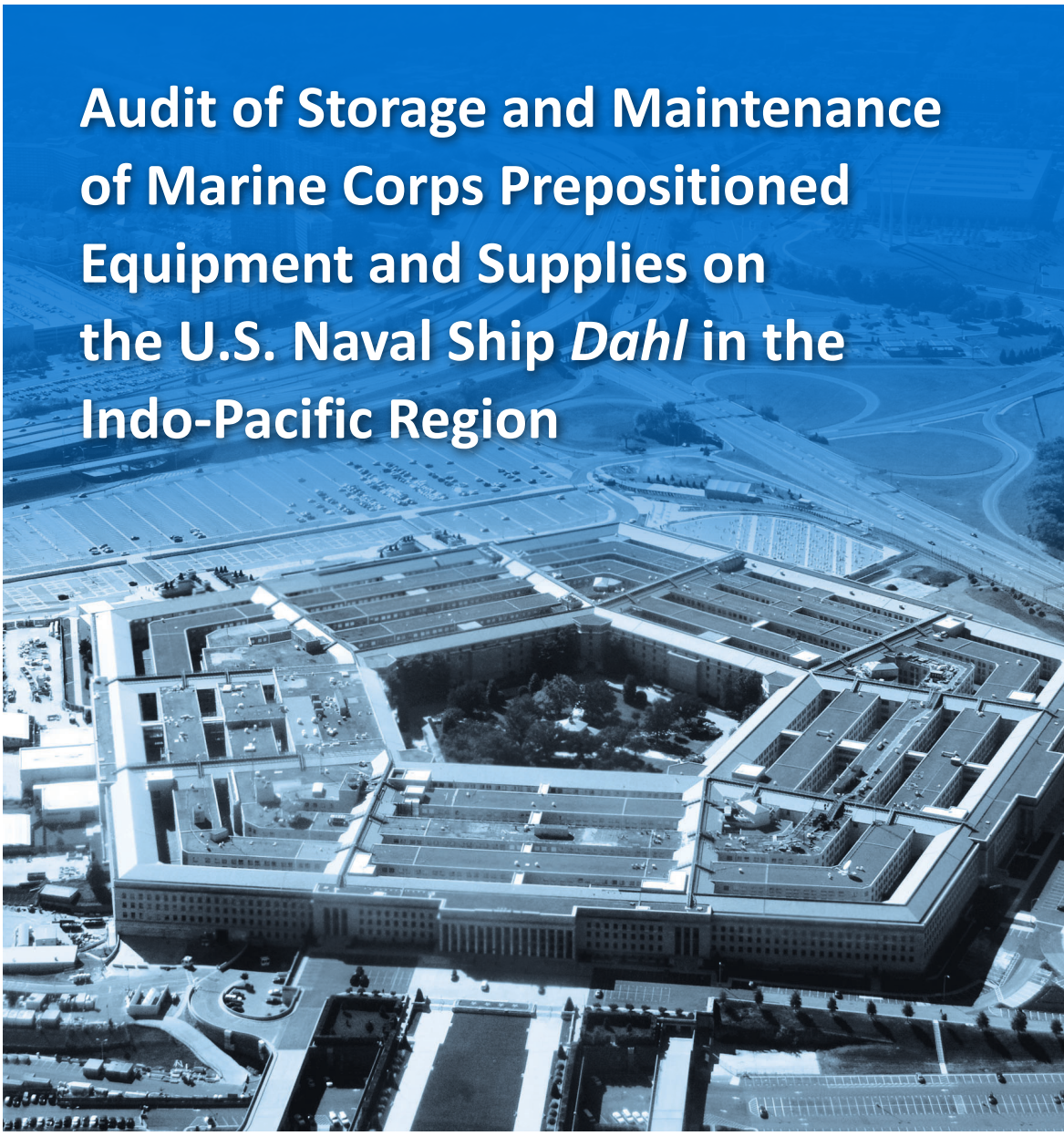
Report No. DODIG-2025-166

INSPECTOR GENERAL

U.S. Department of Defense

SEPTEMBER 24, 2025

Audit of Storage and Maintenance of Marine Corps Prepositioned Equipment and Supplies on the U.S. Naval Ship *Dahl* in the Indo-Pacific Region



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Results in Brief

Audit of Storage and Maintenance of Marine Corps Prepositioned Equipment and Supplies on the U.S. Naval Ship Dahl in the Indo-Pacific Region

September 24, 2025

Objective

The objective of this audit was to determine whether the Marine Corps effectively stored and maintained prepositioned equipment and supplies aboard Maritime Prepositioning Ships in the Indo-Pacific region. We focused on the U.S. Naval Ship *Dahl*, because it was the only ship located in the region that conducted an exercise using Marine Corps prepositioned equipment during our review period. The U.S. Naval Ship *Dahl* had 647 Marine Corps prepositioned equipment items. Blount Island Command (BICmd) officials, part of the Marine Corps Logistics Command, are responsible for the Marine Corps prepositioning programs.

Finding

BICmd officials effectively monitored the contractors' storage of the 88 prepositioned equipment items in our stratified statistical sample; however, they can improve how they monitor the contractors' maintenance of some items, such as batteries. BICmd officials did not ensure that the contractors:

- performed or documented semi-annual start-ups for 3 (6 percent) of 52 items requiring that type of maintenance (2 vehicles and 1 radio set); and
- initiated service requests for 5 (6 percent) of 88 prepositioned equipment items, for vehicles with Class III leaks—leaks that form drops that fall from the item.

Finding (cont'd)

We also reviewed maintenance records for 3,790 batteries and 4 vehicles identified as non-mission capable. For the batteries, 3,175 (84 percent) had a voltage reading below the required threshold, and for 2,631 (83 percent) of those batteries, BICmd officials did not ensure that the contractors documented maintenance. For the four vehicles, the Marine Corps intended to use them for an exercise, but BICmd officials did not ensure that the contractor submitted accurate Pre-Exercise Status reports.

BICmd officials did not effectively monitor the contractors' maintenance of the prepositioned equipment because the quality assurance process identified in the contract does not require BICmd officials to verify the accuracy and completeness of the contractors' maintenance records.

As a result, the Marine Corps may not know the true readiness of the equipment, and BICmd officials may not meet their operational mandate to keep the equipment at 100-percent combat readiness. Without having an accurate readiness status of the equipment, the Marine Corps may not have the items needed to properly exercise or quickly respond to a contingency. Based on our statistical sample of 88 prepositioned equipment items, we estimate (project) that BICmd officials did not effectively monitor the contractors' maintenance of 55 (9 percent) of the 647 prepositioned equipment items.

Recommendations

We recommend that Marine Corps officials:

- update and implement quality assurance procedures, including battery maintenance;
- analyze and document the impact to the battery life for improperly maintained batteries;
- determine whether any vehicles aboard the ship have Class III leaks and fix them; and
- determine why the contractor did not identify maintenance issues, such as Class III leaks, and develop and implement a solution.

Results in Brief

Audit of Storage and Maintenance of Marine Corps Prepositioned Equipment and Supplies on the U.S. Naval Ship Dahl in the Indo-Pacific Region

Management Comments and Our Response

The Commanding General, Marine Corps Logistics Command, agreed with four of the five recommendations and disagreed with one recommendation. The four recommendations are resolved but will remain open. Additionally, the one recommendation with which the Commanding General disagreed is unresolved. We will close the resolved recommendations when we verify that management has implemented corrective actions. We request that the Commanding General provide comments within 30 days in response to the final report to address the unresolved recommendation.

Please see the Recommendations Table on the next page for the status of recommendations.

Recommendations Table

Management	Recommendations Unresolved	Recommendations Resolved	Recommendations Closed
Commanding General, Marine Corps Logistics Command	1.c	1.a, 1.b, 1.d, 1.e	None

Please provide Management Comments by October 24, 2025.

Note: The following categories are used to describe agency management's comments to individual recommendations.

- **Unresolved** – Management has not agreed to implement the recommendation or has not proposed actions that will address the recommendation.
- **Resolved** – Management agreed to implement the recommendation or has proposed actions that will address the underlying finding that generated the recommendation.
- **Closed** – The DoD OIG verified that the agreed-upon corrective actions were implemented.


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September 24, 2025

MEMORANDUM FOR COMMANDER, U.S. INDO-PACIFIC COMMAND
COMMANDING GENERAL, MARINE CORPS LOGISTICS COMMAND
AUDITOR GENERAL, DEPARTMENT OF THE NAVY

SUBJECT: Audit of Storage and Maintenance of Marine Corps Prepositioned Equipment and Supplies on the U.S. Naval Ship *Dahl* in the Indo-Pacific Region (Report No. DODIG-2025-166)

This final report provides the results of the DoD Office of Inspector General's audit. We previously provided copies of the draft report and requested written comments on the recommendations. We considered management's comments on the draft report when preparing the final report. These comments are included in the report.

We consider four of five recommendations in this report resolved and open. We will close them when the Commanding General, Marine Corps Logistics Command, provides us documentation showing that all agreed-upon actions to implement the recommendations are completed. Therefore, please provide us within 90 days your response concerning specific actions in process or completed on the recommendations.

We consider the one remaining recommendation unresolved because the Commanding General, Marine Corps Logistics Command, did not agree with the recommendation. Therefore, it remains open. We will track this recommendation until management has agreed to take action that we determine to be sufficient to meet the intent of the recommendation and management provides adequate documentation showing that all agreed-upon actions are completed. DoD Instruction 7650.03 requires that recommendations be resolved promptly. Therefore, please provide us within 30 days your response concerning specific actions in process or alternative corrective actions proposed on the recommendation. Send your response to either [redacted] if unclassified or [redacted] if classified SECRET.

We appreciate the cooperation and assistance received during the audit. If you have any questions, please contact me at [redacted]

Richard B. Vasquez
Assistant Inspector General for Audit
Readiness and Global Operations

Contents

Introduction

Objective

The objective of this audit was to determine whether the Marine Corps effectively stored and maintained prepositioned equipment aboard Maritime Prepositioning Ships (MPSs) in the U.S. Indo-Pacific Command (USINDOPACOM), in accordance with DoD guidance.

We focused our audit on the U.S. Naval Ship (USNS) *Dahl*, because it was the only ship located in the USINDOPACOM area of responsibility that conducted an exercise using Marine Corps prepositioned equipment during the time period of our review.

Background

Equipment prepositioning is a critical capability that enables rapid response to crisis and contingency situations. Marine Corps equipment and supplies are prepositioned throughout the world on an MPS, for up to 36 months, as part of the Military Sealift Command's Prepositioning program. An MPS is loaded with a variety of Marine Corps, Navy, and Defense Logistics Agency prepositioned equipment and supplies, including vehicles, weapons, ammunition, food, water, cargo, hospital equipment, petroleum products, and spare parts.

The Maritime Prepositioning Force (MPF) program provides combatant commanders mission capable equipment and supplies to support Marine Air-Ground Task Forces for up to 30 days. According to Marine Corps Order P4790.2C, "MIMMS Field Procedures Manual," the term "mission capable" applies to the status or condition of equipment that can perform its designed primary combat function.[1] The two MPS squadrons have a total of seven ships. One MPS squadron is in the Indian Ocean (three ships), and the other squadron is in the Western Pacific Ocean (four ships). Each squadron is provided with enough equipment and supplies to sustain more than 16,000 Marine and Navy personnel for up to 30 days.

[1] Marine Corps Order P4790.2C, "MIMMS Field Procedures Manual," December 17, 2012.

Roles and Responsibilities of Marine Corps Organizations

According to Marine Corps Order 3000.17, "Marine Corps Prepositioning Programs," the Marine Corps plans, manages, and operates afloat and ashore prepositioning programs in collaboration with other Military Services.[2] The following list describes the primary responsibilities of the principal Marine Corps prepositioning stakeholder organizations.

- The Deputy Commandant for Plans, Policies, and Operations serves as the Commandant's executive agent and the advocate for Marine Corps prepositioning programs; and establishes operational policies and procedures for Marine Corps prepositioning programs, including the MPF program.
- The Deputy Commandant for Installations and Logistics serves as the budget and logistics sponsor for the Marine Corps prepositioning programs and leads tailoring efforts.
- The Commanding General, Marine Corps Logistics Command, is the Marine Corps lead for attaining, maintaining, and providing logistics support for Marine Corps prepositioned equipment.
- Blount Island Command (BICmd) officials plan, coordinate, execute the repair and replacement for the Marine Corps prepositioning programs.
- Marine Corps Forces Pacific is the largest operational command in the Marine Corps. It comprises two-thirds of the Marine Corps active duty combat forces, I Marine Expeditionary Force and III Marine Expeditionary Force, collectively known as the "Pacific Marines." Marine Corps Forces Pacific supports MPF efforts by participating in prepositioning objective planning and coordinating exercises involving MPF prepositioned equipment. In addition, Marine Corps Forces Pacific is responsible for initiating the reimbursement process to cover final post-exercise costs incurred on MPF equipment and supplies during exercises.

Prepositioned Equipment Tailoring Process

According to Marine Corps Order 4000.58, "Prepositioning Programs Tailoring Policy," the Marine Corps uses a vetting process known as "tailoring" to establish a listing of equipment and supplies planned to be prepositioned as a part of the MPF program.[3] Prepositioning stakeholders, including operational planners, commodity experts, and program managers, use tailoring to review, analyze, and validate planning documents, requirements, and operational capabilities to establish the types and quantities of equipment and supplies that will be prepositioned as part of the MPF program.

[2] Marine Corps Order 3000.17, "Marine Corps Prepositioning Programs," October 17, 2013.
[3] Marine Corps Order 4000.58, "Prepositioning Programs Tailoring Policy," August 19, 2016.

Prepositioned Equipment Storage

The Marine Corps procedures for storage of prepositioned equipment aboard prepositioning ships include inspection, inventory, and accountability of prepositioned equipment and containers. Specifically, according to the contract and Marine Corps Technical Manual 4790-14/2C, "Logistics Support for Maritime Prepositioning Ships Program Maintenance and Materiel Management," the Marine Corps is required to consider the ship's storage capabilities and space when planning to load Marine Corps prepositioned equipment.[4] The Marine Corps maintenance contractors (the contractors) are responsible for proper storage and preservation of prepositioned equipment, containers, and weapons aboard the MPS, in accordance with Marine Corps guidelines and the contract. For example, the contractors are required to perform monthly stock checks to ensure prepositioned equipment items are safe, secured, and free of corrosion, damage, and leaks. Also, the contractors are required to conduct physical inventories of weapons aboard an MPS and prepare a monthly armory report for accountability.

Prepositioned Equipment Maintenance

Marine Corps Tactical Publication 13-10D, "Maritime Prepositioning Force Operations," outlines Marine Corps responsibilities for prepositioned equipment maintenance requirements.[5] According to Marine Corps guidelines, maintenance of prepositioned equipment occurs aboard the MPS during the MPF maintenance cycle, and the contractors perform limited maintenance activities, such as repairing, diagnosing, adjusting, and calibrating the prepositioned equipment, on a continuous basis.

According to Marine Corps guidelines, when prepositioned equipment is offloaded from the MPS after 36 months afloat, the contractors are required to test, modify, inventory, calibrate, and modernize the equipment and replace shelf-life stocks, such as batteries and fuel, as necessary. Also, Marine Corps Tactical Publication 13-10D requires Marine Corps quality assurance personnel to inspect and monitor the contractors' efforts in performing maintenance. While most of the maintenance for prepositioned equipment that is offloaded from an MPS is conducted at BICmd in Jacksonville, Florida, weapons maintenance is conducted at the Marine Depot Maintenance Command located in Albany, Georgia.

In addition, after Marine Corps prepositioned equipment is used for a training exercise, Marine Corps officials and the contractors are responsible for inspecting that prepositioned equipment to determine whether the equipment is in its pre-exercise condition before the prepositioned equipment is reloaded on the MPS.

[4] Marine Corps Technical Manual TM 4790-14/2C, "Logistics Support for Maritime Prepositioning Ships Program Maintenance and Materiel Management," February 29, 2000.

[5] Marine Corps Tactical Publication 13-10D, "Maritime Prepositioning Force Operations," May 2, 2016.

If the prepositioned equipment used for a training exercise is not returned in its pre-exercise condition, Marine Corps officials are responsible for repairing damaged prepositioned equipment.

Maritime Prepositioning Afloat Phase

During the afloat phase, the contractors perform the necessary sustainment operations for equipment that is aboard the MPS, such as start-ups of vehicles, maintenance of batteries, and modifications to equipment. In addition, the contractors provide pre-exercise support, such as preparation for offloading equipment and joint limited technical inspections for equipment issued for Marine Corps Air-Ground Task Force exercises. According to Marine Corps Technical Manual 4790-14/2C, the exercising unit and the contractors are required to conduct joint limited technical inspections to establish the condition of the equipment before and after an exercise.

Marine Corps Prepositioning Contract Support

On June 1, 2019, the Marine Corps issued a hybrid indefinite-delivery indefinite-quantity contract.[6] According to the contract, the contractors are required to provide various services aboard the MPS, and Marine Corps Order P4790.2C defines those services as follows.

- **Preventative Maintenance Checks and Services (PMCS).** Marine Corps Order P4790.2C defines PMCS as a systematic inspection, detection, and correction of emerging failures, either before they occur or before they develop into major defects.[7] PMCS is completed by contractors on an annual or semi-annual basis using the Maintenance Check/Semi-Annual Start-Up (SASU) Form 600-F-001 C. SASUs are conducted on all applicable items of rolling stock, such as trucks, high mobility multipurpose wheeled vehicles, generators, and radio sets. The contract states that in conjunction with scheduled PMCS, batteries should be tested, serviced, and maintained in accordance with the approved contractor battery maintenance plan. The contractor's Management Procedure 600-P-002, "Battery Maintenance for Shipboard," outlines the battery maintenance plan on board the ship for various vehicle batteries utilized with all types of equipment (rolling and non-rolling stock).[8] Annual preventative maintenance checks consist of conducting limited technical inspections of non-SASU assets, such as trailers and pumps.

[6] Marine Corps, Contract M6700419D0001, "Statement of Work," June 1, 2019.

[7] Marine Corps Order P4790.2C, "Marine Corps Integrated Maintenance Management System Field Procedures Manual," December 8, 1994.

[8] Management Procedure 600-P-002, "Battery Maintenance for Shipboard," December 30, 2019.

- **Corrective Maintenance.** According to Marine Corps Order P4790.2C, corrective maintenance actions are performed to restore a defective item to a specified condition.
- **Equipment Modification.** According to Marine Corps Order P4790.2C, equipment modification consists of those maintenance actions performed to change the design or assembly characteristics of equipment systems, end items, components, assemblies, subassemblies, or parts to improve equipment functioning, maintainability, reliability, or safety characteristics.

The contract also states that the contractors may receive task orders requiring maintenance services ashore at the off-load site during exercises and contingencies.

The contract requires the contractors to develop and implement local procedures in accordance with applicable Marine Corps technical manuals, directives, and international standards to execute contract requirements aboard the MPS, such as:

- PMCS scheduling and planning;
- afloat equipment modification;
- battery maintenance;
- afloat quality control process development;
- afloat container maintenance;
- weapons accountability; and
- surveillance checklists.

Additionally, the contract states that BICmd's operational mandate is to configure and maintain all the prepositioned equipment to 100-percent combat readiness. Marine Corps Command Order P5000.11G, "Quality Manual," states that the quality goal for military equipment is 100-percent readiness, and the quality objective is 98-percent readiness.[9]

In addition to these procedures, the contractors are required to follow all other Marine Corps storage and maintenance requirements, including reporting the equipment status and performing quality control checks of the equipment aboard an MPS.

Contract Quality Assurance

The contract states that the Marine Corps is responsible for quality assurance. According to the contract, Government quality assurance representative personnel are responsible for the inspection and monitoring of equipment, supplies,

[9] Marine Corps Command Order P5000.11G, "Quality Manual," June 1, 2024.

and processes. In addition to quality assurance representative personnel, the contract identifies other Government personnel that can inspect and monitor the contractors' performance of services under the contract, including the Contracting Officer or assigned Contracting Officer's Representative.

The contract states that Government personnel will use the following techniques to inspect and monitor the contractors.

- Examine equipment and supplies.
- Review records of maintenance actions taken.
- Review written reports from the contractors.
- Monitor established contractor processes.

What We Reviewed

To determine whether the Marine Corps effectively maintained and stored prepositioned equipment aboard the USNS *Dahl*, we reviewed a stratified statistical sample of 88 prepositioned equipment items selected from 647 Marine Corps equipment items assigned to the USNS *Dahl*.[10] The USNS *Dahl* is part of the MPS squadron operating in the Western Pacific Ocean. We reviewed the maintenance records, including the SASUs and service requests, and visually inspected the 88 prepositioned equipment items from the following three strata that were and were not used in the U.S. and Philippines Armed Forces exercise (Balikatan 23) in April 2023.

- Stratum 1 consisted of prepositioned equipment items not used in the Balikatan 23 exercise.
- Stratum 2 consisted of prepositioned equipment items used in the Balikatan 23 exercise and returned with no problems.
- Stratum 3 consisted of prepositioned equipment items used in the Balikatan 23 exercise and returned with problems.

See Appendix B for a breakdown of the strata, statistical sample plan, and estimation (projections).

In addition to the statistical sample of 88 prepositioned equipment items, we received a list of 18 prepositioned equipment items that Marine Expeditionary Force officials identified as non-mission capable while inspecting prepositioned equipment selected from the USNS *Dahl* to be used for the Korean Marine Exercise Program (KMEP) 24-1 exercise. We reviewed the list of 18 prepositioned equipment items and identified inaccuracies in the readiness status reporting

[10] There was a total of 1,700 equipment items assigned to the USNS *Dahl*, and the items are owned by the Navy, Marine Corps, and Defense Logistics Agency. We selected our sample using only the 647 Marine Corps items.

for 4 of the 18 prepositioned equipment items. In addition, we reviewed the maintenance and testing records of 3,790 batteries associated with all prepositioned equipment items aboard the ship. See Appendix A for a detailed discussion of the scope and methodology. See Appendix C for a list of the prepositioned equipment items we reviewed.

Finding

BICmd Officials Monitored the Contractors' Performance for Storage and Maintenance, But Could Continue to Improve

BICmd officials effectively monitored the contractors' storage of the 88 prepositioned equipment items in our stratified statistical sample; however, they can improve how they monitor the contractors' maintenance of some items, such as batteries. BICmd officials did not ensure that the contractors:

- performed or documented SASUs for 3 (6 percent) of 52 prepositioned equipment items requiring SASUs, 2 vehicles and 1 radio set;[11] and
- initiated service requests for 5 (6 percent) of 88 prepositioned equipment items, for vehicles with Class III leaks.[12]

We also reviewed maintenance records for 3,790 batteries and 4 vehicles identified as non-mission capable. For the batteries, 3,175 (84 percent) had a voltage reading below the threshold of 12.65 volts, and for 2,631 (83 percent) of those batteries, BICmd officials did not ensure that the contractors documented maintenance. For the 4 vehicles, the Marine Corps intended to use them for the KMEP 24-1 exercise, but BICmd officials did not ensure that the contractors submitted accurate shipboard Pre-Exercise Status reports.

BICmd officials did not effectively monitor the contractors' maintenance of prepositioned equipment because the quality assurance process, identified in the contract, does not require BICmd officials to verify the accuracy and completeness of the contractors' maintenance records.

As a result, the Marine Corps may not know the true readiness status of prepositioned equipment, and BICmd officials may not meet their operational mandate to configure and maintain all the prepositioned equipment to 100-percent combat readiness. Without having an accurate readiness status of prepositioned equipment items, Marine Corps Forces may not have the items needed to properly exercise or quickly respond to a contingency. Based on our statistical sample of 88 prepositioned equipment items, we estimate (project) that BICmd officials

[11] According to the contract, 36 of 88 prepositioned equipment items did not require SASUs. Therefore, we reviewed SASU-related documents for the remaining 52 prepositioned equipment items.

[12] According to Army Technical Manual 9-2320-387-10, "Operator's Manual," October 17, 1997 (Incorporating Change 1, October 15, 2001), a Class III fluid leakage is leakage great enough to form drops that fall from the item being checked or inspected.

did not effectively monitor the contractors' maintenance of 55 (9 percent) of the 647 prepositioned equipment items in accordance with DoD and Marine Corps guidance and contract requirements.

BICmd Officials Effectively Monitored the Contractors' Storage of Prepositioned Equipment Aboard the USNS *Dahl*

BICmd officials effectively monitored the contractors' storage of the 88 prepositioned equipment items we reviewed from the USNS *Dahl* in accordance with DoD and Marine Corps guidance and contract requirements. For example, BICmd officials stored 8 weapons, included in the 88 prepositioned equipment items we reviewed, in a secured armory as required by the contract. Also, BICmd officials effectively stored the 88 prepositioned equipment items by applying safety and security measures, such as seals on containers, vehicle tie downs, and tracking tags placed on equipment.

The contract requires the contractors to conduct and document monthly visual stock checks and physical inventories of weapons aboard the USNS *Dahl*. The stock checks include weapon inspections in all MPS compartments for safety and security. In addition, the contract directs the contractors to develop a local form to document the stock check, location, date, defect found, and signature of the person who conducted the inspection. For the eight weapons, we reviewed the armory reports from August 2023 through January 2024, and we conducted physical inspections of the weapons on the USNS *Dahl*, verifying that the weapons were accounted for and stored in a secured armory as required by the contract.

Additionally, for the 88 prepositioned equipment items in our sample, we reviewed the monthly stock check records from July 2023 through January 2024, and we conducted physical inspections of the prepositioned equipment items on the USNS *Dahl*, verifying the safety and security of the items, such as seals on containers, vehicle tie downs, and tracking tags placed on equipment. The military personnel from the exercising unit provided 18 additional prepositioned equipment items that were being prepared for the KMEP 24-1 exercise. Therefore, we could not conduct physical inspections for safety and security for those items. See Table 1 for our storage inspection results.

Table 1. Equipment Storage Inspection Results

Safety and Security Measures Observed by the DoD OIG	Number of Containerized Items with Intact Seals	Number of Tied Down Equipment Items	Number of Equipment Items with Tracking Tags
Yes	10	71	88
No	0	17[2]	0
Not Applicable	78[1]	0	0
Total Sample Items	**88**	**88**	**88**

[1] Of the 88 items inspected, 78 were listed as Not Applicable because they were not containerized items, such as vehicles, generators, and trailers; therefore, the seal test did not apply.

[2] Of the 88 items inspected, 17 were not tied down due to being moved around on the ship in preparation for the KMEP 24-1 exercise.

Source: The DoD OIG.

BICmd Officials Could Improve How They Monitor the Contractors' Maintenance of Some Prepositioned Equipment

BICmd officials could improve how they monitor the contractors' maintenance of some prepositioned equipment aboard the USNS *Dahl*, to ensure they monitor in accordance with Marine Corps and contract requirements to configure and maintain all the prepositioned equipment to 100-percent combat readiness. BICmd officials did not ensure that the contractors:

- performed or documented SASUs for 3 (6 percent) of 52 prepositioned equipment items requiring SASUs, 2 vehicles and 1 radio set;
- initiated service requests for 5 (6 percent) of 88 prepositioned equipment items, for vehicles with Class III leaks;
- documented maintenance for 2,631 (83 percent) of 3,175 low voltage batteries; and
- submitted accurate shipboard Pre-Exercise Status reports for 4 vehicles selected for the KMEP 24-1 exercise.

BICmd Officials Did Not Ensure the Contractors Performed or Documented Semiannual Maintenance Checks for Prepositioned Equipment

BICmd officials did not ensure that the contractors performed or documented SASUs for three prepositioned equipment items in our sample, two vehicles and one radio set, on the USNS *Dahl*. According to the contract, the contractors are required to schedule, perform, and document SASUs for all applicable equipment. In addition, Technical Manual 4790-14/2C directs Marine Corps officials to conduct

periodic technical inspections of equipment and records aboard the MPS. The SASU form includes 29 items to be checked as a part of performing SASUs, such as tires, engines, batteries, and corrosion, as well as cooling, brake, and electric systems.

Based on our review of SASU forms for 52 of 88 prepositioned equipment items that required scheduled maintenance, the contractors did not perform and document SASUs for 3 of 52 prepositioned equipment items in our sample. In addition, BICmd officials did not perform technical inspections of the equipment or review maintenance records to identify that the contractors did not perform the required SASUs for those three prepositioned equipment items. Specifically, SASUs were not performed for one vehicle in June 2023 and one radio set and one vehicle in November 2023. When we informed BICmd officials that the three SASUs were not performed, they stated that they could not locate the SASU forms. Therefore, the contractors did not document SASUs for all 52 prepositioned equipment items as required by the contract.

BICmd Officials Did Not Ensure the Contractors Initiated Service Requests for Prepositioned Equipment with Leaks

BICmd officials did not ensure that the contractors initiated service requests for five vehicles with Class III leaks aboard the USNS *Dahl*, as required by the contract. According to the contract, a service request must be created before initiating corrective maintenance repairs. Prior to our review of the prepositioned equipment in February 2024, the contractors did not document any Class III leaks related to the five vehicles during their monthly stock check in January 2024 and, therefore, did not initiate service requests for the leaks before we notified them of the leaks. The Figure shows one of the Class III leaks observed during our review.

Figure. Class III Leak
Source: The DoD OIG.

After we informed BICmd officials and the contractors of the Class III leaks, the contractors initiated service requests for four of the five vehicles that had Class III leaks. However, we could not verify that the contractors initiated a service request for one vehicle that had a Class III leak. Specifically, the leak was not annotated on the SASU form, and there was no record of an open or closed service request. BICmd officials stated that the reason no records were found for this Class III leak could be because that vehicle may have been moved during the exercise, and the leak was from a different vehicle. BICmd officials did not provide any supporting documents to show that the leak came from a different vehicle and not from our sampled vehicle, or to show that they rechecked the vehicle.

BICmd Officials Did Not Ensure the Contractors Documented Battery Maintenance

BICmd officials did not ensure that the contractors documented maintenance for 2,631 low voltage batteries connected to prepositioned equipment items on the USNS *Dahl*. The contract states that the contractor's battery maintenance plan should minimize battery failure by ensuring that equipment batteries are in a ready condition. Based on our review of maintenance records for 3,790 batteries connected to prepositioned equipment items, 3,175 batteries, valued at approximately $1 million, had a voltage reading below the threshold of 12.65 volts and were required to be recharged or replaced, in accordance with the contract. However, BICmd officials did not verify that the contractors:

- initiated service requests to recharge or replace 2,631 (83 percent) of 3,175 batteries with voltage readings below the threshold of 12.65 volts; or
- documented accurate battery recharge dates for 66 (2 percent) of 3,175 batteries.

BICmd Officials Did Not Ensure that the Contractors Initiated Service Requests to Recharge or Replace Low Voltage Batteries

BICmd officials did not verify that the contractors opened service requests to either recharge or replace batteries with voltage readings below the threshold of 12.65 volts. The contractor's Management Procedure 600-P-002 referenced Technical Bulletin (TB) 9-6140-252-13, "Recharging Procedures for Automotive Valve Regulated Lead-Acid Batteries," as the guidance for recharging batteries, which requires a threshold of 12.65 volts.[13] However, BICmd officials stated that they used a threshold of 12.1 volts instead of 12.65 volts to determine when to discard batteries or open a service request to replace low voltage batteries. Additionally, BICmd officials stated that they conducted an informal study in July 2001, and they concluded that 12.1 volts for batteries was a more sustainable threshold to determine when to recharge or replace batteries. However, when we reviewed the informal study, it did not state that 12.1 volts should be the threshold.

TB 9-6140-252-13 states that if the battery voltage reading is below 12.65 volts and remains unchanged for two consecutive recharge cycles, then the battery has reached its capacity. Once a battery reaches capacity, Management Procedure 600-P-002 states that a service request must be initiated to recharge or replace the battery. During our review of the voltage readings of the batteries listed on December 2022, June 2023, and December 2023 battery SASU reports, we identified 3,175 batteries that had voltage readings below 12.65 volts. Based on Management Procedure 600-P-002, service requests to recharge or replace the batteries should have been issued for the 3,175 batteries that had voltage readings below 12.65 volts. However, the contractor only initiated service requests for 544 batteries, meaning that the remaining 2,631 batteries would not be recharged or replaced.

The contract states that the contractor's battery maintenance plan should minimize battery failure by ensuring that equipment batteries are in a ready condition. The contract referenced Technical Manual (TM) 9-6140-200-13, "Operator and Field Maintenance for Automotive Lead-Acid Storage Batteries," for maintaining equipment batteries.[14] TM 9-4160-200-13 states that the equipment is not ready or available if the battery test is not within limits or the battery requires recharging. Therefore, based on the 12.65 volts threshold, the 3,175 batteries with voltages below the threshold were not in a ready condition.

[13] Technical Bulletin (TB) 9-6140-252-13, "Recharging Procedures for Automotive Valve Regulated Lead-Acid Batteries," January 31, 2012.

[14] Technical Manual (TM) 9-6140-200-13, "Technical Manual Operator and Field Maintenance for Automotive Lead-Acid Storage Batteries," May 26, 2011.

In addition, we informed BICmd officials that the guidance to use 12.1 volts was not in the contract and that TB 9-6140-252-13 requires a threshold of 12.65 volts. BICmd officials stated that based on their previous 2009 contract, they used 12.1 volts as the threshold requirement for recharging or replacing low voltage batteries, and they erroneously assumed that the threshold of 12.65 volts was updated to 12.1 volts in the current 2019 contract. BICmd officials verified that the threshold of 12.1 volts was not in the 2019 contract. As a result, the contractors updated their Management Procedure 600-P-002, with the threshold requirement of 12.1 volts, in February 2024. However, we informed BICmd officials that they still did not comply with the 12.65 volts threshold required by TB 9-6140-252-13.

Based on TB 9-6140-252-13, the lower the battery voltage, the lower the amount of energy is stored in a battery relative to its maximum capacity. For example, batteries with 12.65 volts store about 80-percent energy and batteries with 12.1 volts store about 35-percent energy. According to a battery manufacturer, when batteries are not fully charged, this can lead to:

- longer charging times,
- shorter running times between charges,
- shorter battery life, and
- battery failure.

The Marine Corps practice of recharging batteries when they reach 12.1 volts and below may not only lead to longer charging times, but also battery failure. Therefore, we recommend that the Commanding General, Marine Corps Logistics Command, direct the Commander, Blount Island Command, to analyze and document the impact to the battery life of the 3,175 batteries, valued at approximately $1 million, due to not recharging the batteries when they reach the threshold of 12.65 volts. In addition, we recommend that the Commanding General, Marine Corps Logistics Command, direct the Commander, Blount Island Command, to require the contractors to implement the Technical Bulletin (TB) 9-6140-252-13, "Recharging Procedures for Automotive Valve Regulated Lead-Acid Batteries," requirements and issue service requests to either recharge or replace batteries with voltage readings below the threshold of 12.65 volts aboard the USNS *Dahl* and all other prepositioned ships covered by the contract.

BICmd Officials Did Not Ensure that the Contractors Documented Accurate Battery Recharge Dates

BICmd officials did not verify that the contractors documented accurate battery recharge dates for 66 of 3,175 batteries with low voltage. Management Procedure 600-P-002 requires the contractors to accurately record battery test results in the SASU, including

battery recharge dates. Management Procedure 600-P-002 also states that low voltage batteries should be recharged after they are tested. Therefore, the recharge date should be after the date that batteries were tested, not before. We identified 66 battery SASUs that did not have the correct battery recharge dates on the reports. Based on our review of the recharge and test dates of the batteries on the SASU reports, the recharge date was before the test date. Specifically, 66 batteries had a recharge date of February 2023; however, the battery test date was November 2023. When we informed BICmd officials of the inaccuracies, BICmd officials confirmed that the battery recharge dates on the SASU battery reports were incorrect. BICmd officials also stated that the recharge date was probably incorrectly cut and pasted, and the recharge date should have been in February 2024 instead of February 2023.

Marine Corps Officials Did Not Ensure that the Contractors Submitted Accurate Shipboard Pre-Exercise Status Reports for Prepositioned Equipment Selected for KMEP 24-1

BICmd officials did not ensure that the contractors submitted accurate shipboard Pre-Exercise Status reports for four vehicles selected for the KMEP 24-1 exercise. According to the contract, the contractors are required to submit accurate shipboard Pre-Exercise Status reports to BICmd officials for equipment selected for an exercise. The shipboard Pre-Exercise Status report includes elements such as the status of equipment's mission capability, the status of service requests, and a list of equipment swapped before the exercise. In addition, the contract directs the contractors to perform equipment and battery function checks. Furthermore, the Marine Corps Tactical Publication 13-10D states that Marine Corps officials are responsible for ensuring all equipment is in a mission capable condition.

The exercising unit officials identified 18 prepositioned equipment items as non-mission capable for the KMEP 24-1 exercise. We determined that BICmd officials did not ensure that the contractors accurately reported the status for 4 of the 18 prepositioned equipment items (4 vehicles) in the Pre-Exercise Status report. Specifically, the shipboard Pre-Exercise Status report showed the status of the four vehicles as mission capable. However, the prepositioned equipment information, including the equipment serial number and equipment status that the exercising unit officials shared with us, showed the four vehicles were not mission capable. For example, for one vehicle, the shipboard Pre-Exercise Status report indicated that it was mission capable; however, the exercising unit officials determined that the vehicle had a dead battery, and it was non-mission capable. After the KMEP 24-1 exercise concluded on March 27, 2024, the contractors initiated a service request showing the status of the prepositioned equipment

as deadlined due to a defective battery.[15] We reviewed the service request associated with the vehicle and confirmed that the vehicle needed a battery and that the contractors inaccurately reported the vehicle was mission capable before the exercise. Additionally, we reviewed the final list of equipment items for the KMEP 24-1 exercise and verified that BICmd officials did not use the four prepositioned equipment items from the final exercise list. After the exercise ended, the contractors initiated service requests for the four prepositioned equipment items. The contractors accurately reported the readiness status of the remaining 14 prepositioned equipment items.

BICmd Officials Did Not Conduct Effective Quality Assurance Reviews

BICmd officials did not effectively monitor the contractors' maintenance of prepositioned equipment aboard the USNS *Dahl* because the BICmd quality assurance process identified in the contract does not require BICmd officials to verify the accuracy and completeness of records supporting the contractors' maintenance processes and maintenance reporting. According to the contract, Marine Corps quality assurance representative personnel are responsible for inspecting and monitoring equipment and processes through examining equipment, reviewing records of maintenance actions taken and written reports from the contractors, and monitoring the contractors' established processes. However, BICmd officials did not effectively inspect and monitor the contractors' maintenance processes and maintenance reporting to identify equipment maintenance or maintenance documentation issues. Specifically, BICmd officials did not conduct effective quality assurance reviews of the contractors' SASUs and service requests that they relied on to determine the condition of the equipment and whether adequate maintenance had been performed on the equipment.

The BICmd Quality Assurance Process Was Not Effective to Ensure the Contractors Accurately Documented SASUs

The BICmd quality assurance process does not require BICmd officials to verify the accuracy and completeness of records supporting the contractors' documented SASUs. Based on our review of 267 SASU forms for 52 prepositioned equipment items, we found errors and inaccuracies in the contractors' SASU reporting that BICmd officials relied on to determine the condition of the equipment on the USNS *Dahl*. For example, BICmd officials provided us with the same SASU form twice. The first time BICmd officials provided the form, the form did not have

[15] According to Marine Corps Order P4790.2C, equipment is considered "deadlined" when it cannot perform its designed combat mission. The organization that owns the item is responsible for determining the item's status.

the supervisor's signature or date. BICmd officials later provided us the same form that included the signature and was backdated. Of the 267 SASU forms, 46 (17 percent) had a total of 48 discrepancies consisting of errors and inaccuracies, and we identified no discrepancies for the remaining 221 SASU forms.

- Of 56 November 2021 SASU forms, 17 forms had 17 errors and inaccuracies.
- Of 52 November 2022 SASU forms, 11 forms had 12 errors and inaccuracies.
- Of 52 June 2023 SASU forms, 12 forms had 13 errors and inaccuracies.
- Of 53 November 2023 SASU forms, 6 forms had 6 errors and inaccuracies.
- Of 54 May 2022 SASU forms, no forms had errors or inaccuracies.

Table 2 shows the type of SASU reporting errors and inaccuracies we found.

Table 2. Contractor SASU Reporting Errors and Inaccuracies

SASU Reporting Errors and Inaccuracies	SASU November 2021	SASU November 2022	SASU June 2023	SASU November 2023	Total Discrepancies
SASU Forms Not Signed by Supervisor	16	2	7	3	**28**
SASU Forms Backdated	1	1	1	1	**4**
Serial Numbers Revised on SASU Forms	0	0	5	0	**5**
SASU Forms with Modified Supervisor Signature Dates	0	9	0	2	**11**
Total	**17**	**12**	**13**	**6**	**48**

Note: A SASU form may have more than one type of inaccuracy, error, or both.
Source: The DoD OIG.

The contractors use the SASU forms to help prepare the shipboard SASU report provided to BICmd officials. According to the contract, the contractors will provide a shipboard SASU report in accordance with the standardized report format upon completion of the SASUs. For example, a shipboard SASU report includes information such as the name of the equipment; equipment serial number; items checked on the equipment (tires, battery, or fuel system); a mechanic's signature and date; and the supervisor's signature and date.

When we informed BICmd officials of the errors and inaccuracies, BICmd officials stated that the contract requires the contractors to provide the shipboard SASU report, not the contractors' internal SASU forms used to support the report. BICmd officials stated that the contractual data in the shipboard SASU reports provide the Command with the information needed for the shipboard quality assurance personnel to determine the contractors' compliance with the contract maintenance, alleviating the need to review the contractors' records supporting the shipboard SASU report. As a result, BICmd officials did not review the SASU forms that supported the results in the shipboard SASU report and relied on the shipboard SASU report without additional verification. Therefore, we recommend that the Commanding General, Marine Corps Logistics Command, direct the Commander, Blount Island Command, to update and implement quality assurance procedures to require the contractors to provide Blount Island Command officials the records supporting the SASU results in the shipboard SASU reports and to require Blount Island Command officials to verify the accuracy and completeness of the records.

The BICmd Quality Assurance Process Was Not Effective to Ensure the Contractors Initiated Service Requests

The BICmd quality assurance process does not require BICmd officials to verify that the contractors initiated service requests. Specifically, BICmd officials did not ensure the contractors identified or initiated service requests for vehicles with Class III leaks.

During our review of 88 prepositioned equipment items on the USNS *Dahl*, we identified 5 vehicles that had Class III leaks. However, the contractors had not initiated service requests for the leaks before we identified the leaks during our walkthrough. The contract states that the contractors are required to create a service request when equipment needs repairs or other services. The contractors did not document any Class III leaks related to the five vehicles during their monthly stock check in January 2024, before our review of the prepositioned equipment in February 2024; therefore, the contractors did not initiate service requests for the leaks before we notified them of the leaks. After we brought the leaks to the attention of the BICmd officials and the contractors, the contractors initiated service requests for four of the five vehicles.

BICmd officials stated that the contractors did not initiate a service request for one of the five vehicles because there may have been a previous vehicle in that location that had a leak; however, BICmd officials provided no documentation to support this statement. Therefore, we recommend that the Commanding General, Marine Corps Logistics Command, direct the Commander, Blount Island Command,

to determine whether any vehicles aboard the USNS *Dahl* have Class III leaks and, if so, require the contractors to take appropriate corrective maintenance actions. In addition, we recommend that the Commanding General, Marine Corps Logistics Command, direct the Commander, Blount Island Command, to determine why the contractor did not identify maintenance issues, such as Class III leaks, and develop and implement a solution.

As part of the quality assurance process, BICmd officials are responsible for verifying that the contractors maintain prepositioned equipment in accordance with the contract, including ensuring that the contractors provide accurate and required maintenance documentation, such as SASUs and service requests. Therefore, we recommend that the Commanding General, Marine Corps Logistics Command, direct the Commander, Blount Island Command, to update and implement quality assurance procedures that verify the contractors' maintenance of prepositioned equipment aboard the USNS *Dahl*, and all other prepositioned ships covered by the contract, is performed in accordance with the contract requirements. In addition, we recommend that the Commanding General, Marine Corps Logistics Command, direct the Commander, Blount Island Command, to perform and document in-person reviews of the maintenance of prepositioned equipment aboard the USNS *Dahl* to verify the status of the equipment and that the contractors have taken the appropriate corrective maintenance actions.

The Marine Corps May Not Know the True Readiness Status of Prepositioned Equipment Aboard the USNS *Dahl*

As a result of the ineffective monitoring of the contractors' maintenance of prepositioned equipment, the Marine Corps may not know the true readiness status of prepositioned equipment, and BICmd officials may not meet their operational mandate to configure and maintain all the prepositioned equipment to 100-percent combat readiness, as stated in the contract. According to the contract, the Marine Corps prepositioning program's focus is on responding to the "unknown with a credible capability" in "short-to-no notice" time frames. BICmd officials are required to collect equipment readiness information from the contractors and provide it to Marine Corps Forces, as directed by Marine Corps Technical Publication 13-10D.

Having an inaccurate status of prepositioned equipment can negatively affect the Marine Corps' decisions regarding the readiness of the prepositioned equipment and the equipment's availability for exercises or contingencies. In addition, failure of equipment batteries can also negatively affect the readiness of

prepositioned equipment. For example, based on the equipment readiness status of the equipment items planned to be used in the KMEP 24-1 exercise that were provided to Marine Corps Forces, all the equipment items should have been mission capable. However, four vehicles for the exercise were inaccurately reported as mission capable. Specifically, one of the four vehicles inaccurately reported as mission capable had dead batteries. The Marine Corps Forces could not use these vehicles for the exercise. Without having an accurate readiness status of prepositioned equipment items, Marine Corps Forces may not have the items needed to properly exercise or respond to a contingency in short-to-no notice time frames.

Based on our overall sample of 88 prepositioned equipment items, we estimate (project) that BICmd officials did not effectively monitor the contractors' maintenance of 55 (9 percent) of the 647 prepositioned equipment items in accordance with DoD and Marine Corps guidance and contract requirements.

Recommendations, Management Comments, and Our Response

Recommendation 1

We recommend that the Commanding General, Marine Corps Logistics Command, direct the Commander, Blount Island Command, to:

a. Update and implement quality assurance procedures to validate the contractors' maintenance of prepositioned equipment aboard the USNS *Dahl* and all other maritime prepositioned ships in the U.S. Indo-Pacific Command area of responsibility that are covered by the contract, including the:

- **requirement for the contractors to provide Blount Island Command officials the records supporting the maintenance results in the shipboard semi-annual start-up reports;**
- **verification of the accuracy and completeness of the records supporting the maintenance results in the shipboard semi-annual start-up reports from the contractors; and**
- **performance and documentation of in-person reviews of the maintenance of prepositioned equipment aboard the USNS *Dahl* to verify the status of the equipment and that the contractors have taken the appropriate corrective maintenance actions.**

Marine Corps Logistics Command Comments

The Commanding General, Marine Corps Logistics Command, agreed with the recommendation, stating that Blount Island Command will review Quality Assurance Procedures, including sampling of contractor source documentation, and it will "make comparisons of same to the contract deliverable monthly shipboard Semi-Annual Start Up (SASU) reports." The Commanding General also stated that Blount Island Command will increase the frequency of on-site quality assurance visits to verify accuracy of reporting and accuracy of the indicated maintenance condition. The Commanding General stated that these actions will be completed no later than December 31, 2025.

Our Response

Comments from the Commanding General addressed the specifics of the recommendation; therefore, it is resolved but will remain open. We will close the recommendation once we: (1) receive and verify the updated quality assurance procedures and documentation supporting that Blount Island Command selected a monthly shipboard SASU report, reviewed and compared it to all of the supporting records for accuracy and completeness, documented the results of the comparison, and took appropriate corrective action; and (2) receive the frequency and dates of on-site quality assurance visits, documentation supporting maintenance reviewed, status of equipment reviewed, and corrective maintenance actions taken by the contractor.

b. Analyze and document the impact to the battery life of the 3,175 batteries, valued at approximately $1 million, due to not recharging the batteries when they reach the threshold of 12.65 volts.

Marine Corps Logistics Command Comments

The Commanding General, Marine Corps Logistics Command, agreed with the recommendation, stating that Blount Island Command will conduct an additional analysis of the impact of recharging batteries at and below 12.1 volts. The Commanding General also stated that the additional analysis will be completed no later than December 31, 2025.

Additionally, the Commanding General stated that the Technical Bulletin (TB) 9-6140-252-13 applies to vehicles in a constant state of use. The Commanding General also stated that for vehicles stored aboard an MPS, adopting the 12.1-volt charging threshold has enabled shipboard maintainers to meet this requirement with reliability, ensuring batteries retain sufficient capacity to support vehicle mobility. In addition, the Commanding General stated that this condition-based charging strategy mitigates overcharging risks and reduces maintenance burden, while ensuring vehicles retain sufficient capacity to perform critical roll-on/roll-off operations.

The Commanding General also stated that historically, traditional lead-acid batteries used in vehicles aboard ships typically lasted less than 3 years, primarily due to the limitations of their design and the harsh operational environment. These batteries were often stored at full charge for extended periods, which contributed to a reduced life cycle and frequent replacements. The Commanding General stated that in response to these challenges, Blount Island Command transitioned to Absorbent Glass Mat batteries, which offer improved durability, better charge retention, enhanced resistance to vibration and temperature fluctuations, and an increased life cycle. Furthermore, the Commanding General stated that allowing voltage to drop to 12.1 volts or less (approximately 35-percent state of charge) before recharging: (1) avoids the stress of constant micro-cycles (small repeated charges and discharges that shorten service life); and (2) reduces the likelihood of overcharging, which is especially critical to Absorbent Glass Mat batteries that degrade rapidly if overcharged.

Our Response

Comments from the Commanding General addressed the specifics of the recommendation; therefore, it is resolved but will remain open. We will close the recommendation once we receive and verify documentation supporting the analysis of the impact of recharging batteries when they reach 12.1 volts and below.

c. Require the contractors to implement the Technical Bulletin (TB) 9-6140-252-13, "Recharging Procedures for Automotive Valve Regulated Lead-Acid Batteries," requirements and issue service requests to either recharge or replace batteries with voltage readings below the threshold of 12.65 volts aboard the USNS *Dahl* and all other maritime prepositioned ships in the U.S. Indo-Pacific Command area of responsibility that are covered by the contract.

Marine Corps Logistics Command Comments

The Commanding General, Marine Corps Logistics Command, disagreed with the recommendation, stating that Blount Island Command will conduct an additional analysis of the impact of recharging batteries at or below 12.1 volts. The Commanding General also said that the 12.65-volt threshold in the Technical Bulletin applies to vehicles in a constant state of use. Additionally, the Commanding General stated that for vehicles stored aboard an MPS, adopting the 12.1-volt charging threshold has enabled shipboard maintainers to meet this requirement with reliability, ensuring batteries retain sufficient capacity to support vehicle mobility. In addition, the Commanding General stated that this condition-based charging strategy mitigates overcharging risks and reduces maintenance burden, while ensuring vehicles retain sufficient capacity to perform

critical roll-on/roll-off operations. The Commanding General also stated that historically, traditional lead-acid batteries used in vehicles aboard ships typically lasted less than 3 years, primarily due to the limitations of their design and the harsh operational environment. According to the Commanding General, these batteries were often stored at full charge for extended periods, which contributed to a reduced life cycle and frequent replacements. The Commanding General stated that in response to these challenges, Blount Island Command transitioned to Absorbent Glass Mat batteries, which offer improved durability, better charge retention, and enhanced resistance to vibration and temperature fluctuations, and increased life cycle. Furthermore, the Commanding General stated that allowing voltage to drop to 12.1 volts or less (approximately 35-percent state of charge) before recharging: (1) avoids the stress of constant micro-cycles (small repeated charges and discharges that shorten service life); and (2) reduces the likelihood of overcharging, which is especially critical to Absorbent Glass Mat batteries that degrade rapidly if overcharged.

Our Response

Comments from the Commanding General did not address the specifics of the recommendation; therefore, the recommendation is unresolved. The Technical Bulletin does not classify battery recharging procedures based on "use," but on voltage level. Additionally, the Technical Bulletin does not state and the Commanding General did not provide any support that adopting the 12.1 volts threshold "avoids the stress of constant micro-cycles (small, repeated charges and discharges that shorten service life), and reduces the likelihood of overcharging, which is especially critical to Absorbent Glass Mat batteries that degrade rapidly if overcharged." Although the Commanding General stated that Blount Island Command will conduct an additional analysis of the impact of recharging batteries at or below 12.1 volts, the Technical Bulletin, which is the Government criteria for recharging the batteries, states that the threshold is 12.65 volts. Therefore, we request that the Commanding General reconsider their position on the recommendation and provide comments and documentation to address the unresolved recommendation within 30 days of the final report.

d. Determine whether any vehicles aboard the USNS *Dahl* have Class III leaks and, if so, require the contractors to take appropriate corrective maintenance actions.

Marine Corps Logistics Command Comments

The Commanding General, Marine Corps Logistics Command, agreed with the recommendation, stating that a focused inspection to identify Class III leaks was completed aboard the USNS *Dahl*, and all findings were addressed through the Global Combat Support System – Marine Corps [GCSS-MC] service requests as of July 15, 2025.

Our Response

Comments from the Commanding General addressed the specifics of the recommendation; therefore, the recommendation is resolved but will remain open. We will close the recommendation once we receive and verify documentation supporting the inspection performed, findings from the inspection and corresponding service requests for each finding, from the Global Combat Support System – Marine Corps.

e. Determine why the contractor did not identify maintenance issues, such as Class III leaks, and develop and implement a solution.

Marine Corps Logistics Command Comments

The Commanding General, Marine Corps Logistics Command, agreed with the recommendation, stating that Blount Island Command will determine why Class III leaks were not properly identified and will implement a solution supporting the highest possible state of readiness for material prepositioned within the INDOPACOM area of responsibility. The Commanding General also stated that the review and solution will be completed prior to December 31, 2025.

Our Response

Comments from the Commanding General addressed the specifics of the recommendation; therefore, the recommendation is resolved but will remain open. We will close the recommendation once we receive and verify documentation supporting Blount Island Command's: (1) determination on why maintenance issues, such as Class II leaks, were not identified; and (2) corresponding solution and implementation of the solution.

Appendix A

Scope and Methodology

We conducted this audit from July 2023 through May 2025 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our finding and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our finding and conclusions based on our audit objectives.

DoD and Marine Corps Prepositioning Equipment Maintenance and Storage Guidance

To understand Marine Corps prepositioned equipment maintenance and storage procedures, we reviewed the following guidance.

- Marine Corps Technical Manual 4790-14/2C, "Logistics Support for Maritime Prepositioning Ships Program Maintenance and Materiel Management," February 29, 2000
- Marine Corps Tactical Publication 13-10D, "Maritime Prepositioning Force Operations," May 2, 2016, Formerly Marine Corps Warfighting Publication 3-32, November 21, 2011
- Marine Corps Order 3000.17, "Marine Corps Prepositioning Programs," October 17, 2013
- Marine Corps Order 4000.58, "Prepositioning Programs Tailoring Policy," August 19, 2016
- Marine Corps Contract M6700419D0001, "Statement of Work," June 1, 2019

Sample Selection of Prepositioned Equipment

We obtained data from the Headquarters Marine Corps for prepositioned equipment loaded on the USNS *Dahl* from June 2021 through February 2024. We selected prepositioned equipment items from the USNS *Dahl* to review because the USNS *Dahl* was the only ship in the USINDOPACOM area of responsibility that conducted an exercise during the time period of our review. While in the USINDOPACOM area of responsibility, the USNS *Dahl* supported the 2023 U.S. and Philippines Armed Forces exercises (Balikatan 23) in April 2023 and the Korean Marine Exercise Program (KMEP) 24-1 exercise in February 2024.

We used the support of the DoD OIG's Quantitative Methods Division to select a stratified statistical sample of 88 prepositioned equipment items from three strata based on the total prepositioned equipment population of 647 in the consolidated memorandum receipt.

- Stratum 1 consisted of prepositioned equipment items not used in the Balikatan 23 exercise.
- Stratum 2 consisted of prepositioned equipment items used in the Balikatan 23 exercise and returned with no problems.
- Stratum 3 consisted of prepositioned equipment items used in the Balikatan 23 exercise and returned with problems.

The consolidated memorandum receipt is an asset account containing principal end item equipment.[16] This equipment account does not contain supply items.[17] Therefore, no supplies were included in our sample. See Appendix B for a breakdown of the strata, statistical sample plan, and estimation.

In addition to the statistical sample of 88 prepositioned equipment items, we reviewed 18 prepositioned equipment items identified by Marine Expeditionary Force officials as non-mission capable. Marine Expeditionary Force officials, who were using the prepositioned equipment in the KMEP 24-1 exercise, informed us that they identified 18 prepositioned equipment items that were non-mission capable while conducting an initial diagnosis of prepositioned equipment selected for the KMEP 24-1 exercise. Subsequently, Marine Expeditionary Force officials emailed the list of the 18 prepositioned equipment items to us on February 17, 2024, including item serial number, description, and issues they identified during their diagnosis of the 18 prepositioned equipment items.

After receiving the list, we verified the status of the 18 prepositioned equipment items that the Marine Expeditionary Force officials provided. Specifically, we compared the list of the 18 prepositioned equipment items to the Pre-Exercise Status report sent from BICmd showing the status of the 18 prepositioned equipment items on the USNS *Dahl* before the exercise. Based on the comparison, we identified inaccuracies in the readiness status reported for 4 of 18 prepositioned equipment items and no inaccuracies in the status reporting for the remaining 14 items.

[16] Marine Corps Order 4400.201, "Management of Property in the Possession of the Marine Corps, Volume 3," June 13, 2016, defines the consolidated memorandum receipt as an asset account that includes military equipment.

[17] Supplies include meals ready to eat; petroleum, oils, and lubricants; munitions; and medical supplies.

Additionally, we added a battery review to our scope because the Marine Corps has specific SASU procedures that require maintenance and testing of batteries associated with prepositioned equipment. We reviewed December 2022, June 2023, and December 2023 SASU reports containing 1,262, 1,265, and 1,263 batteries, respectively, totaling 3,790 batteries.

Interviews, Documentation, and Analysis of Prepositioned Equipment Aboard the USNS Dahl

To determine actions BICmd officials took to maintain prepositioned equipment aboard the USNS *Dahl*, we:

- obtained Marine Corps Service policies and procedures related to prepositioned equipment maintenance and storage requirements aboard MPSs;
- reviewed the contract related to maintenance and storage of prepositioned equipment aboard MPSs;
- reviewed maintenance-related checklists used to complete required maintenance and storage-related procedures aboard MPSs;
- interviewed DoD officials from the Headquarters Marine Corps, USINDOPACOM, BICmd, Marine Corps Forces Pacific, and USNS *Dahl* about the:
    - DoD-wide policies and procedures for MPF prepositioned equipment maintenance and storage, and
    - roles and responsibilities concerning Marine Corps MPF prepositioned equipment maintenance and storage aboard an MPS;
- reviewed records of checklists used to document maintenance and storage-related actions completed aboard the USNS *Dahl* since 2021 to determine whether BICmd officials ensured the contractors complied with contract requirements. For the prepositioned equipment in our sample, we:
    - reviewed whether BICmd officials completed and documented required maintenance and storage procedures in accordance with the contract;
    - assessed whether BICmd officials performed adequate oversight of the contractors' performance to effectively maintain and store prepositioned equipment aboard the USNS *Dahl*; and
    - interviewed BICmd officials to understand prepositioned equipment maintenance and storage procedures aboard the USNS *Dahl*; and
- inquired about Marine Corps information systems to determine the:
    - content of information maintained in the system; and
    - personnel authorized to access and enter data in the system.

We provided the contractor the opportunity to review and comment on relevant portions of the draft report.

Internal Control Assessment and Compliance

We assessed internal controls and compliance with laws and regulations necessary to satisfy the audit objective. We assessed the control environment, risk assessment, and control activities components. We reviewed the control environment regarding maintenance and storage of the prepositioned equipment aboard MPSs in the USINDOPACOM area of responsibility. We reviewed service requests and SASU forms initiated and documented by the contractors. We also assessed the BICmd officials' implementation of control activities related to the Quality Assurance process of the contractors' work performed. Specifically, we reviewed the contract, policies and procedures, and implementation of the maintenance and storage process by the Marine Corps. However, because our review was limited to these internal control components and underlying principles, it may not have disclosed all internal control deficiencies that may have existed at the time of this audit.

Use of Computer-Processed Data

We relied on computer-processed data to select our audit sample. BICmd officials provided us with data from their Global Combat Support System–Marine Corps. Specifically, BICmd officials provided us with a consolidated memorandum receipt. This receipt provided us with all reportable pieces of equipment related to the USNS *Dahl* from which we selected the audit sample. After selecting the sample, we requested the service request history for all items in our sample. Because we only relied on the data for sample selection, we concluded that the data were reliable for the purpose of this audit.

Use of Technical Assistance

We received assistance from the DoD OIG's Quantitative Methods Division to select a statistical sample of prepositioned equipment loaded on the USNS *Dahl* to use for our audit.

Prior Coverage

During the last 5 years, the DoD Office of Inspector General (DoD OIG) and the Government Accountability Office (GAO) issued seven reports discussing the lack of management and maintenance of prepositioning stock. Unrestricted DoD OIG reports can be accessed at http://www.dodig.mil/reports.html. Unrestricted GAO reports can be accessed at http://www.gao.gov.

DoD OIG

Report No. DODIG-2023-076, "Management Advisory: Maintenance Concerns for the Army's Prepositioned Stock-5 Equipment Designated for Ukraine," May 23, 2023

> The purpose of this management advisory was to inform the Department of the Army and its subordinate commands, and U.S. European Command's officials responsible for designation and transfer of military equipment to the Ukrainian Armed Forces, about concerns for the readiness of Army Prepositioned Stock-5 equipment. The advisory identified issues in Army Prepositioned Stock-5 equipment that resulted in unanticipated maintenance, repairs, and extended lead times to ensure the readiness of military equipment selected to support the Ukrainian Armed Forces.

Report No. DODIG-2023-053, "Evaluation of Army Pre-Positioned Equipment Issued in Response to Ukraine and NATO Defense Forces," February 27, 2023

> The 405th Army Field Support Brigade (AFSB) quickly issued Army's Prepositioned Stock-2 equipment to the 1st Armored Brigade Combat Team. The DoD OIG determined that some equipment issued from Army's Prepositioned Stock-2 was non-fully mission capable and found that the 405th AFSB can improve its equipment maintenance and coordination processes. The DoD OIG recommended that Army officials: (1) develop, or update, and implement maintenance processes to track the mission capability of Army's Prepositioned Stock equipment, ways to exercise equipment, a checklist to help deploying units coordinate during rapid deployments, and requirements to configure equipment for transport and for combat; (2) clarify joint inventory requirements at the equipment configuration and handover area; and (3) provide guidance on identifying and ensuring the availability of personnel to support surge requirements for rapid deployments.

Report No. DODIG-2018-151, "Military Sealift Command's Maintenance of Prepositioning Ships," September 24, 2018

> The DoD OIG determined that the Military Sealift Command (MSC) did not ensure its Government-owned, contractor-operated prepositioning ships received the required maintenance. Specifically, MSC personnel did not maintain complete and accurate preventative maintenance plans, which identify the contractors' maintenance responsibilities. In addition, the MSC did not verify that the contractors completed the contract requirements related to the preventative maintenance of the Government-owned, contractor-operated prepositioning fleet. MSC personnel did not maintain complete and accurate preventative maintenance plans because the MSC did not update technical

drawings and manuals to replicate ship configurations or provide training to all Shipboard Automated Maintenance Management (SAMM) users on the system's functionality.

The DoD OIG report made recommendations to the Director, MSC Engineering Directorate, to: (1) update the technical manuals and drawings for its prepositioning fleet; (2) revise MSC policies so that all system users are provided initial and annual refresher training on the proper use of SAMM, including each of the modules in SAMM and of the feedback log; and (3) update SAMM so that its data fields will provide users with clear choices, capture preventative maintenance information more accurately, and allow for the MSC to extract aggregate metrics for assisting with maintenance planning and decision making. The report also recommended that the Director, MSC Contracts for Charters and Ship Operations Division, in conjunction with the Program Manager, Prepositioning Program Management Office, to: (1) review and modify all contracts to develop specific requirements for all users to attend formal SAMM training and align contract language with MSC procedures that describe the contractors' roles and responsibilities for using SAMM; (2) ensure that contracting officers appoint a qualified contracting officer's representative or contracting officer's technical representative to conduct consistent surveillance of contractors at sea and during shipyard availabilities using a quality assurance surveillance plan; and (3) document future contractual deficiencies through formal, written coordination with the contractor. The MSC Commander agreed with all recommendations; therefore, these recommendations are resolved and will be closed once verified that the actions management agreed to are implemented.

Report No. DODIG-2018-152, "Management of Army and Marine Corps Prepositioned Stocks in U.S. European Command," September 17, 2018

The DoD OIG determined that Army and Marine Corps officials did not effectively manage the storage and maintenance of prepositioned stocks in the U.S. European Command area of responsibility. Army and Marine Corps officials did not ensure proper storage facility humidity levels, weapons maintenance, and vehicle maintenance. Specifically, Marine Corps Blount Island Command officials did not control the humidity levels in Marine Corps Prepositioning Program–Norway storage sites because Marine Corps officials did not include a requirement in the local bilateral agreement for Norwegian personnel to control the humidity levels. In addition, Marine Corps Blount Island Command officials did not perform or document maintenance on 30 of 36 weapons and 124 of 165 vehicles from a nonstatistical sample because officials did not develop maintenance requirements for weapons stored

in protective packaging, develop standard operating procedures for recording completed maintenance, or monitor the completion of required maintenance. The report presented three recommendations. Recommendation 1, to the Deputy Chief of Staff of the Army, G-4 (Logistics), was partially addressed and, therefore, it was unresolved. Recommendation 2, to the Commander, 405th Army Field Support Battalion–Africa, was not addressed and, therefore, it was unresolved. Recommendation 3, to the Deputy Commandant, U.S. Marine Corps Installations and Logistics, was resolved but open.

Report No. DODIG-2018-132, "Management of Army Equipment in Kuwait and Qatar," June 29, 2018

The DoD OIG determined that the Army did not ensure that URS Federal Services personnel properly maintained the prescribed cyclic maintenance schedules for Army's Prepositioned Stock-5 vehicles and weapon systems stored in Kuwait and Qatar. Specifically, the 401st Army Field Support Brigade personnel relied on the contractor to adhere to prescribed maintenance schedules and did not verify that the contractor's maintenance schedules complied with Army Technical Manual 38-470 and contract requirements. The DoD OIG made three recommendations. Recommendation A.1 was to the Chief, Land-Based Army's Prepositioned Stock Division, Army Sustainment Command; and Recommendation A.2 was to the Deputy Chief of Staff of the Army, G-4 (Logistics). Recommendations A.1 and A.2 were resolved but not closed. In addition, Recommendation B was to the Chief of Staff of the Army and was unresolved and not closed.

GAO

Report Number GAO-21-358, "Warfighter Support, DoD Needs a Complete Picture of the Military Services Prepositioning Programs," March 2021

The GAO found that each of the Services reported some shortfalls in their prepositioned assets from 2015 through 2019, including mortars, combat vehicles, and medical equipment. In the Indo-Pacific region, the Army reported shortfalls in equipment to construct bridges. The GAO recommended that the DoD develop a reporting mechanism or tool to gather complete information about the Military Services' prepositioning programs for joint oversight and to reduce duplication and fragmentation. The DoD concurred with the recommendation.

Report No. GAO-19-244, "Prepositioned Stocks, DoD Needs Joint Oversight of the Military Services Program," January 2019

The GAO reported that the Department of Defense's implementation plan for managing the Military Services' prepositioned stock programs did not fully address four of the seven elements required by the FY 2014 National Defense Authorization Act. As a result, the GAO made six recommendations, including that the DoD provide information required by the National Defense Authorization Act, fully implement joint oversight of prepositioned stock programs, and update Congress on progress made. The DoD concurred with all the recommendations.

Appendix B

Statistical Sample Plan and Estimation

Population

We used a universe of 647 Marine Corps prepositioned equipment items obtained through the project data call.

Parameters

We used a 90-percent confidence level and 5-percent precision for the sample design.

Sample Plan

We used an attribute sampling design with assistance from QMD in which the population was stratified into the following strata (groups) based on prepositioned equipment items not used and used in the Balikatan 23 exercise. QMD selected samples from each stratum without replacement. We identified the sample items within the strata that had maintenance errors (stratum sample errors). Table 3 shows each stratum's number of prepositioned equipment items in the population and sample, as well as that sample's number of maintenance errors or problems.

Table 3. Population, Sample Sizes, and Sample Errors by Stratum

Stratum Name	Stratum Population Size	Stratum Sample Size	Stratum Sample Errors
Stratum 1 – Number of Items Not Used in the Balikatan 23 Exercise	363	48	2
Stratum 2 – Number of Items Used in the Balikatan 23 Exercise and Returned with No Problems	150	20	0
Stratum 3 – Number of Items Used in the Balikatan 23 Exercise and Returned with Problems	134	20	6
Total	**647**	**88**	**8**

Source: The DoD OIG.

Statistical Estimations

Based on the results that we provided to QMD analysts, QMD calculated statistical estimations with a 90-percent confidence level, as shown in Tables 4, 5, and 6. QMD did not provide a statistical estimation for Stratum 2, "Used in the Balikatan 23 Exercise and Returned with No Problems," because there were no stratum sample errors.

We estimate (project) with a 90-percent confidence level that 3.8 percent to 13.3 percent of the prepositioned equipment items in the population have maintenance errors or problems, with a point estimate of 8.6 percent. The corresponding number of prepositioned equipment items in the population that had maintenance errors or problems ranges from 25 to 86, with a point estimate of 55, as shown in Table 4.

Table 4. Estimation of Prepositioned Equipment in the Total Population with Maintenance Errors

	Lower Bound	Point Estimate	Upper Bound
Number of Items with Maintenance Errors (percent)	25 (3.8%)	55 (8.6%)	86 (13.3%)

Source: The DoD OIG.

We estimate (project) with a 90-percent confidence level that 0.6 percent to 9.7 percent of the prepositioned equipment items not used in the Balikatan 23 exercise had maintenance errors or problems, with a point estimate of 4.2 percent. The corresponding number of prepositioned equipment items not used in the Balikatan 23 exercise that had maintenance errors or problems ranges from 2 to 35, with a point estimate of 15, as shown in Table 5.

Table 5. Estimation of Prepositioned Equipment Not Used in the Balikatan 23 Exercise

	Lower Bound	Point Estimate	Upper Bound
Number of Items Not Used in the Balikatan 23 Exercise (percent)	2 (0.6%)	15 (4.2%)	35 (9.7%)

Source: The DoD OIG.

We estimate (project) with a 90-percent confidence level that 11.5 percent to 48.5 percent of the prepositioned equipment items used in the Balikatan 23 exercise returned with errors or problems, with a point estimate of 30 percent. The corresponding number of prepositioned equipment items used in the Balikatan 23 exercise that returned with errors or problems ranges from 15 to 65, with a point estimate of 40, as shown in Table 6.

Table 6. Estimation of Prepositioned Equipment Used in the Balikatan 23 Exercise and Returned with Errors or Problems

	Lower Bound	Point Estimate	Upper Bound
Number of Items Used in the Balikatan 23 Exercise and Returned with Problems (percent)	15 (11.5%)	40 (30.0%)	65 (48.5%)

Source: The DoD OIG.

Appendix C

Prepositioned Equipment Items We Reviewed

Statistical Sample Items			
Sample Item	Name of Item in MPS (Nomenclature)	Sample Item	Name of Item in MPS (Nomenclature)
1	LOADER, SCOOP TYPE	24	TRUCK, ARMORED, XLWB
2	TRUCK, UTILITY	25	ROUGH TERRAIN CONTAINER
3	PANEL, POWER DISTRIBUTION	26	MACHINE GUN, GRENADE
4	SIGHT, THERMAL	27	TANK, WATER, MODULE
5	GENERATOR SET, DIESEL	28	TRACTOR, MEDIUM CRAW
6	TRUCK, UTILITY	29	TRACTOR, MEDIUM CRAW
7	FUEL PUMP MODULE AY	30	PANEL, POWER DISTRIBUTION
8	PANEL, POWER DISTRIBUTION	31	TRUCK, UTILITY
9	TANK, WATER, MODULE	32	GENERATOR SET, DIESEL
10	TRUCK, AMBULANCE	33	TRUCK, CARGO
11	MACHINE GUN, GRENADE	34	TRUCK ARMORED WRECKER 7T NONREDUCE W WINCH
12	TRUCK, CARGO	35	TRUCK ARMORED TRACTOR 7-TON W/O WINCH
13	ITAS-7 [IMPROVED TARGET ACQUISITION SYSTEM]	36	JOINT TACTICAL VEHICLE
14	TRUCK, CARGO	37	GENERATOR SET, DIESEL ENGINE
15	GENERATOR SET, DIESEL	38	TRUCK ARMORED CGO 7T W/O WINCH REDUCIBLE
16	MACHINE GUN, CALIBER	39	MRC148 RADIO SET
17	ITAS-7	40	TRUCK ARMORED XLWB CGO 7T W/O WINCH REDUCIBLE
18	TANK, WATER, MODULE	41	LOADER SCOOP TYPE (TRAM)
19	FUEL PUMP MODULE AY	42	TRUCK, ARMORED, CARGO, 7 TON, W/O WINCH REDUCIBLE DFCS
20	TRUCK, ARMORED, CARGO	43	JOINT TACTICAL VEHICLE
21	TRAILER, TANK	44	TRUCK ARMORED CGO 7T W/O WINCH REDUCIBLE
22	TRUCK, WRECKER, ARMORED	45	TRUCK ARMORED WRECKER 7T NONREDUCE W WINCH
23	TRUCK, UTILITY	46	GENERATOR SET, DIESEL ENGINE

Prepositioned Equipment Items We Reviewed (cont'd)

Statistical Sample Items			
Sample Item	**Name of Item in MPS (Nomenclature)**	**Sample Item**	**Name of Item in MPS (Nomenclature)**
47	JOINT TACTICAL VEHICLE	68	PANEL, POWER DISTRIB
48	TRUCK WRECKER, ARMORED LVSR	69	TRUCK, CARGO
49	TRUCK, ARMORED, CARGO, 7 TON, W/ WINCH REDUCIBLE DFCS	70	MACHINE GUN, CALIBER
50	TRUCK ARMORED CGO 7T W/O WINCH REDUCIBLE	71	TRUCK, UTILITY
51	LOADER SCOOP TYPE (TRAM)	72	TANK, WATER, MODULE
52	TRUCK ARMORED CGO 7T W/ WINCH REDUCIBLE	73	LOADER BACKHOE
53	SEMITRAILER,TANK	74	TRAILOR TANK WTR 400GAL 1 1/2T 2-WHL
54	TRUCK ARMORED TRACTOR 7-TON W/O WINCH	75	AIR CONDITIONER
55	TANK FUEL MODULE	76	SCRAPER-TRACTOR, WHEELED
56	TRUCK ARMORED TRACTOR 7-TON W/O WINCH	77	TRAILOR TANK WTR 400GAL 1 1/2T 2-WHL
57	TRUCK, UTILITY	78	JOINT TACTICAL VEHICLE
58	FUEL TANK ASSEMBLY	79	LOADER SCOOP TYPE (TRAM)
59	GENERATOR SET, DIESEL	80	RADIO SET AN/TRC-170A(V)5
60	TRUCK, CARGO	81	TANK FUEL MODULE
61	TANK, WATER, MODULE	82	TRUCK, FORKLIFT
62	FUEL PUMP MODULE AY	83	TANK FUEL MODULE
63	ITAS-7	84	TRUCK ARMORED CGO 7T W/O WINCH REDUCIBLE
64	TRUCK, CARGO	85	AIR CONDITIONER
65	TRUCK, CARGO	86	TRUCK ARMORED TRACTOR 7-TON W/O WINCH
66	TANK, WATER, MODULE	87	GENERATOR SET, DIESEL ENGINE
67	FUEL TANK ASSEMBLY	88	GENERATOR SET, DIESEL ENGINE

Prepositioned Equipment Items We Reviewed (cont'd)

Statistical Sample Items			
Sample Item	**Name of Item in MPS (Nomenclature)**	**Sample Item**	**Name of Item in MPS (Nomenclature)**
List of Additional 18 Items from the KMEP 24-1 Exercise			
01	MRC148 RADIO SET	10	JOINT TACTICAL VEHICLE (JLTV)
02	TRK AMB 4 LITTER	11	JOINT TACTICAL VEHICLE (JLTV)
03	MRC148 RADIO SET	12	TRK ARMORED CGO 7T W/O WINCH REDUCIBLE
04	ROUGH TERRAIN CONTAINER HANDLER (RTCH)	13	TRUCK, FORKLIFT
05	TRUCK, ARMORED, CARGO 7 TON, W/O WINCH REDUCIBLE	14	GENERAL PURPOSE JOINT LIGHT TACTICAL VEHICLE (JLTV)
06	TRUCK, CARGO	15	TRK ARMORED XLWB CGO 7T W/O WINCH REDUCIBLE
07	TRLR SEMI 40T M870A2-S	16	LOADER SCOOP TYPE (TRAM)
08	TRUCK, CARGO	17	GENERAL PURPOSE JOINT LIGHT TACTICAL VEHICLE (JLTV)
09	SEMITRAILER, REFUELER	18	GENERAL PURPOSE JOINT LIGHT TACTICAL VEHICLE (JLTV)

Source: The DoD OIG.

Management Comments

Marine Corps Logistics Command

DEPARTMENT OF THE NAVY
HEADQUARTERS, UNITED STATES MARINE CORPS
3000 MARINE CORPS PENTAGON
WASHINGTON, DC 20350-3000

IN REPLY REFER TO:
30 Jul 2025

MEMORANDUM FOR DEPARTMENT OF DEFENSE OFFICE OF INSPECTOR GENERAL

SUBJECT: DODIG Draft Report Project No. D2023-D000RG-0137.000, Audit of Storage and Maintenance of Marine Corps Prepositioned Equipment and Supplies on the U.S. Naval Ship Dahl in the Indo-Pacific Region

Pursuant to your July 01, 2025 report, attached are responses from the Commanding General, Marine Corps Logistics Command. The Marine Corps concurs with recommendations no. 1.a, 1.b, 1.d, and 1.e.

DODIG will note in our attached non-concurrence to recommendation no. 1.c that we have implemented an alternative course of action that meets the intent of the recommendation for ensuring equipment and supplies are properly maintained.

For questions regarding this response, you may contact me at [redacted]

Charles K. Dove
Head, Audit Coordination and Response
Office of the Director, Marine Corps Staff

Attachments:
As stated

Marine Corps Logistics Command (cont'd)

DODIG DRAFT REPORT DATED JULY 1, 2025
PROJECT NO. D2023-D000RG-0137.000

"AUDIT OF STORAGE AND MAINTENANCE OF MARINE CORPS PREPOSITIONED EQUIPMENT AND SUPPLIES ON THE U.S. NAVAL SHIP DAHL IN THE INDO-PACIFIC REGION"

UNITED STATES MARINE CORPS COMMENTS TO THE DODIG RECOMMENDATIONS

RECOMMENDATION 1.a: DODIG recommends that the Commanding General, Marine Corps Logistics Command, direct the Commander, Blount Island Command, to:

a. Update and implement quality assurance procedures to validate the contractors' maintenance of prepositioned equipment aboard the USNS Dahl and all other maritime prepositioned ships in the U.S. Indo-Pacific Command area of responsibility that are covered by the contract, including the:

- requirement for the contractors to provide Blount Island Command officials the records supporting the maintenance results in the shipboard semi-annual start up reports;
- verification of the accuracy and completeness of the records supporting the maintenance results in the shipboard semi-annual start up reports from the contractors; and
- performance and documentation of in-person reviews of the maintenance of prepositioned equipment aboard the USNS Dahl to verify the status of the equipment and that the contractors have taken the appropriate corrective maintenance actions.

USMC RESPONSE: Concur, Blount Island Command will review Quality Assurance Procedures to include sampling of contractor source documentation and make comparison of same to the contract deliverable Monthly Shipboard Semiannual Start-Up (SASU) report. Blount Island Command will increase frequency of on-site QA visits to verify accuracy of reporting and of the indicated maintenance condition. Identified actions will be complete no later than 31 December 2025.

RECOMMENDATION 1.b: DODIG recommends that the Commanding General, Marine Corps Logistics Command, direct the Commander, Blount Island Command, to:

b. Analyze and document the impact to the battery life of the 3,175 batteries, valued at approximately $1 million, due to not recharging the batteries when they reach the threshold of 12.65 volts.

USMC RESPONSE: Concur, Blount Island Command will conduct additional analysis of the impact of recharging batteries at ≤ 12.1 Volts. Additional analysis will be complete no later than 31 December 2025.

Marine Corps Logistics Command (cont'd)

The Technical Bulletin (TB) 9-6140-252-13 threshold of 12.65 volts applies to vehicles in a constant state of use. For vehicles stored aboard MPS adopting the 12.1Volt charging threshold has enabled shipboard maintainers to meet this requirement reliably, ensuring batteries retain sufficient capacity to support vehicle mobility.

This condition-based charging strategy mitigates overcharging risks and reduces maintenance burden while ensuring vehicles retain sufficient capacity to perform critical roll-on/roll-off operations. Historically, traditional lead-acid batteries used in vehicles aboard ships lasted less than three years, primarily due to the limitations of their design and the operational environment. These batteries were often stored at full charge for extended periods, which contributed to a reduced lifecycle and frequent replacements. In response to these challenges, BICmd transitioned to Absorbent Glass Mat (AGM) batteries, which offer improved durability, better charge retention, and enhanced resistance to vibration and temperature fluctuations, and increased lifecycle.

Allowing voltage to drop to ≤ 12.1V (approximately 35% state of charge) before recharging:

- Avoids the stress of constant micro-cycles (small, repeated charges and discharges that shorten service life)
- Reduces the likelihood of overcharging, which is especially critical in AGM batteries that degrade rapidly if overcharged.

RECOMMENDATION 1.c: DODIG recommends that the Commanding General, Marine Corps Logistics Command, direct the Commander, Blount Island Command, to:

c. Require the contractors to implement the Technical Bulletin (TB) 9-6140-252-13, "Recharging Procedures for Automotive Valve Regulated Lead-Acid Batteries," requirements and issue service requests to either recharge or replace batteries with voltage readings below the threshold of 12.65 V aboard the USNS Dahl and all other maritime prepositioned ships in the U.S. Indo-Pacific Command area of responsibility that are covered by the contract.

USMC RESPONSE: Non-Concur, Blount Island Command will conduct additional analysis of the impact of recharging batteries at ≤ 12.1 Volts.

The 12.65 Volt threshold in the TB applies to vehicles in a constant state of use. For vehicle stored aboard MPS adopting the 12.1Volt charging threshold has enabled shipboard maintainers to meet this requirement reliably, ensuring batteries retain sufficient capacity to support vehicle mobility.

This condition-based charging strategy mitigates overcharging risks and reduces maintenance burden while ensuring vehicles retain sufficient capacity to perform critical roll-on/roll-off operations. Historically, traditional lead-acid batteries used in vehicles aboard ships typically lasted less than three years, primarily due to the limitations of their design and the harsh operational environment. These batteries were often stored at full charge for extended periods, which contributed to a reduced lifecycle and frequent replacements. In response to these challenges, BICmd transitioned to Absorbent Glass Mat (AGM) batteries, which offer improved

Marine Corps Logistics Command (cont'd)

durability, better charge retention, and enhanced resistance to vibration and temperature fluctuations, and increased lifecycle.

Allowing voltage to drop to ≤ 12.1V (approximately 35% state of charge) before recharging:

- Avoids the stress of constant micro-cycles (small, repeated charges and discharges that shorten service life)
- Reduces the likelihood of overcharging, which is especially critical in AGM batteries that degrade rapidly if overcharged.

RECOMMENDATION 1.d: DODIG recommends that the Commanding General, Marine Corps Logistics Command, direct the Commander, Blount Island Command, to:

d. Determine whether any vehicles aboard the USNS Dahl have Class III leaks and, if so, require the contractors to take appropriate corrective maintenance actions.

USMC RESPONSE: Concur, A focused inspection to identify Class III leaks was completed aboard the USNS DAHL. All findings were addressed via GCSS-MC service requests by 15 July 2025.

RECOMMENDATION 1.e: DODIG recommends that the Commanding General, Marine Corps Logistics Command, direct the Commander, Blount Island Command, to:

e. Determine why the contractor did not identify maintenance issues, such as Class III leaks, and develop and implement a solution.

USMC RESPONSE: Concur, Blount Island Command will determine why Class III leaks were not properly identified and will implement a solution supporting the highest possible state readiness for material prepositioned within the INDOPACOM Area of Responsibility. Review and solutioning will be completed prior to 31 December 2025.

Acronyms and Abbreviations

BICmd	Blount Island Command
KMEP	Korean Marine Exercise Program
MPF	Maritime Prepositioning Force
MPS	Maritime Prepositioning Ships
PMCS	Preventative Maintenance Checks and Services
SASU	Semi-Annual Start-Up
TB	Technical Bulletin
USINDOPACOM	U.S. Indo-Pacific Command
USNS	U.S. Naval Ship


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