

United States Government Accountability Office

Report to the Committee on Armed Services, U.S. Senate

March 2021

WARFIGHTER SUPPORT

DOD Needs a Complete Picture of the Military Services' Prepositioning Programs



GAO@100 Highlights

Highlights of GAO-21-358, a report to the Committee on Armed Services, U.S. Senate

Why GAO Did This Study

The U.S. military services preposition critical assets at strategic locations around the world for access during the initial phases of an operation. DOD uses these prepositioned assets for combat, support to allies, and disaster and humanitarian assistance. For many years, GAO has identified weaknesses in DOD's efforts to establish a joint oversight framework to guide its ability to assess the services' prepositioning programs. This has led to fragmentation and the potential for duplication.

Senate Report 116-48 included a provision for GAO to evaluate the services' prepositioning programs and associated challenges. This report (1) describes the types of assets the services preposition worldwide, as well as asset shortfalls and challenges the services have identified, and (2) assesses the extent to which DOD has made progress in implementing a joint oversight framework for the services' programs. To conduct this work, GAO reviewed DOD prepositioning documents and interviewed DOD and State Department officials from over 20 offices.

This is a public version of a sensitive report that GAO issued in December 2020. Information that DOD deemed sensitive has been omitted.

What GAO Recommends

GAO recommends that 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. DOD concurred with the recommendation.

View GAO-21-358. For more information, contact Cary B. Russell at (202) 512-5431 or russellc@gao.gov.

WARFIGHTER SUPPORT

DOD Needs a Complete Picture of the Military Services' Prepositioning Programs

What GAO Found

The services preposition combat and support assets ashore and afloat worldwide, including in the Indo-Pacific region. Prepositioned assets include combat vehicles, equipment sets for engineering and construction, and protective gear for chemical or biological attacks. During the COVID-19 pandemic, the Department of Defense (DOD) used prepositioned medical assets for personnel in Guam, South Korea, and Germany. All of the services have reported some shortfalls in their prepositioned assets from 2015 through 2019—including mortars, combat vehicles, and medical equipment. In the Indo-Pacific region, for example, the Army reported shortfalls in equipment to construct bridges over difficult terrain. All services also cited challenges, such as insufficient storage space, storage facilities located far away from intended points of use, and the perishability of some assets. In some cases, the services are taking actions to address these shortfalls and challenges. In others, the services are accepting risk because, according to officials, not all shortfalls and challenges can be fully addressed.

Sailors and Marines Offload Assets from a Prepositioning Ship during the COVID-19 Response in Guam



Source: U.S. Navy/Petty Officer 1st Class Nathan Carpenter. | GAO-21-358

DOD has taken steps to implement a joint oversight framework but does not have a complete view of the services' prepositioning programs. DOD revised two guidance documents—an instruction in 2019 and a strategic implementation plan in 2020—to establish a joint oversight framework. However, DOD has focused much of its joint efforts to date on preparing a required annual report to Congress on the status of the services' prepositioning programs. While the report provides some useful information, GAO found inaccurate and inconsistent information in multiple annual reports, which hinder their utility. DOD does not have a reporting mechanism or information-collection tool to develop a complete picture of the services' prepositioning programs. The current annual reporting requirement expires in 2021, which provides DOD with an opportunity to create a new reporting mechanism, or modify existing mechanisms or tools, to enable a complete picture of the services' prepositioning programs. By doing so, DOD could better identify gaps or redundancies in the services' programs, make more informed decisions to mitigate asset shortfalls and challenges, reduce potential duplication and fragmentation, and improve its joint oversight.

Contents

Letter		1
	Background	4
	The Military Services Preposition Various Assets Worldwide and Have Identified Some Shortfalls and Challenges DOD Has Taken Steps to Implement a Joint Oversight	7
	Framework but Does Not Have a Complete View of the Military Services' Prepositioning Programs Conclusions	17 23
	Recommendation for Executive Action Agency Comments	24 24
Appendix I	Scope and Methodology	26
Appendix II	Comments from the Department of Defense	32
Appendix III	GAO Contact and Staff Acknowledgments	34
Table		
	Table 1: Assessment of Congressionally Required Elements in the Department of Defense's (DOD) Revised Strategic Implementation Plan (Issued February 2020)	19
Figures		
	Figure 1: Marine Corps Prepositioning Ship (left) and Vehicles in the Prepositioning Program to Be Maintained (right) at Jacksonville, Florida Figure 2: Geographic Combatant Commands and Areas of	5
	Responsibility Figure 3: Description of Military Services' Prepositioned Assets	6 9
	Figure 4: Regions Where the Military Services' Prepositioned Assets Are Located Figure 5: Department of Defense's (DOD) Prepositioning Joint	10
	Oversight Framework Figure 6: Selected Limitations in the Department of Defense's	18
	(DOD) Annual Report on the Status of the Military	

Services' Prepositioning Programs for Fiscal Years 2015 through 2019

21

Abbreviations

DODDepartment of DefenseCOVID-19Coronavirus Disease 2019

This is a work of the U.S. government and is not subject to copyright protection in the United States. The published product may be reproduced and distributed in its entirety without further permission from GAO. However, because this work may contain copyrighted images or other material, permission from the copyright holder may be necessary if you wish to reproduce this material separately.



441 G St. N.W. Washington, DC 20548

March 4, 2021

The Honorable Jack Reed Chairman The Honorable James M. Inhofe Ranking Member Committee on Armed Services United States Senate

The U.S. military services position assets worth billions of dollars including combat vehicles, rations, medical supplies, and repair parts—at strategic locations around the world. By positioning assets ashore and afloat (i.e., by "prepositioning" them), the services are able to access assets during the initial phases of an operation until follow-on capabilities are available and the supply chain has been established.¹ The Department of Defense (DOD) uses these prepositioning capabilities for missions such as combat operations, support to allies, disaster response, and humanitarian assistance—including responding to pandemics.

In the 2018 National Defense Strategy, DOD emphasized the importance of maintaining a dynamic, flexible force to aid the department's focus on long-term, interstate strategic competition.² The strategy places a corresponding priority on investments in prepositioned assets.³ In addition, Congress has provided resources for the military services' prepositioning programs as a part of the European Deterrence Initiative, which is intended to support the defense of allies and partners against Russia. Similarly, the William M. (Mac) Thornberry National Defense

²Department of Defense, *Summary of the 2018 National Defense Strategy of The United States of America* (2018).

³Chairman of the Joint Chiefs of Staff Instruction 4310.01E, *Logistics Planning Guidance for Prepositioned War Reserve Materiel* (Jan. 13, 2020). In this instruction, DOD refers to prepositioned war reserve materiel, which consists of capabilities (i.e., unit type sets of equipment both ashore and afloat) and stocks (i.e., stockpiles of materiel strategically positioned to provide sustainment to the capabilities or materiel supporting military operations) that facilitate a timely response in support of combatant command requirements during the initial phases of an operation. For the purposes of this report, we use the term "prepositioned assets" to refer to prepositioned war reserve materiel.

¹On December 20, 2019, the National Defense Authorization Act for Fiscal Year 2020, Pub. L. No. 116-92, established the United States Space Force as a military service within DOD. Since we did not gather data from the Space Force given its status as a new organization, throughout this report we refer to only four military services within DOD.

Authorization Act for Fiscal Year 2021 includes a provision directing DOD to establish a Pacific Deterrence Initiative, and authorizes funds to strengthen the U.S. presence and capabilities, including prepositioning, in the Indo-Pacific region to reassure allies and partners.⁴

For many years, we have identified the potential for duplication in the military services' prepositioning programs because of a fragmented management approach and limited joint oversight within DOD, and we have made related recommendations.⁵ For example, in May 2011, we recommended that DOD develop a department-wide strategy and synchronize at a DOD-wide level the services' prepositioning programs.⁶ In January 2019, we recommended that DOD take steps to fully implement joint oversight of the services' prepositioning programs, including updating department-wide prepositioning guidance and reviewing other joint oversight efforts.⁷ DOD agreed with our recommendations and has taken some actions to address them; we describe the actions later in the report.

Senate Report 116-48, which accompanied a bill for the National Defense Authorization Act for Fiscal Year 2020, included a provision for us to evaluate the military services' prepositioning programs and associated challenges in the Indo-Pacific region.⁸ This report (1) describes the types of assets the military services preposition worldwide, including in the Indo-Pacific, as well as shortfalls and challenges that the military services have identified in their prepositioning programs; and (2) assesses the extent to which DOD has made progress in implementing a joint oversight framework for the military services' prepositioning programs.

⁷GAO, *Prepositioned Stocks: DOD Needs Joint Oversight of the Military Services' Programs*, GAO-19-244 (Washington, D.C.: Jan. 31, 2019).

⁸S. Rep. No. 116-48, at 143-144 (2019).

⁴Pub. L. No. 116-283, § 1251 (Jan. 1, 2021).

⁵See, for example, GAO, *2020 Annual Report: Additional Opportunities to Reduce Fragmentation, Overlap, and Duplication and Achieve Billions in Financial Benefits,* GAO-20-440SP (Washington, D.C.: May 19, 2020).

⁶GAO, Warfighter Support: Improved Joint Oversight and Reporting on DOD's Prepositioning Programs May Increase Efficiencies, GAO-11-647 (Washington, D.C.: May 16, 2011).

This report is a public version of a sensitive report that we issued in December 2020.⁹ DOD deemed some of the information in our December report to be sensitive, which must be protected from public disclosure. Therefore, this report omits sensitive information identifying the specific worldwide locations of the services' prepositioned assets. Although the information provided in this report is more limited, the report addresses the same objectives as the sensitive report and uses the same methodology.

For objective one, we examined relevant laws, DOD and military service guidance, and recent DOD annual reports to Congress about its prepositioning programs. Specifically, we reviewed the annual reports to Congress for fiscal years 2015 through 2019 to obtain information pertaining to: the services' prepositioned assets and where they were located, asset fill rate, and recurring prepositioning asset shortfalls and challenges. We also interviewed service officials to discuss the shortfalls, as well as challenges affecting prepositioning programs and assets. For information about the services' actions to mitigate and resolve risks from shortfalls and challenges, we reviewed the annual reports and interviewed service officials. We discussed the data in the annual reports and related data collection processes with DOD officials and concluded that they were sufficiently reliable to use for the purposes of describing the services' prepositioning programs and shortfalls.

For objective two, we (1) reviewed DOD's revised prepositioning instruction and implementation plan for direction about oversight responsibilities and (2) compared the information in the revised implementation plan on prepositioning programs with congressionally required elements. Finally, we reviewed DOD's annual reports and other documents and interviewed DOD and service officials about processes and mechanisms for jointly tracking, monitoring, and reporting information on prepositioning programs. We assessed this information against DOD's guidance and implementation plan—both of which convey the need for prepositioning information that is complete and accurate for decision making—along with our past work in the area of duplication, overlap, and

⁹GAO, *Warfighter Support: DOD Needs a Complete Picture of the Military Services' Prepositioning Programs,* GAO-21-126SU (Washington, D.C.: Dec. 18, 2020).

fragmentation related to the services' prepositioning programs.¹⁰ A detailed description of our scope and methodology is in appendix I.

The performance audit upon which this report is based was conducted from September 2019 to December 2020 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 findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives. We subsequently worked with DOD from January 2021 to March 2021 to prepare this unclassified version of the original sensitive report for public release. This public version was also prepared in accordance with these standards.

Background	Prepositioning is a vital component of U.S. military planning strategy. According to DOD documentation, ¹¹ prepositioned assets provide several
	benefits to the military such as:

- Allowing for responding to multiple contingencies without a fullydeveloped supply chain.
- Reducing forces' deployment response time.
- Reducing the burden on the department's strategic mobility airlift and sealift assets.¹²
- Reassuring allies of U.S. commitment.
- Serving as an option to potentially deter possible adversaries.
- Providing equipment to support various missions, such as humanitarian assistance, disaster relief efforts, and military exercises with allies and partners.

¹⁰"Fragmentation" refers to those circumstances in which more than one organization within an agency is involved in the same broad area of national need and opportunities exist to improve service delivery. See, GAO-20-440SP.

¹¹DOD, Joint Publication 4-01, The Defense Transportation System (July 18, 2017). DOD, Pre-Positioned War Reserve Materiel Strategic Implementation Plan (February 2020). Report on the Fiscal Year 2019 Status of Department of Defense Programs for Pre-Positioned Materiel and Equipment. Report on the Fiscal Year 2018 Status of Department of Defense Programs for Pre-Positioned Materiel and Equipment.

¹²Strategic mobility refers to the capability to deploy and sustain military forces worldwide in support of national strategy. Strategic mobility assets refer to the strategic mobility triad, comprised of strategic airlift, sealift, and prepositioned assets (both afloat and ashore). Each of the military services operates and manages its respective prepositioning program. Also, each service maintains its own configuration and types of assets to support its program. For example, figure 1 shows a prepositioning ship and vehicles that are part of the Marine Corps' program.

Figure 1: Marine Corps Prepositioning Ship (left) and Vehicles in the Prepositioning Program to Be Maintained (right) at Jacksonville, Florida

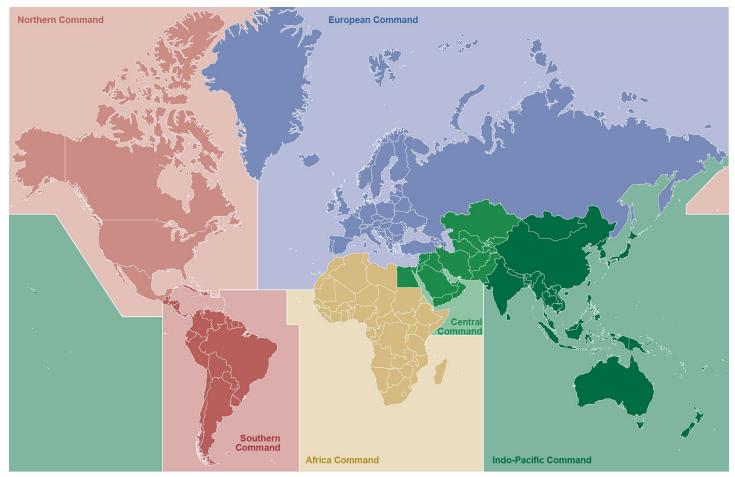


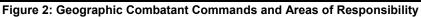
Source: GAO. | GAO-21-358

The services provide prepositioned assets that DOD, using joint guidance, apportions to the geographic combatant commands.¹³ As shown in figure 2, DOD operates six geographic combatant commands, which have responsibilities for accomplishing military operations in regional areas of the world.¹⁴

¹³Prepositioned assets may be apportioned to more than one geographic combatant command. Joint guidance for apportionment of prepositioned assets can be found in Chairman of the Joint Chiefs of Staff Instruction 4310.01E, *Logistics Planning Guidance for Pre-Positioned War Reserve Materiel* (Jan. 13, 2020).

¹⁴In 2019, DOD established United States Space Command as a geographical combatant command. Given its status as a new organization, we did not gather data about the Space Command. Thus, our references to the geographic combatant commands throughout this report do not include Space Command.





Source: GAO analysis of Department of Defense documents; Map Resources. | GAO-21-358

Prepositioned assets are used by the geographic combatant commanders, who have the authority to, among other things, organize and employ forces assigned to them as they deem necessary to accomplish assigned missions. Geographic combatant commands develop operational planning requirements based on an approved operation plan. The services determine how best to meet the needs of the geographic combatant commanders, which may include the use of prepositioned assets. Geographic combatant commanders periodically review their operation plans, assess the risk to those plans, and report the results to the Chairman of the Joint Chiefs of Staff. The use of

Note: In 2019, DOD established United States Space Command as the newest geographic combatant command; it is not depicted in this figure.

prepositioned assets generally requires approval by the Secretary of Defense.

	DOD Instruction 3110.06, <i>War Reserve Materiel</i> , establishes policy, assigns responsibilities, and provides guidance related to the military services' prepositioning programs. According to the instruction, the Under Secretary of Defense for Acquisition and Sustainment is to establish policy for all matters relating to prepositioned war reserve materiel. ¹⁵ Also, the Assistant Secretary of Defense for Sustainment is to develop implementing procedures, establish the Global Pre-positioned Materiel Capabilities Working Group, and in coordination with the Chairman of the Joint Chiefs of Staff, is to appoint a co-chair for the Working Group. ¹⁶ Further, the Chairman of the Joint Chiefs of Staff is to provide guidance, review annually the status of the department's prepositioning requirements, and identify any prepositioning shortfalls or capability gaps. Among other functions, the Working Group is to develop recommendations for prepositioning policy or process improvements, review joint prepositioning issues, and review prepositioning risk assessments conducted by the military services.
The Military Services Preposition Various Assets Worldwide and Have Identified Some Shortfalls and Challenges	The military services preposition combat and support assets worldwide, including in the Indo-Pacific region. The services have reported some shortfalls in their prepositioning programs in recent years and they have cited various challenges in their programs.

¹⁵DOD Instruction 3110.06, War Reserve Materiel (WRM) (Jan. 7, 2019).

¹⁶The Working Group is comprised of officials from the military services, the Defense Logistics Agency, combatant commands, and entities within the Office of the Secretary of Defense.

The Services Preposition Combat and Support Assets Ashore and Afloat in Various Geographic Regions, including the Indo-Pacific

Prepositioning Worldwide

The military services preposition assets at land locations and aboard vessels worldwide, including in the Indo-Pacific region. Figure 3 describes the services' prepositioning programs and the types of combat and support assets prepositioned.

Figure 3: Description of Military Services' Prepositioned Assets

Types of Assets	Afloat⁵	Ashore	Description
Jnit Equipment Sets	√	\checkmark	• Equipment such as weaponry and combat and support vehicles, stored in configurations to reduce deployment time
Operational Project Stocks	√	✓	• Equipment tailored for key strategic capabilities beyond normal unit authorizations, such as bridging equipment to cross difficult terrain or force protection equipment against threats from hazardous materials.
Var Reserve Sustainment	×	1	 Replacements for critical supplies and materiel lost or consumed during operations. Includes items such as repair and spare parts and medical supplies.
Vavy			
Types of Assets	Afloat⁵	Ashore	Description
Navy Support Element	<	×	 Equipment such as forklifts, ferries, and tugs that facilitates the offloading and reloading of Marine Corps and Navy equipment on prepositioning ships. Includes capability to transfer bulk fuel and water from ships to shore and expeditionary life support facilities.
Naval Construction Element	✓	×	• Equipment sets and tools kits that provide engineering and construction capabilities (such as airfield damage repair medical facility and road construction, and well drilling for drinking water).
Medical Capability Sets	1	1	 Equipment to build and operate medical facilities for a wide range of care for up to 150 patients. Includes medical equipment such as laboratory and surgical tools, sterilization kits, and pharmaceuticals.
Marine Corps⁰			
Types of Assets	Afloat⁵	Ashore	Description
Command Element	~	1	 Includes communications and radio, force reconnaissance, intelligence, and other command capabilities, organized into modular detachments that can be tailored to combat needs.
Ground Combat Element	1	× -	 Includes equipment for ground combat operations, including vehicles (such as armored reconnaissance and amphibious assault vehicles), trucks, and engineering equipment.
Aviation Combat Element	√	√	• Includes equipment for air combat operations, such as a low altitude air defense battery and aviation support and expeditionary airfield items.
Logistics Combat Element	√	√	 Provides equipment for reinforcement and resupply. Additional capabilities include engineering, medical logistics, transportation, maintenance, and landing support.
Air Force ^d			
Types of Assets	Afloat⁵	Ashore	Description
Basic Expeditionary Airfield Resources	×	✓	 Support equipment to establish and operate an expeditionary air base including: personnel (lodging and feeding); infrastructure (power, water purification and distribution, waste disposal and work center shelters); and flight line (airfield lighting and arresting systems, and maintenance shelters).
Fuels Support Equipment	×	× -	• Equipment to provide ground and aircraft fuels support, such as hoses, bladders, fuel trucks, pumps, cryogenics, and aerial bulk fuel delivery systems.
Common Support Equipment	×	✓	 Equipment to provide tactical and strategic airlift, fighter, tanker, and bomber aircraft support and vehicles that support combat forces at forward operating locations. Includes munition loaders and aerospace ground equipment.
Expeditionary Medical Capability Sets	×	× -	• Equipment and supplies to support air mobility, ground, and special operations forces' medical needs along with force health protection items.
Rapid Airfield Damage Recovery⁴	×	×	• Equipment and supplies to restore damaged or degraded airfields such as, rapid set concrete, pelletized asphalt, crater repair items and special vehicles, and airfield damage recovery trailer with tools.
Force Protection ^d	×	1	• Equipment and supplies for base defense and force protection such as entry control point items, portable sentry tower, and operations center.

Source: GAO analysis of Department of Defense documents. | GAO-21-358

^aThe Navy's Military Sealift Command operates both government-owned and chartered prepositioning ships carrying the military services' assets.

^bThe Army prepositions munitions ashore and on separate, stand-alone ships.

°The Marine Corps prepositions munitions, bulk fuel, and water afloat. Also, it prepositions ashore in a location in Europe and Southwest Asia a subset of the assets described in the figure above.

^dThe Air Force prepositions munitions ashore and on separate, stand-alone ships. Also, it is in the early stages of procuring equipment for the Rapid Airfield Damage Recovery and Force Protection types of prepositioned assets.

Figure 4 shows the regions worldwide where the military services' prepositioned assets are located.

Figure 4: Regions Where the Military Services' Prepositioned Assets Are Located



Source: GAO analysis of Department of Defense documents; Map Resources. | GAO-21-358

Notes: Prepositioned assets are strategically located—including in the United States—to facilitate a timely response in support of combatant commanders' requirements during the initial phases of an operation. A symbol in a land location indicates that prepositioned assets are present there, but does not identify the precise site of the assets themselves. Some locations have multiple sites throughout with prepositioned assets; however, not every military service prepositions its assets at each location.

Prepositioning in the Indo-Pacific

Prepositioning to Fight COVID-19



During the Coronavirus Disease 2019 (COVID-19) pandemic, DOD used its prepositioned medical assets. See the following examples that military service officials shared.

- In April 2020, the Navy used afloat prepositioned assets to establish a 150bed Expeditionary Medical Facility in Guam (pictured above).
- In April 2020, a naval commander moved a ship to Saipan, Northern Mariana Islands, to stand ready in reserve if additional afloat prepositioned medical assets were needed in Guam.
- In Spring 2020, the Air Force provided prepositioned medical capability sets such as a Theater Isolation System, Critical Care Air Transport Teams, and Inflight Kits for aero-medical support operations in support of patient movement.
- In Spring 2020, the Army provided ventilators, hospital beds, and personal protective equipment to care for individuals in South Korea and Germany.

Source: U.S. Navy photo by Petty Officer 1st Class Nathan Carpenter. | GAO-21-358

Each of the military services prepositions assets for potential operations and contingencies in the Indo-Pacific region.

- Army: The Army prepositions unit equipment sets, operational project stocks, and munitions in afloat locations within the Indo Pacific region. The Army stores its afloat assets onboard five ships and has two ammunition container ships. In ashore locations, the Army prepositions unit equipment sets, operational project stocks, and war reserve sustainment stocks.¹⁷
- Navy and Marine Corps: Both the Navy and Marine Corps preposition their afloat assets aboard 14 Navy ships organized into two forward-deployed squadrons stationed in the region.¹⁸ Additionally, the Navy prepositions medical assets ashore in climatecontrolled warehouses in the region.
- Air Force: The Air Force prepositions assets—including munitions at ashore locations. Additionally, the Air Force prepositions munitions on two ships in the Indo-Pacific region. According to Air Force officials, Air Force units also use agreements to preposition assets at and operate out of several South Korean-owned and operated air bases.

¹⁸In July 2019, the Commandant of the Marine Corps issued guidance that, among multiple force design priorities, stated the service must reimagine its afloat prepositioning capability to develop smaller and more versatile ships. Subsequently, the Marine Corps established 12 integrated planning teams to assess the service's current force design and develop future force recommendations. One team was to address reconfiguring the Marine Corps' afloat prepositioning force. In February 2020, the Marine Corps established an overarching integrated planning team to integrate the output of the 12 teams and produce a plan of action.

¹⁷Unit equipment sets are organizational equipment stored in configurations in order to reduce force deployment response time. War reserve sustainment stocks are intended to replace assets lost in battle or consumed during operations. Operational project stocks are equipment tailored for key strategic capabilities beyond normal unit authorizations.

All Services Have Reported Prepositioning Shortfalls and Cited Challenges	All of the military services have reported prepositioned asset shortfalls and also cited challenges in their prepositioning programs. Some of the services' shortfalls and challenges are longstanding while others have emerged more recently. ¹⁹ The services are taking actions to address these shortfalls and challenges in their programs and in some cases, shortfalls persist because the services choose to provide resources to higher priorities. In other cases, the military services are accepting risk because, according to officials, not all shortfalls and challenges can be fully addressed.
Prepositioning Shortfalls	The military services have reported some recurring asset shortfalls in their respective programs during the time period we reviewed (fiscal years 2015 through 2019). Shortfalls refer to inventory quantities of prepositioned assets, specifically when there is a difference between the equipment quantity deemed necessary by a military service and the available quantity.
	Army: From 2015 through 2019, the Army has reported shortfalls for multiple types of prepositioned assets. Examples of assets with shortfalls include:
	• Mortars of various calibers including 60mm, 81mm, and 120mm. Also, combat support vehicles such as the Assault Breacher, a mine and explosives-clearing vehicle, and the Armored High Mobility Multipurpose Wheeled Vehicle, a lightweight tactical vehicle.
	 Repair and spare parts for armored brigade combat teams assigned to U.S. European Command and medical sustainment assets apportioned to U.S. Indo-Pacific and Central Commands.
	 Medical equipment sets assigned to U.S. Northern Command, equipment for bridges over difficult terrain assigned to U.S. Indo- Pacific Command, and Patriot Launchers assigned to U.S. Central Command.
	Navy: The Navy has reported shortfalls with its medical prepositioned assets. For example, the Navy has reported a recurring shortfall for an expeditionary medical facility requirement for U.S. Central Command beginning in 2017.
	¹⁹ In addition to shortfalls and challenges described above, the services have also reported

¹⁹In addition to shortfalls and challenges described above, the services have also reported shortfalls and challenges that are classified. This report includes only those that can be described in an unclassified manner. Specific effects of the shortfalls on readiness are also classified and therefore not described in this report.

Marine Corps: The Marine Corps has reported some prepositioned asset shortfalls. For example, the Marine Corps has reported a recurring shortfall for air delivery ammunition beginning in 2017.

Air Force: The Air Force has reported shortfalls in multiple types of prepositioned assets. Of these, the Air Force has consistently reported medical asset shortfalls over the following years, which also exist across all geographic combatant commands:

- From 2018 through 2019: Critical care air transportation, aeromedical evacuation oxygen support, and En route patient staging systems capabilities.²⁰
- From 2016 through 2019: Oxygen generation, radiation assessment, and collective protection capabilities.
- From 2015 through 2019: Theater hospital capabilities and medical support for Air Force Special Operations.

Additionally, the Army, Navy, and Air Force reported recurring shortfalls specific to prepositioned assets in the Indo-Pacific region. For example, the Army reported shortfalls in medical sustainment items and equipment to construct bridges over difficult terrain from 2015 through 2019.²¹ The Navy reported that force protection equipment used during chemical, biological, radiological, and nuclear incidents was expired and non-functional from 2017 through 2019. According to an Air Force official, the Air Force had shortfalls in all of the six types of prepositioned assets—e.g., Basic Expeditionary Airfield Resources, Fuels Support Equipment, etc. as described earlier in Figure 3 of this report—and munitions in 2018 and 2019.

Some military service officials stated that in some cases, shortfalls cannot be addressed due to insufficient funding. Prepositioning programs may not receive sufficient funds needed to preposition the required quantity of assets or to sustain or replenish the assets already on hand. By providing funds to higher priorities, the services accept risk that prepositioning asset shortfalls may occur. In other cases, shortfalls are created when new prepositioning requirements increase the quantity of assets needed in one or multiple region(s). In those cases, the required increase may not

²⁰En route patient staging systems are designed to support the aeromedical evacuation and care for wounded personnel.

²¹In 2019, the Army reported a shortfall with force protection equipment used for chemical, biological, radiological, and nuclear incidents.

be immediately satisfied since the services cannot often provide funding or procure new assets as quickly as it takes for new requirements to be validated.

DOD has taken steps to mitigate risk or address shortfalls in prepositioning assets. For example, in some years the Army and Air Force have reported using retrograde equipment to fulfill equipment asset shortfalls. In some cases, DOD accepts risk associated with a particular shortfall.

Prepositioning Challenges All of the military services cited challenges in their prepositioning programs. Challenges refer to broad issues that can affect the effectiveness of prepositioned assets. The following challenges exist in multiple geographic regions.

- **Insufficient Storage Space:** According to Army, Navy, and Air Force officials, the services do not have enough storage space in multiple regions. Storage space may be insufficient because of host nation limitations on the size or quantity of facilities or because of insufficient funding to recapitalize existing facilities to provide necessary storage capabilities. For example, some prepositioned medical assets require climate-controlled storage. Because of insufficient storage facilities abroad, Air Force and Navy officials told us they store some prepositioned medical assets in the continental United States. This contributes to a longer response time if the assets need to be transferred for an operation.
- Storage Locations: Army and Air Force officials stated that some prepositioned assets are stored in geographic locations far away from their intended points of use because of limitations host nations have with respect to the quantities and types of assets that the U.S. is allowed to store in their countries. In Australia, for example, the U.S. is allowed to store prepositioned assets that are used only in training exercises. Similar to instances of insufficient storage space, this also increases the response time if assets are required for an operation that is far away from where the assets are being stored.
- **Perishable Assets:** Navy and Air Force officials stated that the perishable nature of some prepositioned assets, especially medical assets, contributes to sustainment and replenishment costs. Perishable assets expiring in storage creates a risk that units may deploy with an asset shortfall if expired assets cannot be replaced. For example, the Navy has reported that its force protection equipment in the Indo-Pacific for chemical, biological, radiological,

and nuclear incidents is not functional since it contains materiel that has expired and officials stated it is costly to replace and sustain.

- Aging Fleet: Marine Corps officials cited challenges with maintaining and sustaining prepositioning ships. Since the fleet is aging, there are maintenance issues with the ships.²² As a result, the prepositioned assets aboard the ships may not be available to the service because the overall maintenance cycle of the ships has been extended.
- **Materiel Degradation:** The Navy cited materiel degradation of the amphibious craft that facilitate the sea off-loading of Marine Corps and Navy equipment from their prepositioning ships in instances where no port is accessible. The Navy has reported that these craft exhibit signs of hull corrosion and noted that additional preventative maintenance is necessary to maintain acceptable levels of equipment readiness. Due to providing funds to other higher priorities, the Navy has accepted readiness risk with these craft.

Additionally, all of the military services cited challenges specific to prepositioning assets in the Indo-Pacific region. For example:

- Size of Indo-Pacific Region: Officials from all services cited the vast size of the Indo-Pacific region where the distance between available supply points and intended points of use can present a challenge for the services' ability to meet operational objectives. Air Force officials noted that this challenge is further exacerbated by limited surface movement capabilities, as prepositioned assets are limited to either airlift or sealift to traverse large bodies of water.
- Host Nation Agreements: Army and Air Force officials cited challenges with host nation agreements. For example, the Special Measures Agreement with South Korea expired in December 2019 and has not been renewed.²³ Air Force officials stated that, via the agreement, the South Korean government has historically provided funding for contract labor costs to store and maintain some prepositioned assets. However, the U.S. government was funding these labor costs through October 2020, and, as of September 2020,

²³A Special Measures Agreement, a type of burden-sharing agreement, is the mechanism by which another country shares the costs of U.S. forces to defend that country.

²²In recent years, we have issued a number of reports and made recommendations related to Navy ship and submarine maintenance. For a summary of these reports, see: GAO, *Navy Maintenance: Persistent and Substantial Ship and Submarine Maintenance Delays Hinder Efforts to Rebuild Readiness*, GAO-20-257T (Washington, D.C.: Dec. 4, 2019).

the Air Force is seeking funding internally to fund the remaining costs through the end of calendar year 2020. Additionally, Air Force officials stated that the process of negotiating agreements and then establishing a presence abroad may take years, which may inhibit effective planning.

DOD and the military services have taken steps to mitigate risk or address challenges with prepositioned assets.²⁴ For example, the Air Force mitigates its insufficient storage facility challenge by warehousing prepositioned medical assets at consolidated storage deployment centers in the United States, which are located adjacent to strategic airfields for rapid mobilization. Also, DOD, the Army, and Air Force have taken some steps to address the perishable nature of prepositioned medical assets, including a shelf-life extension program and a deferred procurement strategy.²⁵ Additionally, multiple military services return expired prepositioned pharmaceutical products to the manufacturer for credit to purchase replacements.²⁶ In some cases, the service officials said that they accept risk because not all challenges can be fully addressed. For example, negotiating agreements with host nations is a complex, multiyear process that involves other U.S. government entities such as the U.S. Department of State.

²⁶The Defense Logistics Agency administers the returns of expired pharmaceutical products.

²⁴Some efforts to address challenges are classified and therefore are not described in this report.

²⁵DOD's Defense Health Agency coordinates with the Food and Drug Administration on the shelf-life extension program. The program identifies stockpiled pharmaceuticals that are safe and effective beyond their original expiration dates, deferring drug replacement costs while maintaining materiel readiness. The Defense Logistics Agency administers the deferred procurement strategy. Deferred procurement is a type of contracting strategy that guarantees that certain deferred assets will be available to units within specified notification timeframes. By deferring the procurement of perishable assets until they are needed, the strategy enables cost avoidance while maintaining readiness at minimal risk.

DOD Has Taken Steps to Implement a Joint Oversight Framework but Does Not Have a Complete View of the Military Services' Prepositioning Programs	
DOD Has Revised Prepositioning Guidance to Establish a Joint Oversight Framework	 DOD has revised two guidance documents to establish a joint oversight framework for the military service's prepositioned programs. DOD Instruction 3110.06: In January 2019, DOD issued a revision to its <i>War Reserve Materiel</i> instruction. Among other updates, the revised instruction assigns the Global Pre-positioned Materiel Capabilities Working Group—which DOD formally established in June 2008—the role of providing joint oversight of the services' prepositioning programs.²⁷ Further, it includes a detailed charter for the Working Group describing its members, functions, roles and responsibilities, and frequency of meetings. The Assistant Secretary of Defense for Sustainment and Chairman of the Joint Chiefs of Staff appoint representatives who are to co-chair the Working Group. The charter contained in the instruction supersedes the Working Group's previous standalone charter that derived its authority from the prior iteration of the instruction that was dated June 2008. Also, the revised instruction includes a standard definition of "prepositioning" that is applicable across the department.²⁸ According to DOD, this standard definition will allow the department to identify duplicative capabilities among the services' prepositioning programs.

²⁷DOD Instruction 3110.06.

²⁸In June 2015, we recommended that DOD (1) develop a standard definition of prepositioning that was consistent with the one used in the department's joint service guidance and (2) apply this standard definition consistently across the department including by the military services, the combatant commands, and defense agencies. DOD has since implemented these recommendations. GAO, *Prepositioned Stocks: Additional Information and a Consistent Definition Would Make DOD's Annual Report More Useful*, GAO-15-570 (Washington, D.C., June 16, 2015).

• Strategic Implementation Plan: In February 2020, DOD issued a revised *Pre-Positioned War Reserve Materiel Strategic Implementation Plan.* Among other updates, the revised Implementation Plan outlines a joint oversight framework, with implementation actions and associated milestones (see fig. 5). The revised Implementation Plan also establishes a senior-level governing body over the Working Group—which is to execute the plan within the joint oversight framework.²⁹ This action will help ensure DOD has better oversight of the Working Group.

Element	Policy and guidance	Roles, responsibilities, and governance ^a	Assess and monitor	Strategic Plan
Description and Actions	To oversee prepositioning programs: • Identify policy gaps • Revise current policy	To plan, manage, and oversee prepositioning programs along with executing the Strategic Implementation Plan:	To evaluate prepositioning programs' performance and measure prepositioned assets' status and capability:	To develop, implement, and integrate clear policy, effective governance, and accurate assessment:
	or develop new policy • Ensure alignment with strategic plans and facilitate efficient use of resources	 Identify stakeholder roles and responsibilities Establish governance structure 	 Use a deliberate five phased assessment cycle^b Use established metrics and systems of record 	 Develop and implement an overarching strategic plan Annually assess this plan

Figure 5: Department of Defense's (DOD) Prepositioning Joint Oversight Framework

Source: GAO analysis of the Department of Defense's Pre-Positioned War Reserve Materiel Strategic Implementation Plan (February 2020). | GAO-21-358

^aDOD's *Pre-Positioned War Reserve Materiel Strategic Implementation Plan* assigns stakeholders in the Office of the Secretary of Defense, Joint Chiefs of Staff, Combatant Commanders, military services, and Global Pre-Positioned Materiel Capabilities Working Group to oversee the plan's execution and to accomplish stated outcomes.

^bThe five phases are: Data Analysis, Identification of Opportunities, Governance Review, Implementation, and Assessment.

In 2013, Congress required DOD to develop an implementation plan, and in 2019, to provide a report on the department's efforts related to the plan.³⁰ When we assessed DOD's prior version of the Implementation Plan—which was completed in August 2017—we found that the department did not fully address a majority of the congressionally

³⁰National Defense Authorization Act for Fiscal Year 2014, Pub. L. No. 113-66, § 321(b) (Dec. 26, 2013) and National Defense Authorization Act for Fiscal Year 2020, Pub. L. No. 116-92, § 356 (Dec. 20, 2019).

²⁹The revised Implementation Plan designated the Supply Chain Executive Steering Committee as the Working Group's governing body. However, according to DOD officials, it was subsumed by the Logistics Executive Steering Committee in the spring of 2020. This committee—which is chaired by the Deputy Assistant Secretary of Defense for Logistics and is primarily comprised of flag-level representatives from across DOD became the Working Group's governing body.

required elements, and we recommended that they do so.³¹ DOD's 2020 revised plan fully addresses eight of nine congressionally required elements in public laws from 2013 and 2019 (see table 1), and addresses all but one of our recommendations related to the plan.

Table 1: Assessment of Congressionally Required Elements in the Department of Defense's (DOD) Revised Strategic Implementation Plan (Issued February 2020)

Co	ngressionally Required Element ^a	GAO's Assessment ^b	
1.	A comprehensive list of DOD's prepositioned materiel and equipment programs.	Addressed	
2.	A detailed description of how the plan will be implemented.	Addressed	
3.	A description of the resources required to implement the plan, including the amount of funds and personnel.	Partially Addressed ^c	
4.	A description of how the plan will be reviewed and assessed to monitor progress.	Addressed	
5.	Guidance on applying a consistent definition of prepositioning across the department, including the military departments, the combatant commands, and the defense agencies.	Addressed	
6.	A detailed description of how the Secretary will implement a joint oversight approach of the prepositioning programs of the military departments.	Addressed	
7.	Detailed guidance for how DOD will achieve the vision, end state, and goals outlined in the strategic policy.	Addressed	
8.	A schedule, with milestones, for the implementation of the plan	Addressed	
9.	An assignment of roles and responsibilities for the implementation of the plan	Addressed	

Source: GAO analysis of section 321 of the National Defense Authorization Act for Fiscal Year 2014, section 356 of the National Defense Authorization Act for Fiscal Year 2020, and DOD, Pre-Positioned War Reserve Materiel Strategic Implementation Plan (February 2020). | GAO-21-358

^aThese congressionally required elements are nearly the same in the National Defense Authorization Act for Fiscal Years 2014 and 2020.

^bWe assessed an element as "addressed" if DOD's implementation plan addressed all parts of the element. We assessed an element as "partially addressed" if one or more—but not all—parts of the required element were explicitly addressed.

^cDOD's plan states that no additional funding or personnel is necessary above what has been historically allocated to managing prepositioned assets because the work to execute the plan is conducted by participating personnel as part of their normal job duties.

Regarding element three, we had previously recommended that DOD address the requirement about describing the resources required to implement the plan. DOD's revised plan does not fully describe resources. When we discussed this requirement with officials from the Office of the Secretary of Defense during the course of our review, they told us that they plan to include additional information about the required resources in the plan's next revision.

³¹See GAO, *Prepositioned Stocks: DOD Needs Joint Oversight of the Military Services' Programs*, GAO-19-244 (Washington, D.C.: Jan. 31, 2019).

DOD Does Not Have a Complete Picture of the Military Services' Prepositioning Programs

While DOD has revised guidance to establish a joint oversight framework, it does not have a complete, joint picture of the military services' prepositioning programs—thus hindering its ability to implement the framework. We found that DOD focuses much of its joint efforts on preparing the required annual report to Congress on the status of the services' prepositioning programs for the most recently completed fiscal year.³² Among other information, the annual report includes:

- The services' funding levels and readiness condition of their prepositioned assets.
- Assessments of the services' prepositioning programs, provided by the geographic combatant commanders.
- The impact of prepositioned asset shortfalls and related risk mitigation efforts provided by the geographic combatant commanders and the services.

While the report provides some useful information about prepositioned assets and funding, we have previously identified limitations that have hindered the report's utility. For example, when we reviewed DOD's fiscal year 2012 annual report, we found that it contained some inconsistencies in information across the services' programs as well as several inaccuracies and omissions affecting the report's data quality.³³ For example, DOD's report included funding information for 6 or 7 fiscal years for most of the services, but included only 2 fiscal years of information for the Navy. In addition, the report presented the services' program information in different formats and included incorrect calculations within data tables or inadvertently omitted information. At that time, we recommended that DOD (1) develop guidance for the type and format of information the services should provide to ensure consistency and (2) identify and correct weaknesses in its guality assurance procedures to minimize inaccuracies and omissions. DOD concurred with both recommendations and took actions to address them.

Also, when we reviewed DOD's fiscal year 2014 report, we found that the services' reported costs for reconstituting their prepositioned assets was

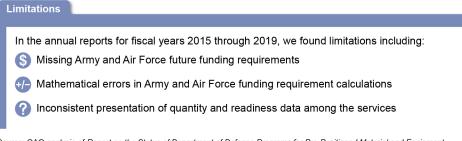
³²See, 10 U.S.C. § 2229a for annual reporting requirement.

³³GAO, *Prepositioned Stocks: Inconsistencies in DOD's Annual Report Underscore the Need for Overarching Strategic Guidance and Joint Oversight*, GAO-13-790 (Washington, D.C.: Sept. 26, 2013).

outdated. ³⁴ Further, we found that the services did not disclose reasons for major changes made to the funding information in the report from year to year, thereby resulting in inconsistencies in the data reported. We recommended that DOD disclose that the reconstitution funding data are current as of the end of the fiscal year, identify significant changes in these data, and explain the reasons for the changes. While DOD concurred with our recommendation, it has not fully addressed it in recent annual reports.³⁵

After examining the annual reports for fiscal years 2015 through 2019 as part of this review, we found that limitations continue to exist (see fig. 6).

Figure 6: Selected Limitations in the Department of Defense's (DOD) Annual Report on the Status of the Military Services' Prepositioning Programs for Fiscal Years 2015 through 2019



Source: GAO analysis of Report on the Status of Department of Defense Programs for Pre-Positioned Materiel and Equipment to Congress for fiscal years 2015 through 2019. | GAO-21-358

For example, we found some future funding requirements labeled as "to be determined" in one report for the Army and in multiple reports for the Air Force, whereas this information was included for the other services in the reports. Further, we found inaccurate information in the reports about the Army's and Air Force's funding requirements, such as mathematical errors in the data tables in all five annual reports. In the fiscal year 2019 annual report, DOD incorrectly labeled what fiscal years the Army's funding data represented.

³⁴GAO, *Prepositioned Stocks: DOD Has Addressed Required Reporting Elements, but Needs to Develop a Department-wide Policy and Joint Service Approach*, GAO-16-418 (Washington, D.C.: Apr. 15, 2016).

³⁵In the fiscal year 2019 annual report, DOD stated it was required to provide these data as of the end of the fiscal year and explained that the data may continue to be refined after the report's submission. However, DOD did not identify significant changes reported in the data from year to year or provide explanations as to the reasons for the changes.

Additionally, the annual report is inconsistent in how it presents each service's program, providing differing levels of detail regarding assets and funding, which makes it challenging to understand the state of each program and the significance of the reported shortfalls. For example, for the Marine Corps, Navy, and Air Force, the report presents two fiscal years' of data about the quantities and readiness condition for all categories of prepositioned assets. However, it provides this same information for only one of the five categories of the Army's prepositioned assets. For the remaining categories, it uses different terminology and provides other information (such as location and dollar values) for the Army's program than it does for the other services. These limitations, taken together, continue to hinder the report's utility.

According to DOD Instruction 3110.06, DOD, via the Working Group, should ensure that information about the services' prepositioning programs is complete and accurate and should use the information, among other purposes, to evaluate if the programs can support combatant commanders' strategies and develop recommendations to mitigate prepositioned asset shortfalls. Further, DOD's 2020 Strategic Implementation Plan states that DOD should conduct an accurate assessment of information, which is critical to evaluate the performance of the prepositioning programs' status and capabilities and to ensure stakeholders have the information needed to make informed decisions. However, the Implementation Plan aligns DOD's joint oversight assessment cycle for the services' prepositioning programs with developing and publishing the annual report which has several limitations, as noted earlier.

In addition to the annual report, the military services use other internal reports, such as readiness or inventory reports, or other internal meeting forums, to manage their prepositioning programs. However, none of these reports or forums provides a joint view of all of the services' programs for DOD. Further, according to a Joint Staff official who managed the development of the annual report, the Joint Staff receives some but not all of the other reports and has limited interaction with one service about its prepositioning programs. Further, these other reports are service-specific, and some include information about topics other than prepositioning programs.

A Joint Staff official said that the annual report can be difficult to read, but DOD has not developed another reporting mechanism or other information-collection tool to obtain complete information to aid in its joint oversight of the services' prepositioning programs. Both Office of the Secretary of Defense and Joint Staff officials noted that alternative information that provides a better picture of the services' programs would be more useful for their oversight, but to date there have been no efforts to develop such a mechanism or tool or to make modifications to existing mechanisms or tools to collect such information.

Since 2011, we have identified the potential for duplication in the services' prepositioning programs due to a fragmented management approach within DOD. For example, DOD officials previously told us there may be duplication among the services' prepositioned medical assets. Furthermore, DOD's 2020 Strategic Implementation Plan states that with joint oversight, the services' prepositioning programs will be effectively balanced to reduce duplication, overlap, and fragmentation across the department. While one of the Implementation Plan's assessment activities includes reviewing data and information to identify redundancies and fragmentation, DOD cannot effectively conduct this activity because it does not have a reporting mechanism or information-collection tool to develop a complete view of the military services' prepositioning programs.

The statutory requirement for DOD to submit the annual report is scheduled to expire in December 2021.³⁶ This provides the department with an opportunity to create a new reporting mechanism or tool, or modify existing ones, to provide a complete picture of the military services' prepositioning programs and help identify and address gaps, redundancies, and fragmentation during the prepositioning assessment cycle. Moreover, a new reporting mechanism or tool would help DOD take a more informed approach toward mitigating shortfalls and challenges in the services' programs, as described earlier in this report. Additionally, DOD would be in a better position to implement its joint oversight framework and effectively communicate its prepositioning needs to Congress as it makes decisions about the department's prepositioning posture around the world.

Conclusions

Prepositioned assets play a pivotal role during the initial phases of an operation and most recently DOD has used its prepositioned assets to respond to the COVID-19 pandemic. DOD has taken positive steps to establish a joint oversight framework, but it will be hindered in fully implementing this framework without complete information about the military services' prepositioning programs. An annual report to Congress is the sole mechanism DOD currently has to conduct joint oversight, but

³⁶Pub. L. No. 114-328, § 1061 (Dec. 23, 2016).

	this report provides an incomplete view of the services' programs. With the annual reporting requirement expiring in 2021, DOD has an opportunity to create a new reporting mechanism or data collection tool, or to modify existing ones, to help it more comprehensively address shortfalls and challenges in the services' programs as well as better identify gaps, redundancies, and fragmentation. Importantly, such a mechanism or tool will equip DOD with complete information that it needs to effectively conduct joint oversight and make more informed decisions on investments and priorities for the services' prepositioning programs.
Recommendation for Executive Action	We are making the following recommendation to the Department of Defense. The Secretary of Defense should ensure that the Assistant Secretary of Defense for Sustainment, in coordination with the Chairman of the Joint Chiefs of Staff, develop and implement a new reporting mechanism or information-collection tool, or modify existing mechanisms or tools, to gather complete information about the military services' prepositioning programs for joint oversight purposes and to reduce potential duplication and fragmentation. (Recommendation 1)
Agency Comments	We provided a draft of the sensitive report to DOD for review and comment. DOD provided technical comments which we incorporated where appropriate. In its comments on the sensitive report, reproduced in appendix II, DOD concurred with the recommendation and described planned actions it will take to implement it.

We are providing copies of this report to the appropriate congressional committees; the Secretary of Defense; the Deputy Assistant Secretary of Defense for Logistics; the Chairman of the Joint Chiefs of Staff; the Acting Secretaries of the Army, Navy, and Air Force; and the Commandant of the Marine Corps. In addition, this report is available at no charge on the GAO website at http://www.gao.gov.

If you or your staff have any questions about this report, please contact me at (202) 512-5431 or russellc@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. GAO staff who contributed to this report are listed in appendix III.

ang fumble

Cary B. Russell Director, Defense Capabilities and Management

Appendix I: Scope and Methodology

To conduct the work for this review, we examined relevant laws, Department of Defense (DOD) and military service guidance, and recent annual reports to Congress about the services' prepositioning programs.¹ Examples of relevant laws we examined include the National Defense Authorization Act for Fiscal Years 2014 and 2020. Guidance documents we examined include:²

- DOD Directive 3110.07, Pre-Positioned War Reserve Materiel (PWRM) Strategic Policy;
- DOD Instruction 3110.06, War Reserve Materiel (WRM);
- DOD, Pre-Positioned War Reserve Materiel Strategic Implementation Plan;
- Chairman of the Joint Chiefs of Staff instruction 4310.01E, *Logistics Planning Guidance for Prepositioned War Reserve Materiel*;
- Army Regulation 710-1, *Centralized Inventory Management of the Army Supply System*;
- Chief of Naval Operations Instruction 4020.15P, Operating Stock and War Reserve Requirements and Stock for Petroleum Products;
- Marine Corps Orders 4400.39, *War Reserve Materiel Policy and 4000.58, Prepositioning Programs Tailoring Policy*; and
- Air Force Instruction 25-101, War Reserve Materiel (WRM).

We reviewed the annual *Report on the Status of Department of Defense Programs for Pre-Positioned Materiel and Equipment* to Congress for fiscal years 2015 through 2019. We selected this timeframe because the last annual report we reviewed and reported upon was for fiscal year

¹On December 20, 2019, the National Defense Authorization Act for Fiscal Year 2020, Pub. L. No. 116-92, established the United States Space Force as a military service within DOD. Since we did not gather data from the Space Force given its status as a new organization, throughout this appendix we refer to only four military services within DOD.

²DOD Directive 3110.07, *Pre-Positioned War Reserve Materiel (PWRM) Strategic Policy* (Mar. 7, 2017) (incorporating Change 1, June 18, 2018). DOD Instruction 3110.06, *War Reserve Materiel (WRM)* (Jan. 7, 2019). DOD, *Pre-Positioned War Reserve Materiel Strategic Implementation Plan* (February 2020). Chairman of the Joint Chiefs of Staff Instruction 4310.01E, *Logistics Planning Guidance for Prepositioned War Reserve Materiel (Jan.* 13, 2020). Army Regulation 710-1, *Centralized Inventory Management of the Army Supply System* (Nov. 28, 2016). Chief of Naval Operations Instruction 4020.15P, *Operating Stock and War Reserve Requirements and Stock for Petroleum Products* (June 26, 2018). Marine Corps Order 4400.39, *War Reserve Materiel Policy* (Feb. 8, 2011). Marine Corps Order 4000.58, *Prepositioning Programs Tailoring Policy* (Aug. 19, 2016). Air Force Instruction 25-101 *War Reserve Materiel (WRM)* (Aug. 27, 2019).

2014 and the most current annual report available at the time of our audit work for this review was fiscal year 2019.³ The annual reports present information on the most recently completed fiscal year and include an unclassified section and a classified supplement.⁴ For this review, we focused on the unclassified sections. We assessed the reliability of the data in the annual reports we examined by discussing the data collection processes and the data themselves with service officials and reviewed our prior assessments of the reliability of the data.⁵ We concluded that the data were sufficiently reliable to report on prepositioned asset and program information as described below.

This report is a public version of a sensitive report that we issued in December 2020.⁶ DOD deemed some of the information in our December report to be sensitive, which must be protected from public disclosure. Therefore, this report omits sensitive information identifying the specific worldwide locations of the services' prepositioned assets. Although the information provided in this report is more limited, the report addresses the same objectives as the sensitive report and uses the same methodology.

To describe the types of assets the military services preposition worldwide, including in the Indo-Pacific, as well as shortfalls and challenges that the military services have identified in their prepositioning programs, we reviewed the military services' policies and annual reports previously identified above, along with briefings from and interviews with service officials, we obtained information about the services' prepositioned assets and where they were located worldwide. In addition, we analyzed data from the annual reports including services' asset fill rate

⁴Among other information, the unclassified section presents the readiness condition of the military services' prepositioned assets within their programs. The classified supplement presents the geographic combatant commanders' assessment of the services' prepositioning programs, the impact of prepositioned asset shortfalls, and risk mitigation efforts to address shortfalls.

⁵GAO, *Prepositioned Stocks: Inconsistencies in DOD's Annual Report Underscore the Need for Overarching Strategic Guidance and Joint Oversight*, GAO-13-790 (Washington, D.C.: Sept. 26, 2013). GAO-16-418.

⁶GAO, Warfighter Support: DOD Needs a Complete Picture of the Military Services' Prepositioning Programs, GAO 21 126SU (Washington, D.C.: Dec. 18, 2020).

³GAO, *Prepositioned Stocks: DOD Has Addressed Required Reporting Elements, but Needs to Develop a Department-wide Policy and Joint Service Approach*, GAO-16-418 (Washington, D.C.: Apr. 15, 2016).

and accompanying narratives, to identify the services' recurring prepositioning asset shortfalls and challenges as well as risk mitigation efforts.⁷

We considered a prepositioned asset shortfall to be recurring if it had been identified by the military services in at least two annual reports between 2015 through 2019. Although the effects of prepositioned asset shortfalls on readiness are classified, we interviewed knowledgeable service officials to confirm which assets were experiencing recurring shortfalls, reasons why the shortfalls existed, and any risk mitigation efforts that were underway. Further, we interviewed officials from the Office of the Secretary of Defense, the Joint Staff, the military services, and U.S. Indo-Pacific Command and its related service component commands to discuss challenges affecting prepositioning programs and assets and associated risk mitigation efforts. We also visited Blount Island Command in Jacksonville, Florida, where the Marine Corps maintains and loads its afloat prepositioned assets onto the Maritime Prepositioning Force's ships to support Marine expeditionary forces.

To assess the extent to which DOD has made progress in implementing a joint oversight framework for the military services' prepositioning programs, we analyzed DOD Instruction 3110.06, *War Reserve Materiel (WRM)* and the *Pre-Positioned War Reserve Materiel Strategic Implementation Plan,* both of which the department revised in proximity to or since we last reported on this topic.⁸ Specifically, we assessed the revised DOD instruction by comparing it against the prior version. We noted instances where DOD added or updated information about joint oversight. We also reviewed our past work and recommendations related to the prior version of Implementation Plan that, among another objective, assessed the extent to which the plan addressed congressionally required elements from the National Defense Authorization Act for Fiscal Year 2014.⁹ In addition, we compared the information in the revised Implementation Plan with congressionally required elements found in the National Defense Authorization Acts for Fiscal Years 2014 and 2020.¹⁰

⁷Shortfalls refers to inventory quantities of prepositioned assets whereas challenges refers to broader issues that can affect the effectiveness of the assets.

⁸GAO, *Prepositioned Stocks: DOD Needs Joint Oversight of the Military Services' Programs*, GAO-19-244 (Washington, D.C.: Jan. 31, 2019).

⁹Pub. L. No. 113-66, § 321(b) (Dec. 26, 2013)

¹⁰Pub. L. No. 113-66, § 321(b) (Dec. 26, 2013) and Pub. L. No. 116-92, § 356 (Dec. 20, 2019).

One GAO analyst coded the information and a different analyst checked the initial coding for accuracy. The analysts discussed and reconciled any differences. We assessed an element as "addressed" if DOD's implementation plan addressed all parts of the element. We assessed an element as "partially addressed" if one or more—but not all—parts of the required element were explicitly addressed. Analysts also had the option to assign a code of "not addressed," if no part of an element had been addressed, but did not code any elements as such. Also, we interviewed officials from the Office of the Secretary of Defense about their efforts to update these prepositioning guidance documents.

Further, we reviewed the annual reports and other documents and interviewed officials at the Office of the Secretary of Defense, the Joint Staff, and military services about processes and mechanisms for jointly tracking, monitoring, and reporting data on the services' prepositioning programs. We assessed this information against (1) DOD Instruction 3110.06, War Reserve Materiel, which designates oversight responsibility for the services' prepositioning programs along with ensuring that information about the programs is complete and accurate and (2) the Pre-Positioned War Reserve Materiel Strategic Implementation Plan, which highlights accurately assessing information, the criticality of evaluating performance, and ensuring stakeholders have the information needed to make informed decisions. We also reviewed our past work in the area of duplication, overlap, and fragmentation related to the services' respective prepositioning programs. "Fragmentation" refers to those circumstances in which more than one organization within an agency is involved in the same broad area of national need and opportunities exist to improve service delivery. ¹¹

To obtain information for our review, we interviewed officials from the following organizations from the Departments of Defense and State.

Department of Defense

- Office of the Deputy Assistant Secretary of Defense for Logistics
- Joint Chiefs of Staff, Logistics Directorate
- Defense Logistics Agency

¹¹GAO, 2020 Annual Report: Additional Opportunities to Reduce Fragmentation, Overlap, and Duplication and Achieve Billions in Financial Benefits, GAO-20-440SP (Washington, D.C.: May 19, 2020).

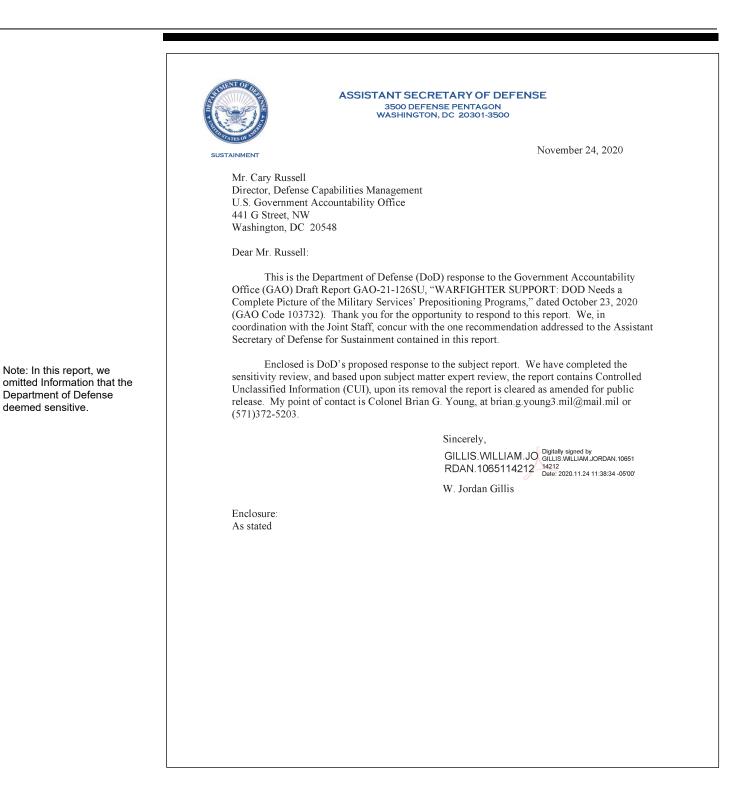
- U.S. Army, Headquarters, G-3/5/7 (Operations, Plans, and Training) and G-4 (Logistics)
- U.S. Army Materiel Command, Army Prepositioned Stocks Branch
- U.S. Army Sustainment Command
- U.S. Navy, Office of the Chief of Naval Operations, N4 (Fleet Readiness and Logistics) and N9 (Warfighting Capabilities and Requirements)
- U.S. Navy, Bureau of Medicine
- U.S. Marine Corps, Headquarters, Installations and Logistics
- U.S. Marine Corps, Headquarters, Plans, Policies, and Operations
- U.S. Air Force, Headquarters, A4(L) (Logistics)
- U.S. Air Force, Medical Readiness Agency
- U.S. Air Force, Air Force Materiel Command, 635th Supply Chain Operations Wing
- U.S. Indo-Pacific Command
- U.S. Army, Pacific
- U.S. Pacific Fleet
- U.S. Marine Forces, Pacific
- U.S. Pacific Air Forces
- U.S. Transportation Command, Military Sealift Command

Department of State

- Bureau of Political-Military Affairs
- Bureau of East Asian and Pacific Affairs
- Office of the Inspector General

The performance audit upon which this report is based was conducted from September 2019 to December 2020 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 findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives. We subsequently worked with DOD from January 2021 to March 2021 to prepare this unclassified version of the original sensitive report for public release. This public version was also prepared in accordance with these standards.

Appendix II: Comments from the Department of Defense



	AFT REPORT DATED OCTOBER 23, 2020 AO-21-126SU (GAO CODE 103732)
	GHTER SUPPORT: DOD NEEDS A COMPLETE PICTURE SERVICES' PREPOSITIONING PROGRAMS" DATED OCTOBER 23, 2020"
	RTMENT OF DEFENSE COMMENTS) THE GAO RECOMMENDATION
that the Assistant Secretary of Joint Chiefs of Staff, develop a collection tool, or modify exist	The GAO recommends that the Secretary of Defense should ensure Defense for Sustainment, in coordination with the Chairman of the and implement a new reporting mechanism or information- ting mechanisms or tools, to gather complete information about the ng programs for joint oversight purposes and reduce potential
sources with regard to the statu to support operations, exercise Defense Readiness Reporting S Center (MCPIC). While these continuously works to improve inform critical readiness and of Global Preposition Materiel Ca later-than September 30, 2021, that (1) the data provided supp it enables the identification of prepositioned programs. If any	Today the Department obtains data and information from multiple is of the military services' prepositioned programs and their ability s, provide humanitarian relief, and etc. These sources include, the Systems (DRRS) and Marine Corps Prepositioned. Information and other sources are in place and available, the Department e the completeness, accuracy, and timeliness of data that it uses to perations support decisions. To this end the Department, via the apability Working Group (GPMCWG), will conduct a review no- , of the systems and data that are currently being used to ensure orts the joint oversight of service prepositioned programs and (2) any gaps, overlaps, or redundancies across the services' y shortfalls or gaps are identified, the GPMCWG will provide priate organization for their resolution.
	1

Appendix III: GAO Contact and Staff Acknowledgments

GAO Contact	Cary B. Russell at (202) 512-512-5431 or russellc@gao.gov	
Staff Acknowledgments	In addition to the contact named above, individuals who made key contributions to this report include Alissa H. Czyz, Guy A. LoFaro, Ava S.H. Bagley, Vincent M. Buquicchio, Martin De Alteriis, Christopher M. Gezon, Shvetal Khanna, Richard Powelson, Michael D. Silver, and Bailey Wong.	

GAO's Mission	The Government Accountability Office, the audit, evaluation, and investigative arm of Congress, exists to support Congress in meeting its constitutional responsibilities and to help improve the performance and accountability of the federal government for the American people. GAO examines the use of public funds; evaluates federal programs and policies; and provides analyses, recommendations, and other assistance to help Congress make informed oversight, policy, and funding decisions. GAO's commitment to good government is reflected in its core values of accountability, integrity, and reliability.
Obtaining Copies of GAO Reports and Testimony	The fastest and easiest way to obtain copies of GAO documents at no cost is through our website. Each weekday afternoon, GAO posts on its website newly released reports, testimony, and correspondence. You can also subscribe to GAO's email updates to receive notification of newly posted products.
Order by Phone	The price of each GAO publication reflects GAO's actual cost of production and distribution and depends on the number of pages in the publication and whether the publication is printed in color or black and white. Pricing and ordering information is posted on GAO's website, https://www.gao.gov/ordering.htm.
	Place orders by calling (202) 512-6000, toll free (866) 801-7077, or TDD (202) 512-2537.
	Orders may be paid for using American Express, Discover Card, MasterCard, Visa, check, or money order. Call for additional information.
Connect with GAO	Connect with GAO on Facebook, Flickr, Twitter, and YouTube. Subscribe to our RSS Feeds or Email Updates. Listen to our Podcasts. Visit GAO on the web at https://www.gao.gov.
To Report Fraud,	Contact FraudNet:
Waste, and Abuse in	Website: https://www.gao.gov/fraudnet/fraudnet.htm
Federal Programs	Automated answering system: (800) 424-5454 or (202) 512-7700
Congressional Relations	Orice Williams Brown, Managing Director, WilliamsO@gao.gov, (202) 512-4400, U.S. Government Accountability Office, 441 G Street NW, Room 7125, Washington, DC 20548
Public Affairs	Chuck Young, Managing Director, youngc1@gao.gov, (202) 512-4800 U.S. Government Accountability Office, 441 G Street NW, Room 7149 Washington, DC 20548
Strategic Planning and External Liaison	Stephen J. Sanford, Acting Managing Director, spel@gao.gov, (202) 512-4707 U.S. Government Accountability Office, 441 G Street NW, Room 7814, Washington, DC 20548