



August 2018

# MARITIME SECURITY

## DOT Needs to Expediently Finalize the Required National Maritime Strategy for Sustaining U.S.-Flag Fleet

Accessible Version

# GAO Highlights

Highlights of [GAO-18-478](#), a report to congressional requesters

## Why GAO Did This Study

The U.S. government relies on U.S.-flag vessels that trade internationally to transport cargo and to provide a pool of U.S. mariners who could be called upon in times of crisis for DOD's reserve fleet. Through financial support and cargo preferences, the United States has supported the viability of the U.S.-flag fleet. However, in recent years concern has grown about the sustainability of the U.S.-flag fleet, and in 2014, Congress statutorily mandated that DOT develop national strategies related to the sustainability of the U.S.-flag fleet including recommendations for the future.

GAO was asked to review U.S. government support for these U.S.-flag vessels that trade internationally. This report discusses: (1) the effect the U.S. government's support for the U.S.-flag fleet has had on national defense needs and other government programs; (2) the challenges identified by stakeholders in sustaining the U.S.-flag fleet for defense needs; and (3) the status of the mandated national strategies related to the U.S.-flag fleet.

GAO reviewed relevant laws and analyzed DOT and DOD documents and government cargo data for fiscal years 2012–2017. GAO also interviewed officials from DOT, DOD, and other federal agencies subject to cargo preference; MSP vessel operators; and other stakeholders.

## What GAO Recommends

GAO recommends that DOT complete the national maritime strategy and establish time frames for its issuance. DOT concurred with our recommendation and provided technical comments, which we view [GAO-18-478](#). For more information, contact Andrew Von Ah at (202) 512-2834 or [vonaha@gao.gov](mailto:vonaha@gao.gov).

August 2018

## MARITIME SECURITY

### DOT Needs to Expediently Finalize the Required National Maritime Strategy for Sustaining U.S.-Flag Fleet

## What GAO Found

U.S. government support for the U.S.-registered (U.S.-flag) fleet has helped meet national defense needs, but it has had a negative effect on some non-defense government programs. Specifically, the U.S. government supports U.S.-flag vessels through: (1) an annual stipend provided through the Maritime Security Program (MSP) and (2) cargo preferences that require federal agencies to transport certain percentages of government cargo on U.S.-flag vessels. These supports have helped ensure that a sufficient number of U.S.-flag vessels are available to meet the Department of Defense's (DOD) cargo capacity needs. Although cargo preference requirements have helped support the financial viability of U.S.-flag vessels that participate in the MSP, they have had a negative impact on some non-defense programs. For example, the requirement pursuant to which food-aid agencies send a certain percentage of food aid on U.S.-flag vessels has resulted in higher shipping costs for these agencies and has negatively affected their missions, according to officials at these agencies.

Stakeholders GAO spoke to identified two primary challenges in sustaining the internationally trading U.S.-flag fleet for national defense needs.

- First, even with the annual MSP stipend, maintaining the financial viability of U.S.-flag vessels is a challenge. This challenge largely results from the higher costs of operating a U.S.-flag vessel. According to U.S. Maritime Administration (MARAD) officials, the additional cost of operating a U.S. flag vessel compared to a foreign-flag vessel has increased—from about \$4.8 million annually in 2009 and 2010 to about \$6.2 to \$6.5 million currently—making it harder for such vessels to remain financially viable. In addition, government cargo volumes have fallen in recent years. In response to this challenge, Congress increased the MSP stipend from \$3.5 million per vessel for fiscal year 2016 to \$4.99 million per vessel for fiscal year 2017. MARAD officials said this increase has temporarily stabilized the financial situation of MSP vessel operators. However, MARAD officials stated trends in operating costs and government cargo suggest this will remain an ongoing challenge.
- Second, a potential shortage of U.S.-citizen mariners available to crew the government-owned reserve fleet during a crisis is a challenge. DOD counts on mariners working on U.S.-flag vessels to crew this fleet when activated. A MARAD working group recently estimated a shortage of over 1,800 mariners in the case of a drawn-out military effort, although it also recommended data improvements to increase the accuracy of the count of available mariners.

The Department of Transportation (DOT) has drafted but not issued the national maritime strategies mandated by Congress. The strategies are intended to address U.S.-flag vessels' competitiveness and ensure the long-term viability of U.S.-flag vessels and U.S.-citizen mariners. According to DOT officials, a combined draft strategy was developed under the previous administration but is now being reviewed by the current administration. DOT has not established a timeline for finalizing the strategy even though it was to be completed by 2015. Without establishing a timeline to complete this required strategy, DOT continues to delay providing decision-makers the information they need to determine how best to address the challenges facing the U.S.-flag fleet.

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# Contents

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Letter	1
Background	6
U.S. Government Support for the U.S.-Flag Fleet Has Helped Meet National Defense Needs but Has Had a Negative Effect on Some Non-Defense Government Programs	13
Stakeholders Identified Two Primary Sustainability Challenges the Internationally Trading U.S.-Flag Fleet Faces in Meeting National Defense Needs	25
DOT Has Not Finalized Mandated National Strategies but Has Identified Various Options to Address Challenges to Sustaining U.S.- Flag Fleet for Defense Needs	35
Conclusions	39
Recommendation for Executive Action:	40
Agency Comments	40
Appendix I: Alternatives and Potential Modifications to the Maritime Security Program	42
Appendix II: Comments from the Department of Transportation	48
Appendix III: Comments from the U.S. Agency for International Development	50
Appendix IV: GAO Contacts and Staff Acknowledgments	53
Data Tables	54
Agency Comment Letters	57
Tables	
Table 1: Types of Vessels in the Maritime Security Program, as of March 2018	16
Table 2: Potential Effects of Alternatives to the Maritime Security Program (MSP) on the Government's Costs and Ability to Meet the Department of Defense's (DOD) Needs, as Identified by Stakeholders	43
Table 3: Stakeholders' Views on Potential Effects of Modifications to the Maritime Security Program (MSP) on the Department of Defense's (DOD) Needs	45

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## Figures

Figure 1: U.S. Sealift Capacity, as of March 2018	8
Figure 2: U.S.-flag, Oceangoing, Internationally Trading Fleet, End of Calendar Year 1990 through 2017	11
Figure 3: Metric Tons of Government Cargo Shipped on Vessels in the Maritime Security Program in Fiscal Year 2016, by Vessel Type, for DOD, Food Aid, and Civilian Agencies' Non-Food Aid	20
Figure 4: Sources of Revenue for Operators of Vessels in the Maritime Security Program	21
Figure 5: Total U.S. Government Cargo, in Metric Tons, Fiscal Years 2004 through 2014	27
Figure 6: Authorized Annual Stipend per Vessel in the Maritime Security Program, Fiscal Years 1996 through 2021	29
Figure 7: Illustration of the Potential Distribution of the Approximately 52 U.S.-citizen Mariners Hired per U.S.-Flag Commercial Vessel during Peacetime and during a Military Activation	32
Accessible Data for Figure 1: U.S. Sealift Capacity, as of March 2018	54
Accessible Data for Figure 2: U.S.-flag, Oceangoing, Internationally Trading Fleet, End of Calendar Year 1990 through 2017	54
Accessible Data for Figure 3: Metric Tons of Government Cargo Shipped on Vessels in the Maritime Security Program in Fiscal Year 2016, by Vessel Type, for DOD, Food Aid, and Civilian Agencies' Non-Food Aid	55
Accessible Data for Figure 5: Total U.S. Government Cargo, in Metric Tons, Fiscal Years 2004 through 2014	55
Accessible Data for Figure 6: Authorized Annual Stipend per Vessel in the Maritime Security Program, Fiscal Years 1996 through 2021	56

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### Abbreviations

DOD	Department of Defense
DOT	Department of Transportation
EXIM Bank	U.S. Export-Import Bank
MARAD	Maritime Administration
MSC	Military Sealift Command
MSP	Maritime Security Program
OMB	Office of Management and Budget
Ro-Ro	Roll on/Roll off
SSOP	Strategic Sealift Officer Program (U.S. Navy)
USAID	U.S. Agency for International Development
USDA	U.S. Department of Agriculture
VISA	Voluntary Intermodal Sealift Agreement
VTA	Voluntary Tanker Agreement

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August 8, 2018

The Honorable Pete Sessions  
Chairman  
Committee on Rules  
House of Representatives

The Honorable Mark Sanford  
House of Representatives

The Department of Defense (DOD) ships more than a million metric tons of cargo overseas annually to sustain its military presence around the world. In a time of war or crisis, it may need access to additional vessel capacity to transport supplies to support both the surge—the initial movement of troops, equipment, and supplies to a war’s location—and to sustain these troops during a potentially long-lasting conflict, while continuing operations elsewhere. The process of transporting government equipment and supplies by sea for military purposes is often referred to as “sealift”. Due to certain statutory requirements and long-time government policy, DOD largely relies on internationally trading U.S.-flag vessels to transport its cargo in peacetime and to supplement the government-owned reserve fleet in times of war or crisis.<sup>1</sup> However, it has long been recognized that the operating costs of U.S.-flag vessels are higher than the operating costs of foreign-flag vessels, and that government support is therefore necessary to maintain a fleet of internationally trading U.S.-flag vessels.<sup>2</sup>

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<sup>1</sup>For the purposes of this report, the term U.S.-flag vessel refers to a vessel that is registered and operated under the laws of the United States, used in commercial trade of the United States, and is owned and operated by U.S. citizens. DOD may also use foreign-flag commercial vessels (registered and operated under the laws of a country other than the United States) to assist with U.S. sealift, but only when U.S.-flag vessels are not available or the proposed freight charges are excessive or unreasonable.

<sup>2</sup>For example, current statutory provisions, reminiscent of language in both the Merchant Marine Act, 1920 (Pub. L. No. 66-261, 41 Stat. 988 (1920)), and the Merchant Marine Act, 1936 (Pub. L. No. 74-835, 49 Stat. 1985 (1936)), as amended, state that it is the policy of the United States to foster the development and encourage the maintenance of a U.S.-flag fleet as necessary for national defense and the development of U.S. foreign and domestic commerce. See 46 U.S.C. § 50101. Title VI of the Merchant Marine Act, 1936 established an operating differential subsidy predecessor program to the current program.

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Currently, the U.S. government financially supports internationally trading U.S.-flag vessels in two key ways: (1) by providing an annual stipend for 60 specific vessels through the Department of Transportation's (DOT) Maritime Security Program (MSP) and (2) by requiring, under laws that are distinct from the MSP, that the federal government transport certain types and percentages of government cargo on U.S.-flag vessels, also known as cargo preference requirements.<sup>3</sup> Federal agencies can meet cargo preference requirements by transporting cargo on vessels in the MSP or on other U.S.-flag vessels. The shipping fees federal agencies pay to U.S.-flag vessels to transport government cargo under cargo preference requirements also help to financially support U.S.-flag vessels. In recent years, Congress has increased appropriations to support vessels in the MSP; however, the amount of government cargo available to be shipped under cargo preference requirements has decreased. This decrease has prompted questions regarding the future of the U.S.-flag fleet and the costs to the government to support it. In 2014, Congress statutorily mandated that DOT develop two national strategies related to the U.S.-flag fleet, one a national sealift strategy focused on ensuring the long-term viability of the U.S. Merchant Marine (U.S.-flag vessels and U.S.-citizen mariners)<sup>4</sup> and the other a national maritime strategy focused, among other things, on increasing the competitiveness of internationally trading U.S.-flag vessels.<sup>5</sup>

You asked us to review the costs to the government of supporting U.S.-flag vessels for military needs. This report responds to the following objectives:

- What effect has the U.S. government's support for the internationally trading U.S.-flag fleet had on defense needs and other government programs?

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<sup>3</sup>See, e.g., 46 U.S.C. § 55305(b). Apart from cargo preference, the U.S. government also supports U.S.-flag vessels operating in domestic trade through what is commonly referred to as the Jones Act (Merchant Marine Act of 1920, Pub. L. No. 66-261, § 27, 41 Stat. 988, 999 (1920) (codified as amended at 46 U.S.C. § 55102)), which, in general, requires that maritime transport of cargo between points in the United States be carried by vessels that are U.S. flag and constructed in the United States. See [GAO-13-260](#). Jones Act vessels generally do not engage in international trade and are not part of the MSP fleet, although they may be called upon to support sealift by DOD in certain circumstances.

<sup>4</sup>Pub. L. No. 113-76, 128 Stat. 5, 598 (2014).

<sup>5</sup>Pub. L. No. 113-281, § 603, 128 Stat. 3022, 3061 (2014).

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- According to stakeholders, what, if any, sustainability challenges does the internationally trading U.S.-flag fleet face in meeting national defense needs?
  - What is the status of the mandated national sealift and maritime strategies, and what options has DOT considered to address any challenges related to sustaining the internationally trading U.S.-flag fleet to meet defense needs?

In addition, you requested that we identify and discuss alternatives to the MSP with DOD, the Department of Transportation's Maritime Administration (MARAD), and other stakeholders, and this information is included in appendix I.

To identify the effect the U.S. government's support for the internationally-trading U.S.-flag fleet has had on national defense needs and other government programs, we reviewed relevant laws, regulations, and directives, including the Maritime Security Act of 1996,<sup>6</sup> the Maritime Security Act of 2003,<sup>7</sup> National Security Directive 28, and laws and regulations related to cargo preference requirements, among others. We also reviewed unclassified summaries of DOD studies and interviewed officials from DOD's U.S. Transportation Command (Transportation Command) to learn how these studies are used to determine defense needs for U.S.-flag vessels. We reviewed DOT guidance on the MSP and interviewed MARAD officials to learn how the program operates, including how participants are selected for the program and how the stipend is determined. We also conducted a literature search on the MSP and maritime economics and reviewed prior GAO reports as well as reports from the Congressional Research Service, MARAD, Econometrica,<sup>8</sup> and academics on the MSP and cargo preference requirements.

In addition, to understand the extent to which the U.S. government is supporting U.S.-flag vessels through shipments of government cargo under cargo preference requirements and the effect of this support on

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<sup>6</sup>Pub. L. No. 104-239, 110 Stat. 3118 (1996).

<sup>7</sup>Pub. L. No. 108-136, 117 Stat. 1788 (2003).

<sup>8</sup>Econometrica, Inc., *Final Report: Maritime Security Program Impact Evaluation*, 1025-100/DTMA1F08157(Bethesda, MD.: July 2009). Econometrica is a business research and management consulting firm that has conducted program evaluations under contracts with a variety of federal agencies. This evaluation of the MSP was designed and conducted under a contract issued by MARAD.



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defense and other government programs, we obtained and analyzed data from DOD on the amount of DOD cargo shipped from fiscal years 2012 through 2017 and data from MARAD on the amount of government cargo that was shipped by non-defense government agencies during the same time period to determine the volume of government cargo shipped on U.S.-flag vessels (including MSP and non-MSP vessels) and the types of vessels used, and the volume of government cargo shipped on foreign-flag vessels. We chose this time period to provide the most recent information with the most complete data available, as data prior to fiscal year 2012 are less complete. To determine whether these data were sufficiently reliable for our analysis, we reviewed the program documentation associated with the files and discussed various data elements and collection processes with MARAD and Transportation Command staff responsible for the data. We also conducted our own electronic testing to check the consistency of the data and to reconcile the accuracy of certain data elements. We did not attempt to evaluate or test all aspects of the data files but focused on data on government cargo transported on U.S.-flag vessels. As a result of our review and discussions, we determined that these data were sufficiently reliable for the purposes of our review. We also interviewed officials representing federal agencies affected by cargo preference requirements, including the U.S. Department of Agriculture (USDA), U.S. Agency for International Development (USAID), U.S. Export-Import Bank (EXIM Bank), Department of Energy, and the State Department; all 14 MSP vessel operators; six labor unions; an international ship-registry service; a maritime association; two stakeholders in nongovernmental organizations involved with food aid; and six academics with a background in defense transportation, food assistance or maritime economics.

To identify stakeholders' views on any challenges the government faces in sustaining the internationally trading U.S.-flag fleet to meet defense needs, we conducted a literature search on the MSP and maritime economics and reviewed prior GAO reports as well as reports from the Congressional Research Service, MARAD (including, among others, MARAD's 2015 report on cargo preference requirements,<sup>9</sup> 2011 report on the costs of operating U.S.- and foreign-flag vessels,<sup>10</sup> and 2017 *Maritime*

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<sup>9</sup>U.S. Department of Transportation, Maritime Administration, *Impacts in Reductions in Government Impelled Cargo on the U.S. Merchant Marine*, (Washington, D.C.: Apr. 21, 2015).

<sup>10</sup>U.S. Department of Transportation, Maritime Administration, *Comparison of U.S. and Foreign-Flag Operating Costs* (Washington, D.C.: September 2011).

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*Workforce Working Group Report*<sup>11</sup>), Econometrica,<sup>12</sup> and academics on the MSP and cargo preference programs. We reviewed data provided by MARAD on MSP vessel operators' finances and laws authorizing and appropriating funds for the MSP. We also interviewed MARAD and Transportation Command officials as well as the stakeholders identified above.

To discuss the status of the mandated national sealift and maritime strategies and options that DOT has considered to address any challenges related to sustaining the internationally trading U.S.-flag fleet to meet defense needs, we reviewed the laws requiring MARAD or DOT to develop these strategies and interviewed MARAD and DOT officials on the status of their efforts to develop the mandated strategies and the process the officials used. We compared MARAD's efforts to the pertinent laws. We also reviewed laws requiring MARAD to convene a working group in order to study the sufficiency of the mariner pool and the working group's 2017 *Maritime Workforce Working Group Report*. In addition, we reviewed MARAD's strategic plan and reports and documents related to the U.S.-flag fleet and Coast Guard requirements, mariners, and cargo preference, among other things; and interviewed MARAD and DOD officials.

To identify alternatives and modifications to the MSP, we conducted a literature search on the program and reviewed a 2009 study of the MSP,<sup>13</sup> and prior GAO work.<sup>14</sup> We then interviewed stakeholders, including MARAD and DOD officials; MSP participants; an international ship-registry service; a maritime association; academics with backgrounds in food aid, defense transportation, food assistance; and maritime economics; as well as maritime unions about these alternatives and

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<sup>11</sup>Maritime Administration, U.S. Department of Transportation, *Maritime Workforce Working Group Report*, (Washington, D.C., Sept. 29, 2017).

<sup>12</sup>Econometrica, Inc., *Final Report: Maritime Security Program Impact Evaluation*, 1025-100/DTMA1F08157 (Bethesda, MD.: July 2009).

<sup>13</sup>Econometrica, Inc., *Final Report: Maritime Security Program Impact Evaluation*, 1025-100/DTMA1F08157 (Bethesda, MD.: July 2009).

<sup>14</sup>GAO, *Maritime Security Fleet: Factors to Consider Before Deciding to Select Participants Competitively*, [GAO/NSIAD-97-246](#) (Washington, D.C.: Sept. 24, 1997).

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modifications and on other ways to potentially improve the MSP.<sup>15</sup> (See app. I.)

We conducted this performance audit from January 2017 to July 2018 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.

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## Background

A series of laws and policy directives dating back to 1904 require DOD to rely in large part on U.S.-flag commercial vessels over government-owned or foreign-flag vessels for its sealift needs.<sup>16</sup> Most recently, a 1989 National Security Directive<sup>17</sup> reaffirmed the policy of relying on U.S.-flag commercial vessels to provide sealift in times of peace, crisis, and war. These requirements and policies align with the following principles from the Merchant Marine Act of 1936, as amended:

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<sup>15</sup>These stakeholders included MARAD and DOD officials, MSP vessel operators, an international ship-registry service, a maritime association, and academics with backgrounds in food aid, defense transportation, food assistance and maritime economics, as well as maritime unions.

<sup>16</sup>The law commonly referred to as the Cargo Preference Act of 1904 (1904 Act) (Pub. L. No. 58-198, 33 Stat. 518 (1904)) (codified as amended at 10 U.S.C. § 2631), requires that, in general, only U.S.-flag vessels be used in the transportation by sea of supplies bought for the military. Defense Federal Acquisition Regulations generally provide that the requirements in the law commonly referred to as the Cargo Preference Act of 1954 (1954 Act) (Pub. L. No. 83-664, 68 Stat. 832 (1954)) (codified as amended at 46 U.S.C. § 55305(b)) that certain amounts of government cargo be shipped on U.S.-flag commercial vessels is applicable to DOD. 48 C.F.R. § 247.570(b). This regulation also notes that compliance with the 1904 Act historically has resulted in DOD exceeding the 1954 Act's requirements. With respect to the 1954 Act, in circumstances where no privately owned commercial U.S.-flag vessels are available at fair and reasonable rates, U.S. government owned vessels may be used and foreign-flag vessels may be contracted. 46 U.S.C. § 55305(b). In addition, in the 1954 Wilson-Weeks Agreement between DOD and the Department of Commerce, since codified in DOD policy, DOD committed to using privately-owned U.S.-flag vessels for merchant shipping to carry out DOD's logistical needs beyond the capacity of its own government-owned fleet, to the extent 'consistent with military requirements and prudent management.'

<sup>17</sup>National Security Directive 28: National Security Directive on Sealift. October 5, 1989

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- *A fleet of commercial vessels with military utility that are owned and operated by U.S. citizens and are able to provide reliable support during difficult wartime missions is necessary for national defense.* According to testimony by the Commander of Transportation Command, during Operation Desert Shield, 7 percent of foreign-flag vessels refused to go into war zones, whereas U.S.-flag vessels continued to deliver cargo as promised.<sup>18</sup>
  - *A pool of trained U.S. mariners is needed to crew the U.S.-flag fleet.* According to DOD and MARAD, mariners are necessary to crew not only the U.S.-flag commercial vessels but also the U.S. government-owned reserve cargo vessels. These vessels are held in reduced operating status with minimal crew in peacetime. When put into full operating status—such as for a surge related to a wartime effort—the government needs to add additional trained and qualified mariners to operate them. U.S.-flag commercial vessels, which are required to be staffed by U.S.-citizen mariners, provide a pool of mariners who can be used for this task. Because mariners work on vessels for months at a time, commercial vessels typically have at least two full sets of mariners to crew a single vessel—one set of which is on the vessel while the other is on leave.<sup>19</sup> In times of crisis, one set of mariners could continue to work on the commercial vessel, while some of those on leave could be called upon to voluntarily crew vessels in the government-owned reserve fleet.
  - *A U.S. presence in international trade is needed to carry goods overseas.* According to MARAD, a U.S. presence in international trade helps ensure that both commercial shippers and the military can access vessels to carry their goods overseas at all times, both in times of peace and in times of war.<sup>20</sup>

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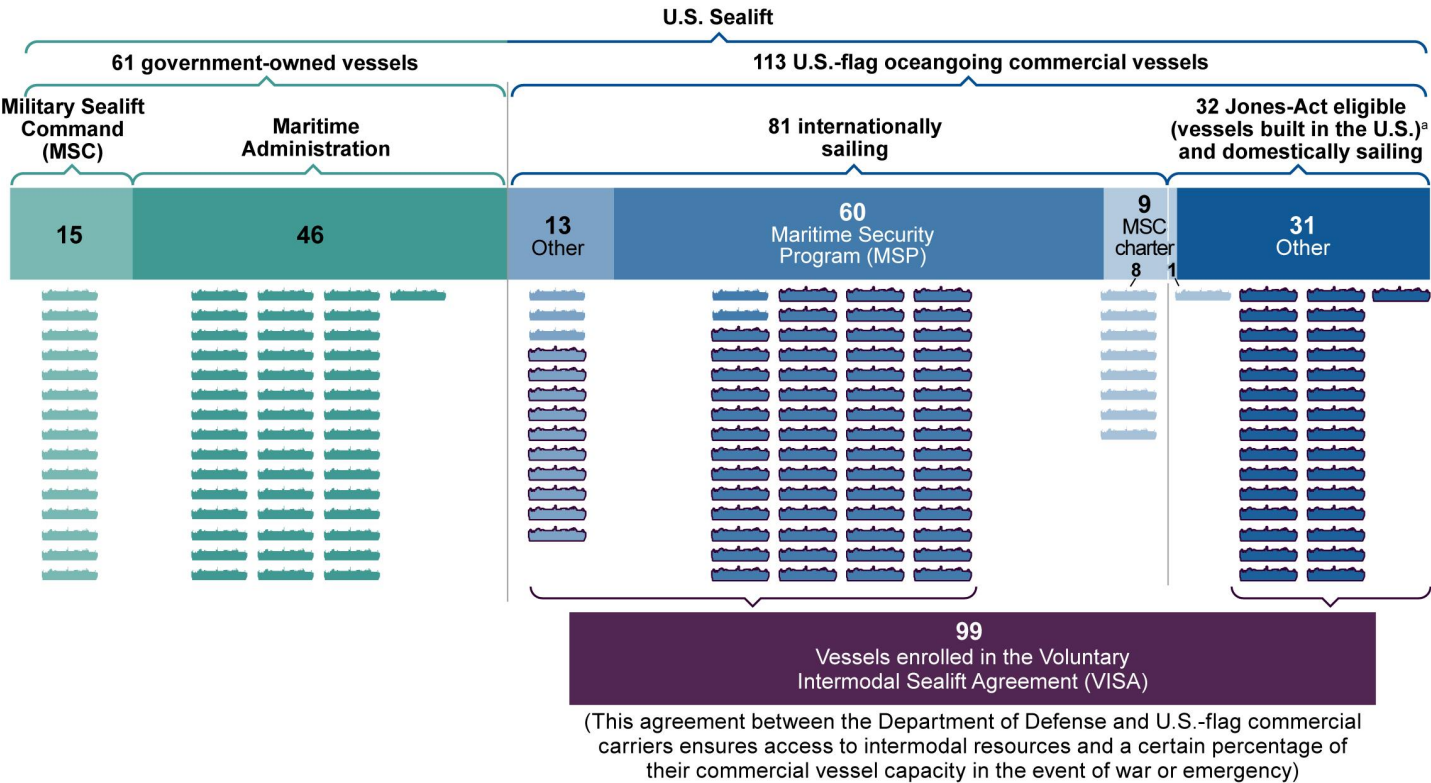
<sup>18</sup>General Darren W. McDew, United States Air Force Commander, United States Transportation Command, *Posture of the United States Transportation Command*, testimony before the Senate Armed Services Committee, 115th Cong., 2nd sess., April 10, 2018. See also Matthews, James K. and Holt, Cora J., *So Many, So Much, So Far, So Fast: United States Transportation Command and Strategic Deployment for Operation Desert Shield/Desert Storm*, Joint History Office, Office of the Chairman of the Joint Chiefs of Staff, and the Research Center, USTRANSCOM, U.S. Government Printing Office: Washington, DC, 1996.

<sup>19</sup>According to DOT officials, a mariner employed for six months a year works longer hours than a traditional land-based employee working 8 hours a day for 12 months.

<sup>20</sup>In addition, 1970 amendments to the Merchant Marine Act, 1936 recodified in 2006 specify that the United States should have a merchant marine supplemented by efficient shipbuilding and ship repair facilities. See 46 U.S.C. § 50101(a)(5).

In line with this policy, as of March 2018, DOD’s sealift capacity consisted of 61 government-owned reserve vessels held in reduced operating status and 113 commercial vessels operating under the U.S. flag in regular trade (see fig. 1).<sup>21</sup>

Figure 1: U.S. Sealift Capacity, as of March 2018



Source: GAO analysis of Maritime Administration data. | GAO-18-478

<sup>a</sup>Under the requirements of the Jones Act, only U.S.-built, U.S.- flag vessels may operate in domestic trade. There are 31 Jones-Act eligible oceangoing commercial vessels that are enrolled in VISA and available to meet emergency military operational needs and 1 Jones-Act eligible oceangoing commercial vessel that is under charter to MSC. These 32 vessels are considered part of the sealift fleet. In addition, there are 68 Jones-Act eligible oceangoing commercial vessels that employ mariners that are qualified to crew sealift vessels.

<sup>21</sup>The 61 government-owned vessels include 46 vessels owned by MARAD and 15 surge vessels owned by DOD’s Military Sealift Command (MSC). The government-owned reserve fleet also includes two missile-tracking ships, but they are not used for sealift. In addition, MSC charters a small number of commercial vessels—9—as of March 2018, which are included as part of the sealift fleet.

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MARAD, in consultation with DOD, administers a program designed to ensure that needed U.S.-flag commercial vessel capacity will be available during a wartime activation. The program consists of an agreement between the U.S. government and operators of U.S.-flag commercial vessels, called the Voluntary Intermodal Sealift Agreement (VISA). MSP vessel operators are required to enroll in VISA or a similar agreement for tankers as part of their participation in the MSP, while other operators with U.S.-flag vessels may but are not required to enroll in VISA.<sup>22</sup>

Operators enrolled in VISA:

- commit to providing their intermodal resources and a certain percentage of their U.S.-flag vessel capacity to meet national defense needs during times of war or national emergency, if activated by DOD;
- will receive compensation during a VISA activation at rates that are set according to certain parameters established in contingency contracts between DOD and the operator; and
- receive priority for peacetime DOD cargo contracts, under which they carry DOD cargo at established or negotiated rates.

According to Transportation Command and MARAD officials, DOD has never formally activated VISA, as vessel operators with these agreements have voluntarily met DOD's ocean cargo carrying needs under regular operations and compensation rates established under contract with DOD.<sup>23</sup> For example, these officials said that U.S.-flag vessels carried significant amounts of cargo during recent military conflicts such as those in Iraq and Afghanistan, and DOD did not have to activate VISA to obtain additional capacity.

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<sup>22</sup>Of the 60 MSP vessels, 58 are in VISA. The other two MSP vessels are tankers that participated in the Voluntary Tanker Agreement (VTA), which has expired and is pending renewal as of March 2018. The VTA contained similar provisions to VISA, but was designed to provide access to tankers during times of war or national emergency.

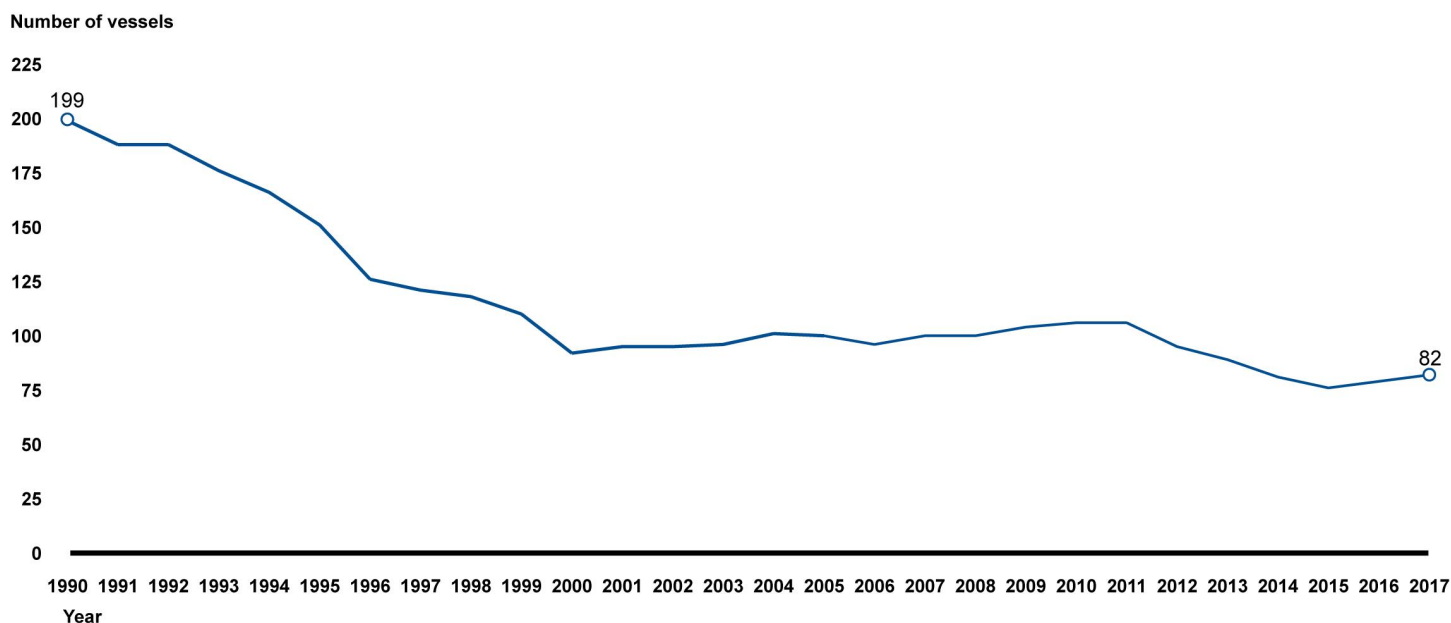
<sup>23</sup>During peacetime and wartime operations, DOD contracts with commercial vessel operators to transport cargo on their vessels either through vessel charter contracts or through regularly scheduled shipping routes via the Universal Services Contract. In the event of VISA activation, vessel operators are paid according to pre-established rates that are determined by DOD to be fair and reasonable by a rate methodology process and that are included in VISA contracts.

International shipping is dominated by foreign-flag vessels.<sup>24</sup> According to MARAD, only about 1.5 percent of U.S. international oceangoing trade by weight is carried on U.S.-flag vessels.<sup>25</sup> U.S.-flag vessels face difficulties competing in international markets due to the higher costs of operating under the U.S. flag. For example, to operate under the U.S. flag, vessel operators must comply with various U.S. laws, including requirements of the United States Coast Guard (Coast Guard), and must use U.S.-citizen and permanent resident crews, which according to a MARAD 2011 report,<sup>26</sup> results in higher labor costs than are typically incurred by foreign-flag vessels for foreign crews. Since U.S.-based vessel operators engaged in international trade can choose to operate vessels under a foreign flag, according to the 2011 MARAD report, the majority of large, oceangoing, self-propelled merchant-type U.S.-owned vessels are not registered under the U.S. flag. In 2011, MARAD reported that the Marshall Islands, Singapore, and Liberia registries accounted for 52 percent of U.S.-owned vessels. According to MARAD, these registries have different requirements than the U.S. registry that result in lower associated operating costs. Further, according to MARAD data, the fleet of large U.S.-flag vessels engaged in international trade has declined from approximately 199 vessels at the end of 1990 to 82 vessels at the end of 2017 (see fig. 2). In February 2018, the number of U.S.-flag vessels dropped again, to 81 vessels.

<sup>24</sup>Under the requirements of the Jones Act, only U.S.-built, U.S.-flag vessels may operate in domestic trade. However, U.S.-flag vessels operating in international trade do not have to be U.S. built. A U.S.-built requirement for vessels engaging in international trade would generally add costs to the already higher operating costs of U.S.-flag vessels compared to foreign-flag vessels.

<sup>25</sup>Rear Admiral Mark H. Buzby, USN Ret., Administrator, Maritime Administration, U.S. Department of Transportation *The State of the U.S. Flag Maritime Industry*, testimony before the House Committee on Transportation and Infrastructure, Subcommittee on Coast Guard and Marine Transportation, 115th Cong., 2nd sess., January 17, 2018.

<sup>26</sup> Maritime Administration, Department of Transportation, *Comparison of U.S.- and Foreign-Flag Operating Costs* (Washington, D.C.: September 2011).

**Figure 2: U.S.-flag, Oceangoing, Internationally Trading Fleet, End of Calendar Year 1990 through 2017**

Source: GAO analysis of Maritime Administration data. | GAO-18-478

To ensure the existence of an international maritime presence of U.S.-registered and U.S.-citizen-crewed vessels, the U.S. government has, at least since 1936, had laws designed to provide financial support to offset the higher costs of operating an internationally trading vessel under the U.S.-flag.<sup>27</sup> This support has provided an incentive for U.S. commercial vessel operators to register vessels under the U.S. flag in spite of the higher operating costs. Currently, this support is provided through the (1) MSP stipend for certain vessels and (2) cargo preference requirements:

- MSP stipend—Since fiscal year 1996, the MSP has provided an annual stipend set by statute to support a specific number of vessels.

<sup>27</sup> As discussed earlier, title VI of the Merchant Marine Act, 1936 established an operating differential subsidy program. A committee report accompanying the 1936 act provided that “[i]n the United States our shipping is handicapped in foreign trade by the same factor which makes it difficult for us to compete with foreign nations in the production and manufacture of many commodities—our higher standards of living. This factor operates against the American ship-owner, not only in the higher wages he must pay his own crews and the more costly food he must provide, but also in the higher original cost of building ships and repairing them, since comparable wages in foreign shipyards and repair yards are much lower than in ours. Higher first costs mean that greater sums must be set aside for depreciation and interest, and makes the cost of insurance greater.” S. Rep. No. 74-713 at 3 (1935).



In return for receiving the stipend, the MSP vessel operator agrees to keep the vessel or an equivalent vessel under the U.S. flag for the life of a 10-year operating agreement (subject to annual appropriation), and enrolled in VISA.<sup>28</sup> For fiscal year 2018, the MSP provided an annual stipend of \$5 million per vessel, for a total cost of \$300 million for the 60 vessels in the MSP. According to MARAD officials, the MSP was designed as a less costly replacement for the Operating Differential Subsidy that, since 1936, had subsidized the higher operating costs of the U.S.-flag fleet. According to DOT officials, the MSP currently covers approximately 80 percent of the average annual operating cost differential between U.S. and foreign-flag vessels, although this varies across vessels in the MSP.

- ***Cargo preference requirements***—In general, cargo preference requirements specify that certain percentages of all U.S. government cargo, military and otherwise, must be carried on U.S.-flag vessels, to the extent the vessels are available at reasonable rates.<sup>29</sup> Current law requires that 100 percent of military cargo be transported on U.S.-flag vessels.<sup>30</sup> DOD charters a small number of internationally trading U.S.-flag vessels, while contracting with other internationally trading U.S.-flag vessels to carry cargo as part of the vessel's regular operations. A minimum of 50 percent of the gross tonnage of all other government civilian cargo, such as food aid or freight sent to overseas embassies and consulates, is to be transported on privately owned commercial U.S.-flag vessels. In addition, cargoes financed by U.S. agencies, such as through loans from EXIM Bank, have been

<sup>28</sup>To participate in the MSP a vessel must meet certain other requirements, such as to be U.S. owned and operated, operate in foreign commerce, fall below an age limit, among other things. 46 U.S.C. §53102. The MSP vessel operator must also join VISA, for which it has a higher capacity commitment than other vessel operators in VISA.

<sup>29</sup>More specifically, for the transportation by sea of supplies bought for the Army, Navy, Air Force, or Marine Corps, the Cargo Preference Act of 1904, as amended, provides that the charges by U.S.-flag vessels for such transportation may not be higher than charges made for transporting like goods for private persons). In addition, the Cargo Preference Act of 1954, as amended, requires privately owned commercial U.S.-flag vessel usage to the extent vessels are available at fair and reasonable rates for commercial vessels, which according to MARAD regulations (See 46 C.F.R. 381.8) is based on MARAD's calculation of anticipated costs for the voyage plus a reasonable amount for profit for the voyage. With respect to the Cargo Preference Act of 1954, in circumstances where no privately owned commercial U.S.-flag vessels are available at fair and reasonable rates, U.S. government-owned vessels may be used and foreign-flag vessels may be contracted.

<sup>30</sup>According to DOD policy, military cargo may be transported on foreign-flag vessels when U.S.-flag vessels are not available or the proposed freight charges are excessive or unreasonable. See also 10 U.S.C. § 2631.

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congressionally directed to be transported on U.S.-flag vessels.<sup>31</sup>

DOD and MARAD each play a role in managing the nation's sealift capacity. DOD's Transportation Command determines the vessel capacity necessary to meet national security requirements,<sup>32</sup> whereas MARAD is responsible for determining whether there are enough commercial vessels and mariners available to support the activation of the government-owned reserve fleet while maintaining trade. In addition, MARAD supports the U.S.-flag fleet by administering VISA and the MSP and monitoring federal agencies' compliance with cargo preference requirements, among other responsibilities. DOD and MARAD each maintain their own set of government-owned vessels that are part of the surge sealift fleet.

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## U.S. Government Support for the U.S.-Flag Fleet Has Helped Meet National Defense Needs but Has Had a Negative Effect on Some Non-Defense Government Programs

U.S. government support for the internationally trading U.S.-flag fleet has helped meet national defense needs. Specifically, financial support to U.S.-flag vessels through both the MSP stipend and the cargo preference requirements has helped ensure a sufficient number of internationally trading U.S.-flag vessels are available to meet DOD's most recently stated cargo capacity needs from such vessels. In contrast, while cargo preference requirements are a means of providing government support to U.S.-flag vessels, these requirements have had a negative impact on some non-defense programs. For example, the requirement that food aid agencies send a certain percentage of food aid on U.S.-flag vessels has resulted in higher shipping costs for these agencies, and USAID and

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<sup>31</sup>The Joint Resolution of March 26, 1934, commonly known as Public Resolution 17, codified at 46 U.S.C. § 55304 in 2006, provides the sense of Congress, not a legal requirement, that exports financed directly by the U.S. government, such as through the EXIM Bank are to be transported on U.S.-flag vessels, to the extent vessels are available at reasonable rates, among other factors.

<sup>32</sup>To assist DOD, the Transportation Command provides air, land, and sea transportation, terminal management, and aerial refueling to support global deployment, employment, sustainment, and redeployment of U.S. forces.

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USDA officials stated that this has reduced the amount of funds the agencies can spend on their mission to reduce hunger.

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## MSP and Cargo Preference Requirements Have Resulted in Sufficient U.S.-Flag Vessel Capacity to Date to Meet Defense Needs, At Acceptable Risk

### Under the MSP, DOD and MARAD Select Vessels for Government Support That Meet the Military's Needs and Have Commercial Viability

DOD's Transportation Command conducts periodic mobility studies that, among other things, determine the overall vessel capacity needed under differing wartime scenarios, including resource-heavy scenarios involving a range of concurrent military operations for a sustained period of time. A mobility requirements study completed in 2000 found that in addition to the cargo capacity that could be provided by government-owned or long-term chartered vessels and by vessels belonging to allies, the United States would need the capacity of approximately 55 commercial vessels designed to carry dry cargo to meet mobility requirements. The study also found a potential need for additional tankers, which are designed to carry liquid cargo. At the time, the MSP stipend was provided to 47 vessels; subsequently, through the Maritime Security Act of 2003, a new MSP was established that raised funding levels to support an increase in the program fleet to 60 vessels beginning in fiscal year 2006, to include both vessels designed to carry dry cargo and tankers.<sup>33</sup>

According to Transportation Command officials, mobility study updates in 2010 and 2013 confirmed that this capacity remained sufficient to meet defense needs. As a result, the 60 vessels currently participating in the MSP have the ability to meet DOD's stated cargo capacity needs. They include a mix of vessel types designed to carry dry cargo as well as two tankers for liquid cargo (see table 1). DOD is required by statute to complete a new study by September 30, 2018.<sup>34</sup> According to Transportation Command officials, this study will evaluate the sufficiency of the sealift fleet in light of the current defense strategy, plans, threats, and DOD's mobility capabilities.

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<sup>33</sup>Pub. L. No. 108-136, 117 Stat. 1788, 1813, 1817 (2003).

<sup>34</sup>DOD is required by statute to complete a new Mobility Requirements and Capabilities Study by September 30, 2018. Pub. L. No. 115-91, Div. A, § 144, 131 Stat. 1283 (2017).

**Table 1: Types of Vessels in the Maritime Security Program, as of March 2018**

Type of vessel	Number in MSP	Description
Roll-on/Roll-off	18	Vessels designed to transport wheeled cargo, such as trailers, containers on chassis, and vehicles that are loaded and unloaded using ramps.
Containership	34	Vessels that carry cargo in intermodal containers. Geared containerships are equipped with cranes on board, providing flexibility to load and unload cargo at ports with insufficient infrastructure.
General cargo	6	Vessels with a multi-deck or single-deck hull designed primarily for the carriage of general cargo, which includes most types of dry, non-bulk cargo. These vessels usually are equipped with gear to load or unload cargo at ports with insufficient infrastructure
Tanker	2	Vessels designed to transport liquids—such as oil or other petroleum products—in bulk.

Source: GAO analysis of information provided by MARAD and DOD | GAO-18-478

MSP regulations establish that DOD and MARAD select vessels for the MSP based in part on their military utility.<sup>35</sup> Due to different configurations and cargo capacity, some vessel types are more useful to the military than others. For example, Transportation Command officials stated that currently the most useful type of cargo vessel for DOD's military needs is the roll on/roll off (Ro-Ro) vessel, in part because it is configured so that vehicles, including tanks, can be easily driven on and off the vessel. DOD's priority for the selection of MSP vessels is Ro-Ro vessels, multi-purpose/heavy-lift vessels (also referred to as general cargo vessels), geared containerships, and all others (including tankers), in that order. According to Transportation Command officials, due to the need to balance military utility with commercial viability, a mix of vessel types with military utility is currently in the MSP, with over half of the vessels in the MSP being containerships.

In addition to selecting vessels based on military utility, MARAD, in consultation with Transportation Command, also bases their MSP vessel selections on the commercial viability of operations. The assessment of commercial viability includes, among other things, four key areas: 1) the intermodal networks accessible to the applicant; 2) the trading routes operated by the applicant, and the ability to maintain service during

<sup>35</sup>46 C.F.R. § 296.3(b)(11). In addition, in October 2017, the Transportation Command issued guidance that provides characteristics of militarily useful vessels.

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military operations; 3) the applicant's record of owning and operating vessels; and 4) the applicant's financial condition.<sup>36</sup>

MARAD and Transportation Command officials cited numerous benefits to the current configuration of the MSP. First, MARAD and Transportation Command officials stated that the annual cost of the stipend is small compared to the outlay required to acquire, crew, and maintain a government-owned fleet of vessels that are not needed on a day-to-day basis. (See app. I for more information on the potential effects of discontinuing the MSP stipend and instead relying on a government-owned fleet.) Second, MSP vessels must be less than 25 years of age.<sup>37</sup> According to MARAD officials, this requirement helps ensure the recapitalization of the U.S.-flag fleet participating in the program. According to our analysis of MARAD data, since the beginning of fiscal year 2006, MSP vessel operators have replaced more than 70 MSP vessels. In most cases, we found that the replacement vessels have been newer and provide greater capacity to meet DOD requirements. Finally, under the MSP's operating agreements, participating vessel operators are required to make their commercial transportation resources, including infrastructure, available upon request by the Secretary of Defense during times of war or national emergency. In this way, according to MARAD and Transportation Command officials as well as MSP vessel operators, the MSP provides DOD with assured access to a global intermodal transportation network, including logistical management services, infrastructure, and terminal facilities. According to MARAD and Transportation Command officials, without assured access to this network and infrastructure, the government would have to undertake a multi-billion dollar effort to create such a network on its own or would have to contract for such a network separately, a process that could come with additional risks and costs in a war-time scenario. A 2006 study for the National Defense Transportation Association estimated that it would cost approximately \$13 billion to replicate the Ro-Ro and containership capacity of MSP vessels and \$52 billion to replicate the intermodal networks provided by MSP vessel operators.<sup>38</sup>

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<sup>36</sup>46 C.F.R. § 296.3(b)(5)-(8).

<sup>37</sup>Tankers must be less than 20 years of age while in the MSP. 46 U.S.C. § 53101(5).

<sup>38</sup>Reeve and Associates, *The Role of the United States Commercial Shipping Industry in Military Sealift*, prepared for Military Sealift Committee, National Defense Transportation Association (Yarmouthport, MA.: August 2006).

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A 2012 report by the National Defense Transportation Association provided some examples of how intermodal networks made available by MSP vessel operators have helped meet DOD needs.<sup>39</sup> This report states that during military action in Afghanistan, U.S. forces depended on supplies transported overland through Pakistan. However, the limited road capacity in Pakistan resulted in delayed cargo and left drivers vulnerable to attacks. In addition, U.S.-Pakistan relations became strained, and the need for an alternative delivery method arose. The report says that MSP vessel operators devised alternative distribution systems, including an overland distribution network from Baltic seaports to Afghanistan as well as a multimodal (both sea and air transport) route from other seaports in the region. Some MSP vessel operators also told us that they were willing to participate in the MSP because, as U.S.-based companies, they felt a responsibility to contribute to national security.

Vessels in the MSP Rely on the Combination of MSP Stipend and Government Cargo Shipped Under Cargo Preference Requirements to Maintain Financial Viability

The MSP stipend provides a fixed financial incentive for vessel operators to maintain vessels under the U.S. flag, but on its own is not sufficient to support the higher costs of operating U.S.-flag vessels, according to MARAD officials and 12 of the 14 MSP vessel operators we spoke to.<sup>40</sup> According to MARAD officials, the MSP currently covers about 80 percent of the operating cost differential between U.S. and foreign-flag vessels. However, a majority of MSP vessel operators we spoke with said that in order for a U.S.-flag vessel to be financially viable, the entire operating cost differential must be somehow made up. The other key way that MSP vessel operators can make up the difference in operating costs between U.S.-flag and foreign-flag vessels is through the transport of government cargo under cargo preference requirements. According to a 2015 MARAD

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<sup>39</sup>Military Sealift Committee, Working Group on Maritime Policy, National Defense Transportation Association, *The Use of Commercial Vessels and Intermodal Systems for Military Sealift, 2009-2011 Addendum* (Washington, D.C.: December 2012).

<sup>40</sup>From its inception, the MSP was designed as a fixed stipend that was not meant to cover the full difference between U.S.-flag and foreign-flag costs, in part, to incentivize operators to operate as cost-effectively as possible. The MSP was designed as a less costly replacement of a program that, since 1936, had paid a subsidy based on the differential between U.S. crew wages and foreign crew wages. This program did not provide a fixed payment and was costlier than MSP.

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report, the higher freight rates that DOD and other federal agencies pay to transport government cargo on U.S.-flag vessels are critical to these vessels' financial viability.<sup>41</sup> According to this report, carriers of U.S.-flag vessels stated that in the absence of government cargo at freight rates that cover the higher commercial cost of operating under a U.S. flag, the financial support provided by MSP would be insufficient to continue operating under the U.S. flag. A 2011 MARAD report similarly stated that the portion of U.S.-flag vessels' higher operating costs not covered by the MSP stipend is defrayed by the ability of those vessels to carry government cargo at rates that are significantly higher than commercial rates.<sup>42</sup>

Under cargo preference requirements, the use of U.S.-flag commercial vessels is required to the extent that such vessels are available at rates that are fair and reasonable, as determined by MARAD and the Transportation Command. According to Transportation Command guidance, even though lower prices may be available from foreign-flag carriers, a lower price for use of a foreign-flag vessel is not a sufficient basis, on its own, to determine the ocean freight rate proposed by a U.S.-flag vessel operator is excessive or otherwise unreasonable. Similarly, by regulation, MARAD's determination of U.S.-flag vessels' fair and reasonable rates takes into account the vessels' operating costs, among other things, which as described previously are higher than foreign-flag vessels' operating costs.<sup>43</sup>

Our analysis of DOD and MARAD data show that in total, more than 1.4-million metric tons of government cargo were shipped on MSP vessels in fiscal year 2016. Fifty-nine of the 60 MSP vessels carried government cargo in fiscal year 2016. One MSP vessel (a general cargo vessel) entered the MSP at the end of the fiscal year but did not carry any government cargo until the next fiscal year.<sup>44</sup> As shown in figure 3, the

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<sup>41</sup>Maritime Administration, U.S. Department of Transportation, *A Report to Congress: Impacts in Reductions in Government Impelled Cargo on the U.S. Merchant Marine* (Washington, D.C.: April 21, 2015).

<sup>42</sup>According to Transportation Command officials we spoke with, operators with U.S.-flag vessels compete for these cargos based on their typical service routes and areas of operation, and type of vessel available.

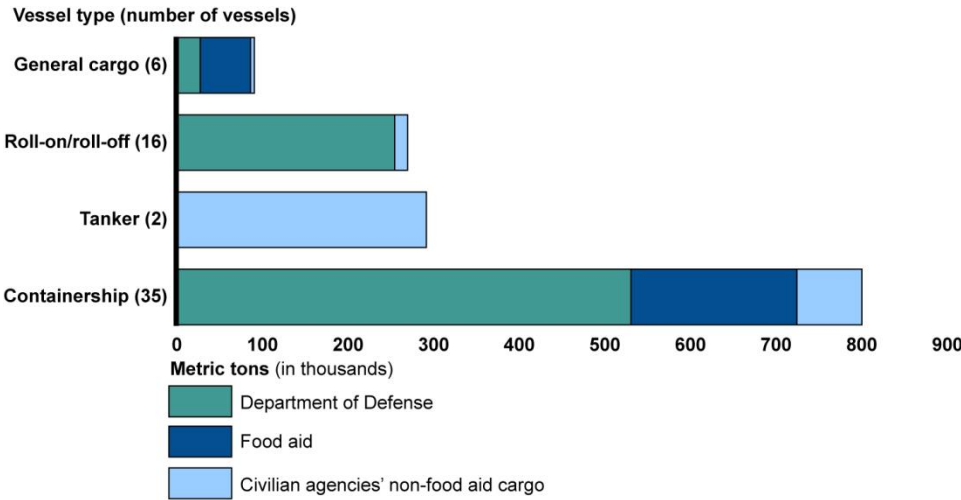
<sup>43</sup> 46 C.F.R. § 382.3

<sup>44</sup>DOD utilized 54 of these vessels, food aid shipments were sent on 18 MSP vessels, and civilian agencies used 49 MSP vessels to ship goods (excluding food aid) overseas.



MSP Ro-Ro and containership vessels carried more cargo for DOD than for civilian agencies.<sup>45</sup> MSP general cargo vessels predominantly carried food aid, and during this time, tankers were used only by civilian agencies for foreign military assistance.

**Figure 3: Metric Tons of Government Cargo Shipped on Vessels in the Maritime Security Program in Fiscal Year 2016, by Vessel Type, for DOD, Food Aid, and Civilian Agencies' Non-Food Aid**



Sources: GAO analysis of Department of Defense and Maritime Administration data. | GAO-18-478

Our analysis also found that the extent to which government cargo shipped on U.S.-flag vessels was transported on MSP vessels varied. For example, 69 percent of the cargo DOD shipped on U.S.-flag vessels was transported on an MSP vessel; 99 percent of non-food aid cargo that civilian agencies shipped via U.S.-flag vessels was transported on an MSP vessel; and 24 percent of food aid shipped on U.S.-flag vessels was transported on MSP vessels.<sup>46</sup> The rest of the government cargo shipped on U.S.-flag vessels was shipped on vessels that are not in the MSP.

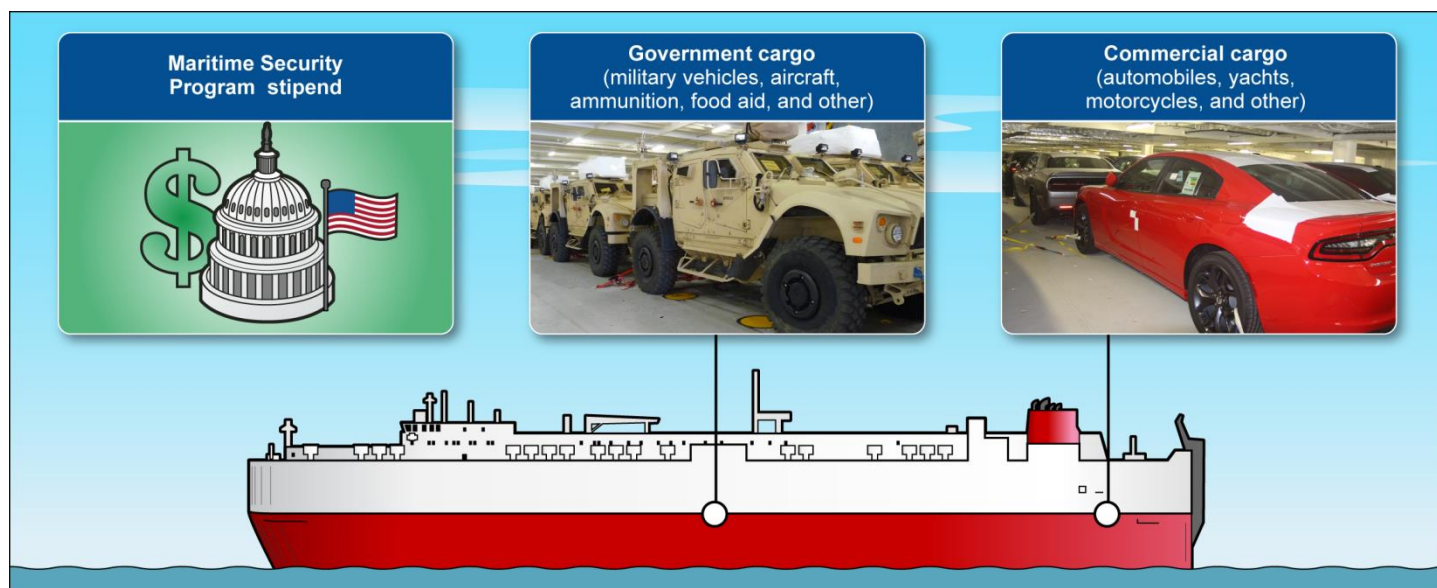
Most of the MSP vessel operators we spoke to said that in addition to government cargo, their MSP vessels also carry commercial cargo. These vessel operators told us that because they have to compete for

<sup>45</sup>The numbers of each vessel type in the MSP shown in figure 3 (fiscal year 2016) are slightly different than in March 2018, as shown in table 1, due to program vacancies and vessel replacements.

<sup>46</sup>Each of these agency groups also sent cargo on foreign-flag vessels in fiscal year 2016.

commercial cargo with foreign-flag vessels that have lower operating costs, commercial cargo alone typically does not have high-enough rates to maintain the financial viability of U.S.-flag vessels. However, when added to the MSP stipend and government cargo rates, the rates they receive for commercial cargo are part of the overall financial picture that allows them to operate MSP vessels under the U.S. flag (see fig. 4).

**Figure 4: Sources of Revenue for Operators of Vessels in the Maritime Security Program**



Source: GAO. | GAO-18-478

## Cargo Preference Requirements Have Had a Negative Effect on Some Non-Defense Agency Programs

Officials at USAID and the EXIM Bank have raised concerns that the higher shipping costs that result from cargo preference requirements have had a negative effect on their missions. For example:

- According to officials at USAID's Office of Food for Peace, the additional costs the agency incurs by using U.S.-flag vessels instead of foreign-flag vessels for its cargo directly reduces its budget to fulfill its mission of reducing hunger and malnutrition. For example, USAID officials stated that for each \$40-million increase in shipping costs, its food aid reaches one-million fewer recipients each year. Concerns about the role of cargo preference requirements for food aid in

supporting the U.S.-flag fleet are longstanding, and we reported on them in 1994, 2011, and 2015. Others have also reported on these concerns over the last few decades.<sup>47</sup>

- According to USAID officials, due to cargo preference requirements and the limited availability of U.S.-flag bulk carriers, the agency has at times had to send bulk food, such as grain, on other types of U.S.-flag vessels that are not meant to carry this type of cargo. According to these officials, this process has resulted in additional costs and delays because the equipment used to load and unload bulk grains onto and off of a bulk cargo vessel cannot be used with other types of vessels, as well as concerns about the appearance and health of bulk food being transported, for example, on vessels that typically carry oil or other fuels.
- Officials from the EXIM Bank said that U.S. shipping provisions may have put EXIM bank at a competitive disadvantage compared with other countries' export credit agencies, thus having a negative impact on the Bank's mission—which is to support American jobs by facilitating the export of U.S. goods and services. Cargoes financed through loans from EXIM Bank have been congressionally directed to be transported on U.S.-flag vessels. According to a 2014 survey of exporters and lenders conducted by EXIM Bank, arranging U.S. transport typically results in higher costs and can result in shipment delays.<sup>48</sup> These exporters and lenders reported that the requirement to ship on U.S.-flag vessels placed them at a competitive disadvantage relative to other countries' exporters—and may have resulted in potential clients choosing to import goods from other countries without the same requirements. According to our prior work and EXIM's 2016 Competitiveness Report, export credit agencies in

<sup>47</sup>GAO, *Cargo Preference Requirements: Objectives Not Significantly Advanced When Used in U.S. Food Aid Programs*, [GAO/GGD-94-215](#) (Washington, D.C.: Sept. 29, 1994); GAO, *International Food Assistance: Funding Development Projects through the Purchase, Shipment, and Sale of U.S. Commodities Is Inefficient and Can Cause Adverse Market Impacts*, [GAO-11-636](#) (Washington, D.C.: June 23, 2011); GAO, *International Food Assistance: Cargo Preference Increases Food Aid Shipping Costs, and Benefits are Unclear*, [GAO-15-666](#) (Washington, D.C.: Aug. 26, 2015); Elizabeth R. Bageant, Christopher B. Barrett, and Erin C. Lentz, *Food Aid and Agricultural Cargo Preference*, (Ithaca, N.Y.: Cornell University, June 2010); Phillip J. Thomas and Wayne H. Ferris, *Food Aid Reforms Will Not Affect Shipping Industry or Surge Fleet*, (Arlington, VA: Centers of the Public Service, School of Policy, Government, and International Affairs, George Mason University, June 2015).

<sup>48</sup>Export-Import Bank of the United States, *Report to the U.S. Congress on Global Export Credit Competition for the Period January 1, 2014, through December 31, 2014* (Washington, D.C.: June 2015).

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many other countries do not have such a requirement.<sup>49</sup>

Furthermore, food aid advocates have questioned the economic efficiency of using food aid shipments to financially support the U.S.-flag fleet for defense purposes, particularly in light of the increased costs to food aid agencies. These advocates have argued that it is inefficient to spend U.S. government funds to support U.S.-flag vessels generally considered to have little military utility—such as bulk carriers—primarily for the U.S.-citizen mariners they provide. According to our analysis of MARAD data, during fiscal year 2016, food aid agencies shipped 592,000 metric tons of cargo on U.S.-flag dry bulk carriers, providing substantial government support to a vessel type that Transportation Command officials have stated is not a priority for the military's cargo needs and that Transportation Command and MARAD officials acknowledge has only limited military utility.<sup>50</sup> Based on our analysis of data provided by DOD, during fiscal year 2016, DOD did not ship any cargo on dry bulk vessels. In contrast, based on our review of data provided by MARAD, in fiscal year 2016, 57 percent of food aid transported on U.S.-flag vessels was transported on vessels flagged by MARAD as having limited military utility. In contrast to the food aid advocates' perspective, Transportation Command and MARAD officials stated that ensuring sufficient mariners for defense purposes is one key purpose of supporting the U.S.-flag fleet, regardless of the military utility of the vessel.

The total additional cost the government incurred due to cargo preference requirements is not known, as neither Transportation Command nor MARAD track the additional costs to ship on U.S.-flag vessels. Transportation Command and MARAD officials both stated that their current processes are not designed to track the difference between what federal agencies are paying to ship government cargo on U.S.-flag vessels and what they would pay to ship the same cargo on foreign-flag vessels, and that it would require considerable time and expense for them to create processes to do this. Moreover, Transportation Command officials stated that there would be little value in tracking this information,

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<sup>49</sup>GAO, *U.S. Export Import Bank: Actions Needed to Promote Competitiveness and Internal Cooperation*, [GAO-12-294](#) (Washington, D.C.: Feb. 7, 2012), and Export-Import Bank of the United States, *Report to the U.S. Congress on Global Export Credit Competition for the Period January 1, 2016, through December 31, 2016* (Washington, D.C.: June 2017).

<sup>50</sup>According to Transportation Command officials, the operator of one of these bulk vessels has performed alterations that permit it to carry ammunition for the military.

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since their focus is on complying with the requirement to transport DOD cargo on U.S.-flag vessels whenever possible. Our past work on this issue has shown that cargo preference laws have increased transportation costs to federal agencies. For example, in 1994 we reported that these costs increased by \$578 million per year between fiscal years 1989 and 1993, with DOD estimating that it spent about \$350 million of that amount in increased costs.<sup>51</sup> More recently, in 2015, we found that cargo preference requirements for food aid increased the cost of shipping food aid by 23 percent, or \$107 million, for the period from April 2011 through fiscal year 2014.<sup>52</sup>

MARAD and Transportation Command officials acknowledged that some agencies have raised concerns that cargo preference requirements may have adverse impacts on their programs. According to MARAD officials, while there is not overall agreement on the net benefit to the nation of cargo preference requirements, such requirements provide offsetting benefits to the U.S. maritime sector that are difficult to quantify in dollar terms. A Transportation Command official stated that cargo preference for food aid has been less beneficial in supporting U.S.-flag vessels than it once was because of recent decreases in food aid volumes. However, this official emphasized that cargo preference for food aid continues to provide value as a tool to help support the U.S.-flag vessels that provide mariners to meet DOD's needs.

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<sup>51</sup>GAO, *Maritime Industry: Cargo Preference Laws—Estimated Costs and Effects*, [GAO/RCED-95-34](#) (Washington, D.C.: Nov. 30, 1994).

<sup>52</sup>GAO, *International Food Assistance: Cargo Preference Increases Food Aid Shipping Costs and Benefits are Unclear*, [GAO-15-666](#) (Washington, D.C.: Aug 26, 2015).

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## Stakeholders Identified Two Primary Sustainability Challenges the Internationally Trading U.S.-Flag Fleet Faces in Meeting National Defense Needs

Stakeholders we spoke with identified two primary challenges to ensuring that the U.S.-flag fleet would continue to meet DOD's national defense needs.<sup>53</sup> First, stakeholders described maintaining the financial viability of U.S.-flag vessels participating in MSP as a challenge. Second, stakeholders identified a potential shortage of U.S. citizen mariners available to crew the government-owned reserve fleet during a military activation as a challenge, in part due to the declining numbers of U.S.-flag vessels.

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### According to Stakeholders, Maintaining the Financial Viability of Vessels Participating in the MSP Is a Challenge due to Increasing Costs and Decreasing Levels of Government Cargo

According to MARAD officials, the relative cost of operating a U.S.-flag vessel compared to a foreign-flag vessel has increased in recent years, making it increasingly challenging for vessel operators to remain economically viable under the U.S. flag. While an increasing cost differential between U.S.-flag and foreign-flag vessels affects all U.S. flag vessels, MARAD officials raised particular concerns related to defense needs about maintaining the financial viability of vessels in the MSP. MARAD estimates this operating cost differential is currently between \$6.2 million and \$6.5 million per vessel per year, up from an estimated

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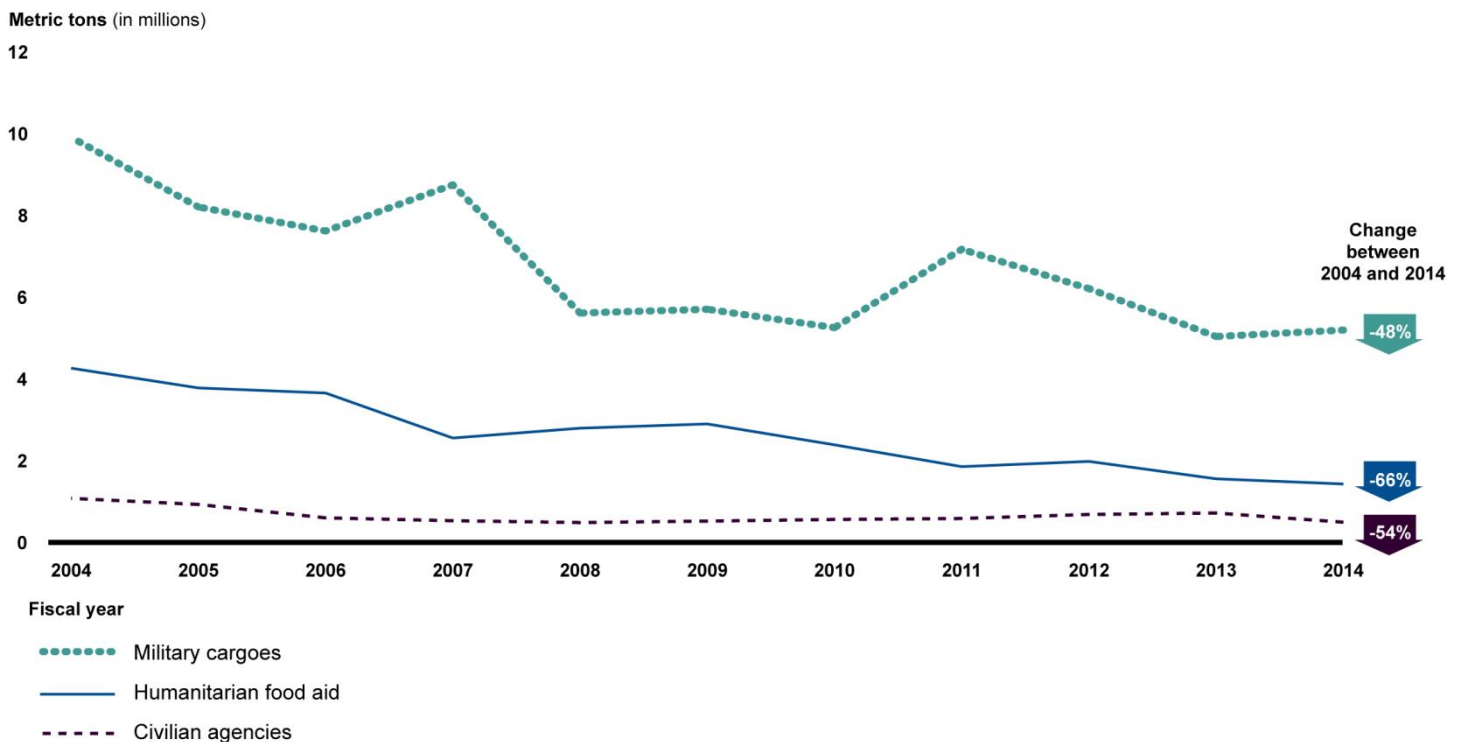
<sup>53</sup>These stakeholders included MARAD and DOD officials, MSP vessel operators, labor unions, an international ship-registry service, a maritime association, academics with backgrounds in defense transportation, food assistance, and maritime economics.

\$4.9 million in 2009 and 2010—an increase of more than 25 percent.<sup>54</sup> MARAD and MSP vessel operators we spoke with stated that the increase is due to a range of factors, primarily the rising relative costs of employing U.S. mariners as crew versus foreign crew members. For example, one MSP vessel operator indicated that labor costs for its U.S.-flag vessels are projected to increase approximately 4 percent per year compared to smaller increases in its foreign-flag crew costs. Representatives from maritime unions that we interviewed acknowledged that labor costs have risen and also noted that one factor contributing to higher labor costs in the United States is that operators are required to cover retirement benefits for employees. These representatives stated that such benefits are paid by the government in some other countries. In addition to labor costs, MSP vessel operators also mentioned that increasing insurance and maintenance and repair costs are also factors.

At the same time, total government cargo volumes have fallen, compounding the challenge for vessel operators to remain viable under the U.S. flag. Figure 5 below shows the decline in total government cargo volumes between 2004 and 2014 for DOD, food aid, and other civilian agencies. According to a 2015 MARAD report on the effect of declining cargo preference volumes, vessel operators that reflagged vessels from the U.S. flag to a foreign flag, or retired vessels in recent years said that the primary reason for doing so was the loss of government cargo. However, it is not known exactly how many vessels have been reflagged, and the 2015 MARAD report stated it could not quantify the number of vessels that left the U.S. flag specifically for this reason.<sup>55</sup> One vessel operator we spoke with stated that it removed five vessels from the U.S.-flag registry due to a decline in food aid shipments and an increase in the cost of operating under the U.S. flag. According to MARAD officials, if government cargo volumes continue to decline in future years, the resulting decline in revenue to U.S.-flag vessels for shipping these goods may lead to further reductions in the number of U.S.-flag vessels and may also affect the financial viability of those vessels in the MSP.

<sup>54</sup>A 2011 study by MARAD found that on average the yearly cost of operating a U.S.-flag vessel was \$5.2 million higher in 2009 and \$4.6 million higher in 2010 than the cost of operating a similar foreign-flag vessel. Averaged together, it cost approximately \$4.9 million more to operate a U.S. flag vessel than a similar foreign-flag vessel in 2009 and 2010. A consultant's report commissioned by MSP participants also identified a similar cost differential. However, as of March 2018, this study has not been updated.

<sup>55</sup>DOT, *A Report to Congress: Impacts of Reductions in Government Impelled Cargo on the U.S. Merchant Marine* (Washington, D.C.: 2015).

**Figure 5: Total U.S. Government Cargo, in Metric Tons, Fiscal Years 2004 through 2014**

Source: GAO analysis of Maritime Administration data. | GAO-18-478

According to the 2015 MARAD report, the decrease in total government cargo volumes has been driven by two trends.<sup>56</sup>

- First, the international military presence of the United States has decreased overseas. DOD, which generates 75 percent of preference cargo, has gone through a worldwide drawdown following the end of the cold war in the 1990s, notwithstanding brief upticks in volume during military escalations since that time.
- Second, due to reduced funding, fluctuating commodity prices, and other factors, food aid agencies, such as USDA and USAID, have shipped reduced volumes of food aid overseas.

Further affecting the amount of food aid cargo on U.S.-flag vessels were changes to the cargo preference requirement and the elimination of reimbursements designed to help cover the extra cost of meeting the

<sup>56</sup>DOT, *A Report to Congress: Impacts of Reductions in Government Impelled Cargo on the U.S. Merchant Marine* (Washington, D.C.: 2015).



preference requirement. The Cargo Preference Act of 1954, as amended, requires that at least 50 percent of all U.S. government cargo be shipped on U.S.-flag commercial vessels.<sup>57</sup> For food aid programs, an additional 25 percent of the tonnage of certain agricultural commodities was required beginning in 1988.<sup>58</sup> This increase was repealed in 2012, and the cargo preference requirement for food aid effectively returned to 50 percent.<sup>59</sup> In prior work, we found that although the reduction in the food aid cargo preference requirement reduced overall shipping costs for food aid, food aid agencies still paid a higher price to ship on U.S.-flag vessels than on foreign-flag vessels to meet cargo preference requirements.<sup>60</sup> Further, in 2012 and 2013, government reimbursements to USAID and USDA to help cover the extra costs to meet cargo preference requirements were discontinued.<sup>61</sup> As we reported in 2015, this change in reimbursement policy reduced the amount of food aid these agencies were able to provide.<sup>62</sup>

In 2015, to ensure the continued financial viability of vessels in the MSP, maritime unions advocated for and eventually received an MSP stipend increase. According to MARAD data, at the time, several companies with

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<sup>57</sup>The Cargo Preference Act of 1954 amended section 901 of the Merchant Marine Act of 1936 to require that at least 50 percent of all U.S. government cargo tonnage be transported on privately owned, U.S.-flag vessels, to the extent that such vessels are available at fair and reasonable rates (Pub. L. No. 83-664, 68 Stat. 832 (1954) (codified as amended at 46 U.S.C. § 55305)).

<sup>58</sup>The Food Security Act of 1985 (Pub. L. No. 99-198, 99 Stat. 1354, 1491 (1985)) required an additional 25 percent of commodity tonnage exported under section 416 of the Agricultural Act of 1949 (Pub. L. No. 81-439, 63 Stat. 1051 (1949)) and the Food Security Wheat Reserve Act of 1980 (Pub. L. No. 96-494, 94 Stat. 2578 (1980)) to be transported on privately owned, U.S.-flag commercial vessels.

<sup>59</sup>Moving Ahead for Progress in the 21<sup>st</sup> Century Act, Pub. L. No. 112-141, § 100124, 126 Stat. 405, 915 (2012).

<sup>60</sup>[GAO-15-666](#).

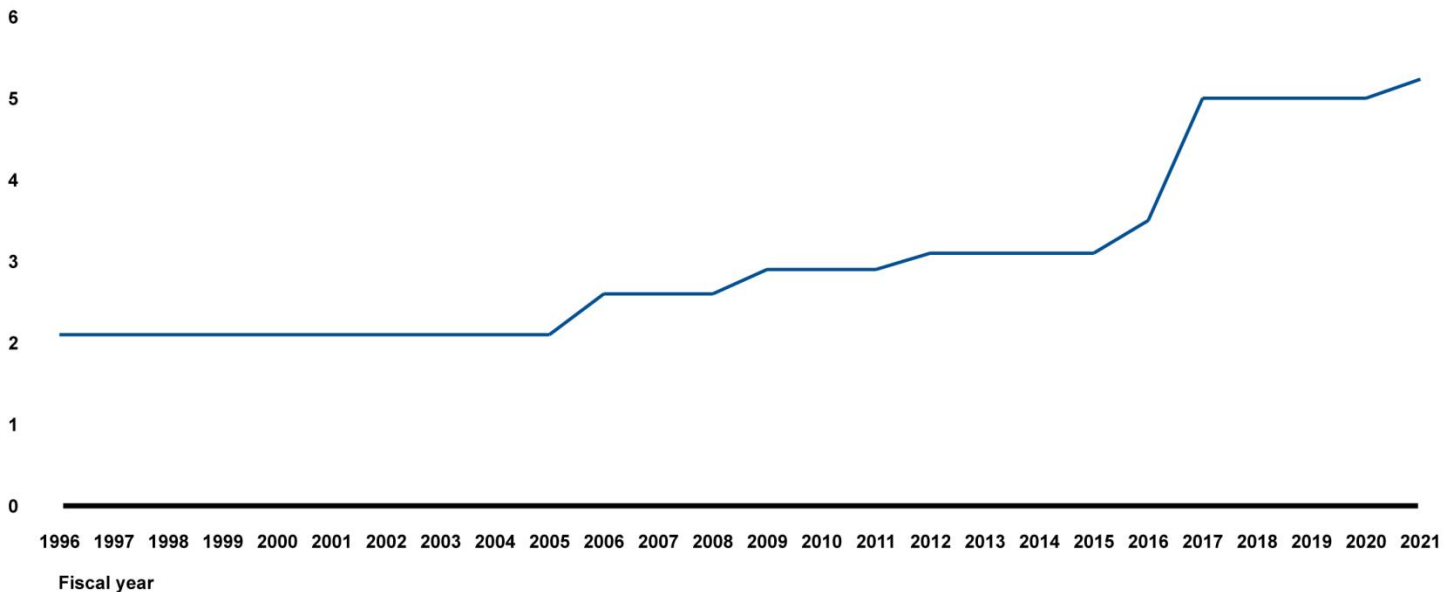
<sup>61</sup>The Food Security Act of 1985 included provisions for DOT to partially reimburse USAID and USDA for the additional ocean freight cost associated with the additional 25 percent requirement, termed the Ocean Freight Differential; and the cost of ocean freight exceeding 20 percent of the commodity and shipping, termed Twenty Percent Excess Freight (Pub. L. No. 99-198, 99 Stat. 1354, 1493 (1985)). The Moving Ahead for Progress in the 21<sup>st</sup> Century Act of repealed the Ocean Freight Differential (Pub. L. 112-141, Div. F, § 100124, 126 Stat. 405, 915 (2012)). The Bipartisan Budget Act of 2013 eliminated the Twenty Percent Excess Freight provision. (Pub. L. No. 113-67, Div A, § 602, 127 Stat. 1165, 1188 (2013)).

<sup>62</sup>[GAO-15-666](#).

vessels in the MSP were in financial trouble, and all but three of the companies participating in the MSP would have been operating at a loss without the MSP stipend. Congress authorized the appropriation of a 42 percent increase in the MSP appropriation from fiscal year 2016 to fiscal year 2017—from \$210 million to \$299 million. The corresponding authorized stipend rose from \$3.5 million to \$4.99 million per vessel annually. The appropriation for fiscal year 2018 further increased this amount to \$5 million, and an additional increase to about \$5.23 million is authorized for fiscal year 2021. Figure 6 shows the authorized annual stipend for MSP vessels from fiscal year 1996 through fiscal year 2021.

**Figure 6: Authorized Annual Stipend per Vessel in the Maritime Security Program, Fiscal Years 1996 through 2021**

Per vessel stipend (in millions of dollars)



Source: GAO analysis of Maritime Security Program legislation | GAO-18-478

According to MARAD officials, the recent increase in the MSP stipend to the current level of \$5 million in fiscal year 2018 has temporarily stabilized the financial situation of MSP vessel operators. However, concerns remain about the future of the U.S.-flag fleet. According to MARAD officials and commercial vessel operators we spoke with, if the cost differential between operating U.S.-flag and foreign-flag vessels continues to increase, the levels of government support would accordingly need to rise to ensure that vessel operators would be willing and able to keep the existing U.S.-flag vessels under the U.S. flag, including those in the MSP. In 2015, MARAD issued a statutorily-mandated report that concluded that without a comprehensive change to maritime policy, the size of the U.S.-

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flag fleet would continue to decline.<sup>63</sup> However, in this report, MARAD did not propose specific changes or options to address this concern.

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## MARAD and Stakeholders Identified a Potential Shortage of U.S.-Citizen Mariners as a Challenge to Meeting National Defense Needs

According to MARAD and DOD officials, another challenge related to the ability of the U.S.-flag fleet to meet national defense needs is a potential shortage of U.S.-citizen mariners qualified to crew government-owned reserve vessels. While in terms of cargo capacity, the current number of U.S.-flag commercial vessels in international trade is sufficient to meet DOD's stated needs, MARAD and DOD have raised concerns that the declining number of such U.S.-flag vessels has led to a corresponding decline in the number of U.S.-citizen mariners qualified to crew these types of vessels and who are also able to crew government-owned reserve vessels that are usually held in reduced operating status.

On January 23, 2018, MARAD's Maritime Workforce Working Group issued a statutorily-mandated report that found that the current number of U.S.-citizen mariners is insufficient to support sustained activation of the government-owned reserve fleet for military operations.<sup>64</sup> Specifically, the report estimated approximately 11,768 qualified and available U.S.-citizen mariners as of June 2017—1,839 less than the 13,607 mariners the

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<sup>63</sup> DOT, *A Report to Congress: Impacts of Reductions in Government Impelled Cargo on the U.S. Merchant Marine*, (Washington, D.C.: 2015).

<sup>64</sup>U.S. Department of Transportation, Maritime Administration, *Maritime Workforce Working Group Report* (Washington, D.C., Sept. 29, 2017). The National Defense Authorization Act for Fiscal Year 2017, (Pub. L. No. 113-328, Div. C, § 3517, 130 Stat. 2000, 2789 (2017)), required the creation of a Maritime Workforce Working Group to examine and assess the size of the pool of citizen mariners necessary to support the U.S. flag fleet in times of national emergency.

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working group estimates would be needed for sustained operation of the reserve and commercial fleet.<sup>65</sup>

The working group based its identification of 11,768 existing qualified U.S.-citizen mariners on the number of U.S.-citizen mariners actively sailing on U.S.-flag commercial and government-owned ocean-going vessels. For the vessels in full operating status, the working group accounted for 2 mariners employed for each crew position.<sup>66</sup> The double crew, which according to MARAD officials is typical for a commercial U.S.-flag vessel operating in international trade, allows each mariner, over the course of a year, to work for 6 months on the vessel and take 6 months of earned leave. According to MARAD officials, this typical double crew configuration is based on the fact that while on duty, mariners work long hours with little to no opportunity to leave the vessel. The working group assumed that during a military activation, commercial operations would continue at the same level as during peacetime—but that some U.S.-citizen mariners currently working on commercial vessels would be willing to reduce the amount of earned leave they took in order to work on government-owned reserve vessels. The working group analyzed this scenario by changing the ratio of crew positions to crew from 2 (in which case half of the employed mariners are working on the vessel and half are on earned leave at any one time) to 1.75. As illustrated in figure 7, under this scenario, with an average of 26 crew positions per vessel,

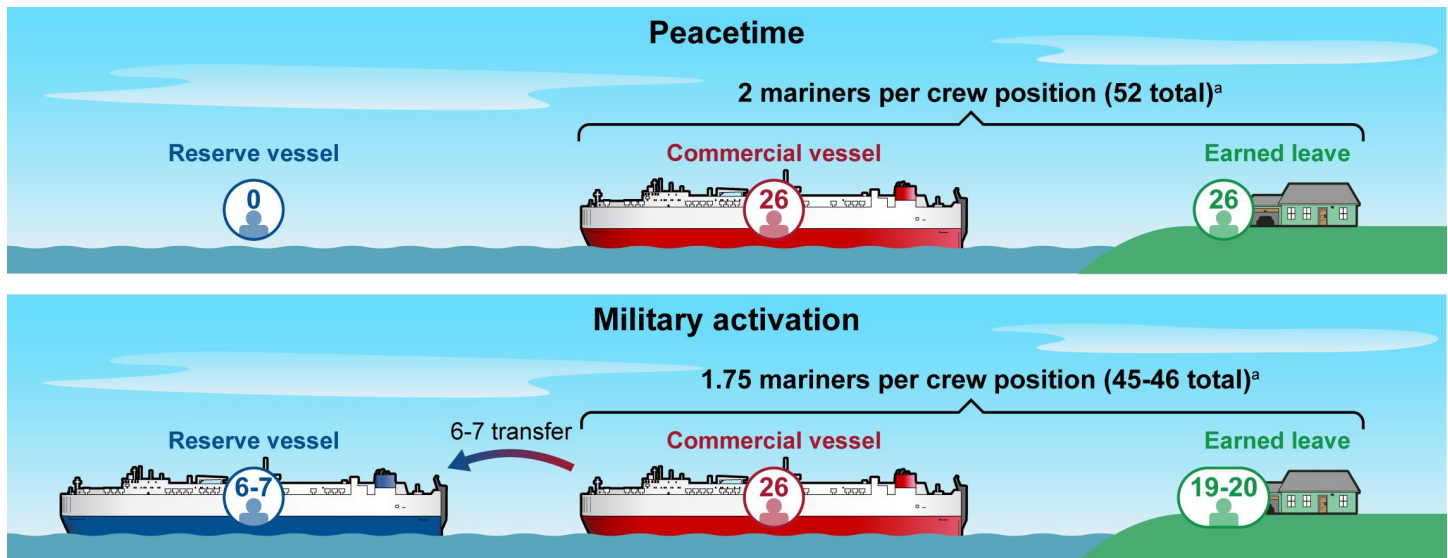
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<sup>65</sup>The working group considered mariners to be qualified if they had certain credentials, referred to as unlimited mariner credentials, and had sailed on large oceangoing U.S. flag vessels within the last 18 months. The working group considered officers from the U.S. Navy Strategic Sealift Officer Program (SSOP) in its count. The SSOP is a naval reserve program established to facilitate collaboration between the US Navy and all segments of the maritime industry. The SSOP supports national defense sealift requirement and capabilities and provides Navy Reserve Officers who are licensed merchant marine officers. The working group's report states that because strategic sealift officers are comprised of actively employed and sailing or active duty military members, they are treated as a subset of the total number of the actively sailing mariner pool and not an addition to the total pool of mariners. DOT officials told us that those strategic sealift officers who are not currently employed on oceangoing vessels would likely need significant training before they could serve on a government-owned reserve vessel. Moreover, DOT officials stated that strategic sealift officers serving on a government-owned reserve vessel would have the same leave expectations as any other U.S. citizen mariner.

<sup>66</sup>The working group also accounted for 626 mariners on 63 government-owned reserve vessels that are usually in reduced operating status, as well as 2,044 mariners that the MSC contracts from private sector to serve on MSC owned or chartered ships. These mariners are included in the working group's count of 11,768 existing qualified U.S.-citizen mariners.

between 6 and 7 mariners per existing commercial oceangoing U.S.-flag vessel are made available to crew the reserve fleet.

**Figure 7: Illustration of the Potential Distribution of the Approximately 52 U.S.-citizen Mariners Hired per U.S.-Flag Commercial Vessel during Peacetime and during a Military Activation**



Source: GAO. | GAO-18-478

<sup>a</sup>Ratios of 2 mariners per crew position in peacetime and 1.75 mariners per crew position during a military activation are taken from MARAD's *Maritime Workforce Working Group Report*, 2017. The number of approximately 52 U.S. citizen mariners employed per U.S.-flag commercial vessel is calculated based on information in the same MARAD working group report. Because 26 crew positions multiplied by 1.75 mariners per crew position equals 45.5, the number of mariners per crew position, on earned leave, or on a reserve vessel during military activation is expressed as a range.

According to the working group's methodology, given the size of the current U.S. flag oceangoing fleet and the number of currently employed mariners on this fleet, there are enough U.S.-citizen mariners to crew the reserve fleet during an initial surge, but not for a sustained activation, during which the working group estimated that the reserve vessels themselves would need a double crew to allow for crew rotations. This need for crew rotations on the reserve vessels led the working group to the estimate a shortage of 1,839 U.S.-citizen mariners. Moreover, the working group's report found that the shortage of mariners may be understated if some of the estimated available mariners are unable or unwilling to continue sailing during times of national emergency, as available mariners are not required to crew the reserve fleet.

Although the working group concluded that there is a shortage of mariners for sustained operations, its report also details data limitations

that cause some uncertainty regarding the actual number of existing qualified mariners and, thus, the extent of this shortage.<sup>67</sup> The working group's approach—driven, in part, by limitations of the U.S. Coast Guard's database that tracks mariner credentials—did not count any qualified mariners who are no longer employed on U.S.-flag oceangoing vessels or who are employed on other types of vessels but may have the required credentials. In fact, according to the working group's analysis, over 15,000 mariners listed in the U.S. Coast Guard's database have unlimited credentials but are unaccounted for, as they are neither currently employed on large, oceangoing vessels nor serving as civil-service mariners committed to government-owned vessels. The working group stated that the availability and continuing proficiency of these mariners remains unknown.<sup>68</sup> These data limitations, which the working group was unable to resolve, are long standing. For example, in August 2015, we reported that the number of U.S. civilian mariners who would be qualified and available to serve during a prolonged defense activation was uncertain. We found that MARAD's analysis of the sufficiency of the mariner pool could have included more qualified mariners using different assumptions, and we recommended that MARAD study this issue.<sup>69</sup> MARAD was later mandated by statute to convene a working group to

<sup>67</sup>According to the working group report, a U.S. Coast Guard database shows that 33,215 unlimited mariner credentials have been issued in the past 5 years. However, the working group concurred unanimously that this number did not reflect the number of full-time mariners who have recent experience on large oceangoing vessels, or would be available in a real-world scenario. The report further states that any attempt to equate this 33,215 number with the number of available mariners would be misleading and incorrect. Instead, the working group identified as available mariners 11,768 mariners currently employed on large, oceangoing vessels. Also in the total of 33,215 mariners are 5,576 civil-service mariners who are fully committed to government-owned vessels who would also be activated during any scenarios under which the government-owned reserve vessels would be activated, and thus are considered by the maritime workforce working group to be unavailable to crew other vessels. This leaves 15,871 mariners who, according to the Coast Guard database, have unlimited credentials but are unaccounted for.

<sup>68</sup>In discussions with us, Transportation Command officials acknowledged that the estimate of available mariners does not take into account mariners who currently are not employed on U.S.-flag oceangoing vessels but may have maintained the needed credentials, such as mariners who recently stopped working as crew on a U.S.-flag vessel. However, MARAD officials told us that the number of mariners who have ceased working on U.S.-flag vessels, but who have qualifying sea service within the last 18 months, is a small number and would not account for a significant share of the gap between working group's estimate of 11,768 mariners and the 33,215 mariners with unlimited oceans credentials listed in the U.S. Coast Guard's database.

<sup>69</sup>[GAO-15-666](#).

study the sufficiency of the U.S.-citizen mariner pool.<sup>70</sup> MARAD officials emphasized to us, however, that mariners who have not worked on the right types of vessels for more than 18 months are likely to need additional training before they would be qualified to crew the reserve fleet during a military activation.

The working group's report contains several recommendations related to improving information on the number of available and willing mariners. These recommendations include that the Coast Guard database should be replaced with one that would enable a more accurate account of available mariners, and that a periodic survey of the U.S.-citizen mariner pool should be established to allow MARAD to determine, with reasonable certainty, how many qualified mariners would be available and willing to sail in U.S. government reserve vessels if called upon to do so. The report concluded that until these agencies improve the tracking of licensed mariners who may be available to crew the government-owned reserve vessels when activated into full operating status, the extent to which there is a shortage of mariners for defense needs will remain unclear. The lack of information on the extent to which there is a shortage of mariners limits the U.S. government's ability to effectively plan for such needs. In January 2018, MARAD's administrator testified that MARAD is working with the Coast Guard and the maritime industry to better track licensed mariners who may no longer be sailing but could serve in a time of crisis, and in March 2018, MARAD officials told us they are taking steps to initiate a new survey of mariners, as recommended in the Mariner Workforce Working Group's report.<sup>71</sup>

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<sup>70</sup>National Defense Authorization Act for Fiscal Year 2017, Pub. L. No. 104-328, Div. C, § 3517, 130 Stat. 2000, 2789 (2016).

<sup>71</sup>According to MARAD officials, the last such survey was conducted in 2003 and it found that only two-thirds of the mariner pool were willing to serve in time of crisis.

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## DOT Has Not Finalized Mandated National Strategies but Has Identified Various Options to Address Challenges to Sustaining U.S.- Flag Fleet for Defense Needs

Congress issued two separate mandates to DOT to develop strategies related to challenges facing the U.S.-flag fleet, specifically:

- The Secretary of Transportation was directed in 2014 to develop a national maritime strategy with recommendations, among other things, to increase U.S.-flag vessel competitiveness.<sup>72</sup>
- The Secretary of Transportation and MARAD were directed in 2014 to develop, in collaboration with DOD, a national sealift strategy to ensure the long-term viability of the U.S. Merchant Marine (which encompasses U.S.-flag vessels and U.S.-citizen mariners).<sup>73</sup>

According to MARAD and DOD officials, MARAD has been working on a single draft maritime strategy to meet both mandates, since from their perspective, the national maritime strategy would need to encompass the national sealift strategy, as well.

While there was no statutory deadline for the completion of the national sealift strategy, there was a statutory deadline of February 2015 for the national maritime strategy to be submitted to Congress. However, DOT had not finalized the national maritime strategy as of May 2018. According to MARAD officials, MARAD completed a draft strategy in 2016, which was approved by DOT and reviewed by the Office of Management and Budget (OMB) and 28 additional agencies identified as being stakeholders, including DOD. MARAD officials told us that while MARAD had reached initial concurrence with these other agencies, the

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<sup>72</sup> Pub. L. No. 113-281, § 603, 128 Stat. 3022, 3061 (2014). The national maritime strategy was also mandated to include recommendations on areas that are outside the scope of our review, such as increasing the use of third-party inspection and certification authorities to inspect and certify vessels or enhance U.S. shipbuilding capability, among other things. We considered MARAD's efforts related to a national maritime strategy as it pertained to supporting U.S.-flag commercial fleet competitiveness in relation to addressing sealift.

<sup>73</sup> Pub. L. No. 113-76, 128 Stat. 5, 598 (2014).



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strategy is now subject to the new administration's review. MARAD and DOT officials told us that they now view the existing draft strategy as pre-decisional and emphasized that no decisions have yet been made about the extent to which it must be revised before being sent out for a new round of review by the stakeholder agencies. DOT officials provided no timeline to us as to when they expect the strategy to move forward, stating that it was not yet clear how long DOT would be reconsidering and potentially revising the strategy before moving it forward again. Similarly, no time frames have been provided to Congress. The delay in submitting this strategy to Congress means that decision-makers do not have information and recommendations from the agency to inform policy-making in this area. Moreover, it further delays a response to a specific statutory requirement that DOT make recommendations related to U.S.-flag vessel competitiveness and develop a strategy to ensure the long-term viability of U.S.-flag vessels and U.S.-citizen mariners.

While DOT has been delayed in issuing the national strategy, MARAD has in other agency reports or through discussions with stakeholders identified some options to address the competitiveness of U.S.-flag vessels and the long-term viability of the U.S. Merchant Marine—issues that are very similar to the key challenges identified by stakeholders with whom we spoke. However, DOT and MARAD officials stated that they are not yet ready to address the feasibility of these options. For example, MARAD has identified the following options as having potential to reduce the costs of operating a U.S.-flag vessel—which would in turn increase U.S.-flag vessels' competitiveness:

- MARAD is part of a U.S. Registry Working Group that was established in response to a 2016 report<sup>74</sup> and is looking at actions to decrease the time and cost of bringing vessels under the U.S. flag, including the cost of meeting Coast Guard requirements. This working group is considering actions, such as applying internationally recognized

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<sup>74</sup>According to MARAD, this working group was created to address findings from the following study: Transportation Research Board of the National Academies of Sciences, Engineering, and Medicine, *Impact of United States Coast Guard Regulations on United States Flag Registry* (2016). The working group was created under the National Defense Transportation Association and includes participants from MARAD, the Coast Guard, the American Bureau of Shipping, the Transportation Institute, and U.S.-flag vessel operators, among others. The National Defense Transportation Association is a non-partisan and non-profit organization that shares knowledge on logistics, transportation, and passenger travel services for national security and defense.

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vessel standards to U.S.-flag vessels to meet Coast Guard requirements, among others.

- In the current strategic plan for 2017 through 2021, MARAD identified two areas of reform—mariner income-tax relief and liability insurance reform—that could reduce the crew costs of operating under a U.S. flag.<sup>75</sup>
- MARAD officials stated that stakeholders have recommended that MARAD consider whether a tax on U.S.-flag vessels receiving maintenance overseas should be eliminated in order to reduce maintenance costs for U.S.-flag vessels. In general, maintenance and repairs on U.S.-flag vessels not conducted at U.S. shipyards are subject to a statutory 50 percent ad valorem tax on the cost of maintenance performed overseas.<sup>76</sup> According to 12 of the 14 MSP vessel operators we spoke with, U.S. shipyards are typically more expensive than foreign shipyards or may not be close to the vessel's location or route, so they typically choose to pay the tax and have the maintenance performed overseas. Four MSP vessel operators stated that they send U.S.-flag vessels to U.S. shipyards for maintenance when it makes sense from a logistical and financial perspective. MARAD officials stated they are considering the effect of eliminating the tax, a step that would reduce costs for vessel operators but would potentially negatively affect the financial viability of U.S. shipyards, which the law was designed to assist. However, MARAD officials stated that they have not yet evaluated these trade-offs.

MARAD and Transportation Command officials have also identified—but not officially proposed—several options to increase the volume of government cargo carried on U.S.-flag vessels, which was identified by stakeholders we spoke with as a cause of the challenge of sustaining the financial viability of MSP vessels. For example, Transportation Command officials told us that they consider access to cargo to be a critical means of sustaining U.S.-flag vessels.

- Transportation Command and MARAD officials stated that one way to increase the amount of commercial cargo on U.S.-flag vessels would be to require that certain energy export commodities, such as oil or

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<sup>75</sup>Department of Transportation, Maritime Administration, *Maritime Administration Strategic Plan Navigating the Future 2017-2021*.

<sup>76</sup>19 U.S.C. § 1466.

liquefied natural gas, be carried on U.S.-flag vessels. While this option has been considered in the past, it would require new legislation and would have potential trade-offs. For example, in 2015, we analyzed the potential effects of a requirement that U.S. liquefied natural gas exports be carried on U.S.-built and flagged vessels. We found that such a requirement could potentially increase the number of U.S.-flag vessels by 100, but, due to their higher operating costs, could also increase the cost of transporting liquefied natural gas from the United States, decrease the competitiveness of U.S. liquefied natural gas in the world market, and in turn, reduce demand for U.S. liquefied natural gas. MARAD officials stated that another option would be increasing the percentage of cargo, such as food aid, that civilian agencies are required to transport on U.S.-flag vessels. This would also require an amendment to existing legislation and would also have trade-offs since as described previously, cargo preference requirements can negatively affect the missions of civilian agencies.

- Another option stated by MARAD officials to address declining government cargo volumes would be to increase the MSP stipend to replace some of the government support previously provided through cargo preference programs. This option was previously used to address the recent reduction in government cargo, as described previously in this report.

MARAD, through its 2017 Mariner Workforce Working Group report, also identified options to address the challenge of ensuring a sufficient number of U.S.-citizen mariners for defense needs. This challenge was identified by stakeholders we spoke with and by the sealift strategy mandate's call for DOT to ensure the long-term viability of the U.S. Merchant Marine, which includes U.S.-citizen mariners. The Mariner Workforce Working Group report identified two actions that could help increase the number of U.S.-citizen mariners. However, the working group's report did not discuss specific costs or trade-offs related to either action or elaborate any further on them. The identified actions were as follows:

- MARAD should develop a broad-based reserve program that would identify and support qualified mariners willing to sail in commercial and government-owned vessels during an emergency. MARAD would provide limited financial assistance in training mariners and maintaining credentials, in turn for which mariners who participate would be obligated to sail in the event of a defense need.
- MARAD and other U.S. government agencies should support a healthy merchant marine (which encompasses U.S.-flag vessels and

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U.S.-citizen mariners). The government should fully support programs including MSP, cargo preference requirements, the Jones Act, and government chartering of privately owned vessels. When DOD determines that national needs require more mariners and vessels than can be provided through current programs, those programs should be expanded to meet such needs.

MARAD and DOT officials stated that they are not yet ready to propose actions to address any of these issues. According to these officials, they have not yet developed cost estimates or analyzed the trade-offs of various alternatives to increasing U.S.-flag vessels' competitiveness or otherwise supporting the financial viability of the U.S.-flag fleet or ensuring sufficient U.S. citizen mariners for defense purposes. The officials stated that they are therefore not ready to recommend which of the identified options, if any, should be pursued, either as recommendations in the national maritime strategy or elsewhere.

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## Conclusions

To date, U.S. government support for commercial sealift has helped meet national defense needs, but recent increases in the cost differential of U.S.-flag vessels versus foreign-flag vessels and decreases in the volumes of government cargo have made it more challenging to ensure the financial viability of U.S.-flag vessels. Moreover, with a smaller number of U.S. flag vessels in international trade than in previous years, DOD and MARAD have raised concerns about the sufficiency of the pool of U.S. citizen mariners the United States can count on to crew government-owned reserve vessels activated for national defense needs. Congress mandated in 2014 that DOT issue strategies to address these challenges. MARAD has been working on a national maritime strategy to address both mandates. However, over 3 years after a congressionally mandated issuance date of February 2015, DOT has not published this strategy or made any recommendations to increase U.S.-flag vessels' competitiveness or to ensure the long-term viability of the U.S.-flag fleet and U.S. citizen mariners. DOT has also not developed a timeline for when it will complete and provide this strategy to Congress. The continued lack of such a strategy limits decision-makers' ability to make policy choices related to these challenges in a comprehensive way that considers the complex issues related to the long-time government support for the U.S.-flag fleet.

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## Recommendation for Executive Action:

The Secretary of the Department of Transportation should complete the national maritime strategy and establish and provide to Congress a timeline by which the strategy document will be issued.  
(Recommendation 1)

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## Agency Comments

We provided a draft of this report to DOT, DOD, USDA, USAID, EXIM Bank, the Department of Energy, and the State Department for review and comment. DOT provided written comments, which are reprinted in appendix II, and technical comments, which we incorporated as appropriate. DOT agreed with our recommendation that DOT should complete the national maritime strategy and provide a timeline to Congress by which the document will be issued. USAID provided written comments, which are reprinted in appendix III. DOD and EXIM Bank provided technical comments, which we incorporated as appropriate. USDA, the Department of Energy, and the State Department informed us that they had no comments.

We are sending copies of this report to the Secretary of Transportation, the Secretary of Defense, the Secretary of State, the Secretary of Energy, the Secretary of Agriculture, the Administrator of USAID, and the Chairman of EXIM Bank, as well as appropriate congressional committees and other interested parties. In addition this report is available at no charge on the GAO website at <http://www.gao.gov>.

If you or your staff members have any questions about this report, please contact me at (202) 512-2834 or [vonaha@gao.gov](mailto:vonaha@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 made key contributions to this report are listed in appendix IV.



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Letter

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Andrew Von Ah  
Director, Physical Infrastructure Issues

# Appendix I: Alternatives and Potential Modifications to the Maritime Security Program

In addition to the potential modifications to the Maritime Security Program (MSP) that we described in the report, we examined two alternatives to the MSP that we identified by conducting a literature search on the program and reviewing a 2009 study of the MSP.<sup>1</sup> We also interviewed stakeholders about these two alternatives.<sup>2</sup> These two alternatives were for the government to purchase its own vessel fleet to meet defense requirements or for DOD to charter or contract for vessels in times of need. However, these options do not present clear cost savings or would reduce the government's ability to meet national defense goals, according to stakeholders we interviewed and the 2009 study. We also identified additional options beyond those described in the report to modify the MSP while maintaining the annual stipend by reviewing prior GAO work<sup>3</sup> and interviewing the same stakeholders on ways to improve the MSP. These modifications included implementing a competitive-bidding process to select participants and varying payments to MSP vessel operators based on the vessel's type and military usefulness, among others. Cost savings to the government associated with these modifications are likely to be small to nonexistent, according to MARAD officials, and maritime stakeholders had differing views on whether these modifications would improve the program. Tables 2 and 3 below show the potential effects, as identified by stakeholders, that each of the alternatives and modifications to the MSP would have on costs, mission, and other areas.

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<sup>1</sup> Econometrica, Inc., *Final Report: Maritime Security Program Impact Evaluation*, 1025-000/DTMA1F08157 (Bethesda, MD.: July 2009).

<sup>2</sup> These stakeholders included MARAD and DOD officials, MSP vessel operators, an international ship-registry service, a maritime association, and academics with backgrounds in food aid, defense transportation, food assistance and maritime economics as well as maritime unions.

<sup>3</sup> GAO, *Maritime Security Fleet: Factors to Consider Before Deciding to Select Participants Competitively* [GAO/NSIAD-97-246](#) (Washington, D.C.: Sept. 24, 1997).

**Table 2: Potential Effects of Alternatives to the Maritime Security Program (MSP) on the Government's Costs and Ability to Meet the Department of Defense's (DOD) Needs, as Identified by Stakeholders**

Alternative as identified by a 2009 MSP report <sup>a</sup>	Potential effect on costs	Potential effect on ability to meet defense requirements	Other effects
<p><b>Purchase fleet</b></p> <p>The government would acquire its own fleet of vessels for defense needs and to transport cargo. MSP stipend would be discontinued.</p>	<p>This alternative would eliminate the ongoing costs of the stipend. However, according to stakeholders, the cost to acquire a fleet and obtain supporting infrastructure would be in the billions. Stakeholders we interviewed did not support this alternative because of the expense to acquire a fleet and replicate the infrastructure provided by MSP vessel operators. A 2006 study for the National Defense Transportation Association estimated that it would cost \$13 billion to replicate the roll on/roll off vessel and containership capacity of MSP vessels and \$52 billion to replicate the intermodal networks provided by MSP vessel operators.</p>	<p>This alternative would continue to meet the goal of assured access to vessels, according to stakeholders, as DOD would continue to have assured access to capacity in times of need because it would own the vessels. However, stakeholders said this alternative could have a negative impact on MARAD's goals to support a U.S. commercial fleet and maintain U.S.-citizen mariner numbers because the vessels would be underused, as they would not be needed during general operations. Some stakeholders also stated that the additional mariners needed to crew these vessels in times of need might not obtain the necessary level of work experience to maintain their credentials in the maritime industry. Further, some stakeholders noted that DOD may not be a welcome presence in some areas of the world that are currently served by commercial vessel operators.</p>	<p>According to DOD officials, if DOD did not build the intermodal networks currently provided by MSP vessel operators, DOD would have to contract for the intermodal networks that are now provided by commercial vessel operators as part of their regular government contracts.</p>
<p><b>Contract or charter for capacity in times of need</b></p> <p>The MSP stipend would be discontinued, and DOD would rely on U.S.-flag vessels that have committed to providing capacity to DOD in time of need through the Voluntary Intermodal Sealift Agreement (VISA) and DOD would contract for needed additional capacity during such times of need</p>	<p>According to stakeholders, it is unclear whether costs would be reduced or increased by contracting or chartering vessels in times of need. On the one hand, some stakeholders said that the U.S. government would no longer be paying the annual cost of the MSP program and, to the extent that DOD contracted or chartered foreign-flag vessels, such vessels often have lower rates than U.S.-flag vessels, as explained previously. However, some MSP vessel operators stated that in a crisis, operators of chartered or contracted vessels could charge higher prices if the U.S. government needed their services. Further, the operators said that there might not be vessels available for chartering when the government needs them.</p> <p>Stakeholders also emphasized that under MSP, costs are known. Likewise, VISA rates are pre-established, and access to vessels is guaranteed if needed.</p>	<p>According to the 2009 study we reviewed, the total number of U.S.-flag vessels would likely decline with the elimination of the MSP stipend. The study indicated that some U.S.-flag vessels would likely remain financially viable due to the availability of cargo under cargo preference requirements. If the number of U.S.-flag vessels declined, those that remained could receive increased volumes of government cargo required to be transported on U.S. flag vessels under cargo preference requirements. Overall, a smaller or non-existent U.S.-flag fleet would reduce the number of U.S.-flag vessels available for VISA. The 2009 study found that without the MSP stipend, it was likely that half of the MSP vessels (30) would change from U.S. flag to a foreign flag. MSP vessel operators indicated that the stipend is a key factor to staying under the U.S. flag and that without it, they would be likely to reflag under a foreign flag to reduce costs and remain financially viable.</p>	<p>According to Transportation Command officials, DOD would have to contract for the intermodal networks that are now included in the MSP operating agreement, and are provided by commercial vessel operators as part of their regular government contracts.</p>



**Appendix I: Alternatives and Potential  
Modifications to the Maritime Security Program**

Alternative as identified by a 2009 MSP report <sup>a</sup>	Potential effect on costs	Potential effect on ability to meet defense requirements	Other effects
n/a	n/a	Both MARAD and Transportation Command officials said there would be increased risks from not having assured ready access to vessels. Foreign-flag vessels have at times been used to meet military needs. For example, according to a DOD Inspector General report, 137 foreign-flag vessels were contracted for use during Operation Desert Shield between August 1990 and January 1991 due to a lack of available U.S.-flag vessels to meet the military's needs, and the inability to mobilize sufficient U.S.-flag vessels could increase the risk that the U.S. government would not be able to unilaterally respond to future contingencies as required by its National Security Sealift Policy. <sup>b</sup> In addition, DOD officials stated that previous experience with foreign-flag vessels operating for DOD has shown that some vessels/crews may not be willing to enter danger zones. MARAD officials said that with a smaller U.S.-flag commercial fleet, there would likely be a reduced pool of merchant mariners with appropriate qualifications to crew the ready reserve vessels in times of need.	n/a

Source: GAO analysis | GAO-18-478

Note: Stakeholders consulted include U.S. Maritime Administration and Department of Defense officials, Maritime Security Program vessel operators, an international ship-registry service, a maritime association, academics with backgrounds in food aid, defense transportation, food assistance and maritime economics as well as officials with maritime unions.

<sup>a</sup>Econometrica, Inc., *Final Report: Maritime Security Program Impact Evaluation*, 1025-000/DTMA1F08157 (Bethesda, MD.: July 2009).

<sup>b</sup>Office of Inspector General, Department of Defense, *DOD Sealift Operations*, Report 92-135 (Arlington, VA: Sept. 9, 1992).

**Table 3: Stakeholders' Views on Potential Effects of Modifications to the Maritime Security Program (MSP) on the Department of Defense's (DOD) Needs**

Modification	Potential effect on costs	Potential effect on ability to meet defense requirements	Other effects
<p>Competitive bidding</p> <p>A 2009 MSP study<sup>a</sup> suggested that the MSP could be modified by having vessel operators bid competitively for slots in the program. Under this program modification, instead of receiving an annual stipend set based on congressional appropriations, vessel operators would bid on the lowest amount they would take as an annual stipend to participate in the program, a process that could reduce the total expenditures of the program. The process could take into account the military utility of a vessel and be targeted accordingly to specific vessels.</p>	<p>Despite the concept that competitive bidding would generally help to reduce costs, in 1997 we reported that its effect on costs in this case is unclear.<sup>b</sup> We found that the cost of these stipends could rise, depending on factors affecting vessel operators and the set of potential bidders, such as operating costs and whether there are additional operators or vessels other than those currently in the program that would choose to bid to gain an MSP spot.</p>	<p>U.S. Maritime Administration (MARAD) officials said that the implementation of competitive bidding could run the risk that vessel operators submit bids for stipends that are higher than the total amount Congress appropriated for the program. If this were to occur, MARAD would be restricted to the appropriated amount, which would result in awards to fewer vessels.</p> <p>Further, MARAD officials cautioned that competitive bidding could create a "race to the bottom" where bidders would present the cheapest vessels that meet minimum DOD needs rather than the best suited vessels.</p>	<p>According to the 2009 study, from the point of view of vessel operators, changes to the MSP could interfere with the operators' confidence that the program provides a recurring, predictable annual payment, subject to annual appropriation, in an otherwise volatile international shipping business.</p> <p>Further, MARAD officials said that a competitive bidding process may create administrative inefficiencies.</p>

**Appendix I: Alternatives and Potential  
Modifications to the Maritime Security Program**

<b>Modification</b>	<b>Potential effect on costs</b>	<b>Potential effect on ability to meet defense requirements</b>	<b>Other effects</b>
<p>Competition for replacement spots</p> <p>Currently, with MARAD and DOD approval, vessel operators may replace an MSP vessel with one that is equivalent to or better than the vessel in the program without facing competition from other vessel operators. MARAD and the Transportation Command could open that MSP spot to competition from other vessel operators.</p>	<p>According to an MSP vessel operator, the costs would be the same under this modification.</p>	<p>According to one MSP vessel operator, this modification would create an opportunity for DOD to obtain vessels that provide the best military utility.</p>	<p>One MSP vessel operator suggested that re-competing for vessel replacements would be a fairer process for the replacement of vessels that leave the MSP because it would create some competition for these spots. Eleven MSP vessel operators were opposed to this modification. Some of these operators stated that replacement vessels already meet program criteria and vessel operators commit to the program for 10 years in exchange for the stability of having the government contract. Further, MARAD officials cautioned that vessel operators need a mechanism to replace vessels in order to meet the terms of their operating agreements and that it would be inefficient to initiate a competitive process to fill one spot. In addition, they stated that replacement vessels are the equivalent or better than the vessel being replaced.</p>
<p>Varying annual MSP stipend amounts by vessel type</p> <p>Some MSP vessel operators suggested that instead of providing all MSP vessels the same annual stipend, the amount of the stipend could vary based on the type of vessel.</p>	<p>According to stakeholders, this change would not necessarily reduce costs; however, if the amount of the stipend were tied to the operating costs of each vessel type, this change could result in the stipend more accurately representing vessel operators' actual operating costs. On the other hand, one MSP vessel operator explained that crew sizes, and thus, labor costs are relatively similar across vessel types</p>	<p>According to the 2009 study, from a military standpoint, DOD could consider the military utility of the vessel and pay a premium for vessels with additional military capability.</p>	<p>According to MARAD officials, varying the stipend amount by vessel type would be a departure from the simplicity of the current system, wherein all vessel operators are given equal payments. In addition, two carriers stated that pricing the value of their intermodal resources could also add complexity. Further, eight MSP vessel operators noted that if certain vessels received higher payments and others less, the reduced payments may not be a sufficient incentive for vessel operators to stay in the MSP.</p>

Source: GAO analysis. | GAO-18-478

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**Appendix I: Alternatives and Potential  
Modifications to the Maritime Security Program**

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Note: Stakeholders consulted include U.S. Maritime Administration and Department of Defense officials, Maritime Security Program vessel operators, an international ship-registry service, a maritime association, academics with backgrounds in food aid, defense transportation, food assistance and maritime economics as well as officials with maritime unions.

<sup>a</sup>Econometrica, Inc., *Final Report: Maritime Security Program Impact Evaluation*, 1025-000/DTMA1F08157 (Bethesda, MD.: July 2009).

<sup>b</sup>GAO, *Maritime Security Fleet: Factors to Consider Before Deciding to Select Participants Competitively*, [GAO/NSIAD-97-246](#) (Washington, D.C.: Sept. 24, 1997).

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## Appendix II: Comments from the Department of Transportation

**Appendix II: Comments from the Department  
of Transportation**



**U.S. Department of  
Transportation**

Office of the Secretary  
of Transportation

Assistant Secretary for Administration

1200 New Jersey Avenue SE  
Washington, DC 20590

JUL 26 2018

Andrew Von Ah  
U.S. Government Accountability Office (GAO)  
441 G Street NW  
Washington, DC 20548

Dear Mr. Von Ah:

The mission of the U.S. Department of Transportation (DOT) Maritime Administration (MARAD) is to strengthen the U.S. marine transportation system, including infrastructure, industry and labor, to meet the economic and security needs of the Nation. MARAD oversees and manages the Maritime Security Program (MSP), which provides the U.S. Department of Defense (DoD) with assured access to a fleet of 60 modern U.S. flag vessels, actively engaged in international trade and available on notice to meet DoD emergency requirements. The MSP also provides DoD with access to the multibillion-dollar global network of intermodal facilities and transport links maintained by MSP carriers and employs 2,400 trained, skilled U.S. citizen Merchant Mariners. These mariners are critical to crewing the Nation's fleet of Government-owned surge sealift ships in times of crisis.

MARAD has recently made several improvements to the MSP program as part of its ongoing program improvement and management initiatives, to include the following:

- Updated and improved the Operating Agreements with MSP carriers to clarify USDOT/MARAD authorities and better define carrier requirements and responsibilities under the program.
- Conducted extensive research and collaborated with the U.S. Transportation Command and DoD to develop potential options to further improve the MSP program.
- Strengthened outreach to industry leadership to address the concerns of MSP carriers and worked closely with the U.S. Coast Guard, industry, and labor leadership to identify ways to reduce the cost burden of registering and operating MSP vessels under U.S. registry.

Upon review of the draft report, we concur with the recommendation to complete the national maritime strategy and establish timeframes for issuance. We will provide a detailed response to the recommendation within 60 days of the final report's issuance.

We appreciate the opportunity to respond to the GAO draft report. Please contact Madeline M. Chulumovich, Director, Audit Relations and Program Improvement, at (202) 366-6512 with any questions or if you would like to obtain additional details.

Sincerely,

A handwritten signature in black ink, appearing to read "Keith Washington".

Keith Washington,  
Deputy Assistant Secretary for Administration

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## Appendix III: Comments from the U.S. Agency for International Development

Appendix III: Comments from the U.S. Agency  
for International Development



**USAID**  
FROM THE AMERICAN PEOPLE

JUL 26 2018

Andrew Von Ah  
Director,  
Physical Infrastructure Issues  
United States Government Accountability Office  
441 G Street, N.W.  
Washington, D.C. 20548

Re: *MARITIME ADMINISTRATION: Department of Transportation (DOT) Needs to Expediently Finalize the Required National Maritime Strategy for Sustaining the U.S.-Flag Fleet (GAO-18-478)*

Dear Mr. Von Ah:

I am pleased to provide the formal response of the United States Agency for International Development (USAID) to the draft report of the United States Government Accountability Office (GAO) entitled, "*MARITIME ADMINISTRATION: DOT Needs to Expediently Finalize the Required National Maritime Strategy for Sustaining the U.S.-Flag Fleet*" (GAO-18-478).

I am transmitting this letter and the enclosed comments from USAID for incorporation as an appendix to the GAO's final report. Thank you for the opportunity to respond to your draft report, and for the courtesies extended by your staff while conducting this engagement.

We are grateful that, consistent with previous reports from 1994, 2011, and 2015, the GAO acknowledges in this latest analysis that the role of cargo-preference requirements for food aid in supporting the U.S.-flag fleet is unclear. USAID's own analysis indicates that increases to cargo-preference requirements as applied to global food assistance would not likely increase the availability of militarily useful vessels, or mariners to crew them, but would have significant cost implications that would decrease the total amount of U.S. agricultural commodities we use in our programs, and the total number of beneficiaries we could reach with our assistance.

Sincerely,

Angelique M. Crumbly  
Acting Assistant Administrator  
Bureau for Management

Enclosure: a/s

U.S. Agency for International Development  
1300 Pennsylvania Avenue, NW  
Washington, DC 20523  
[www.usaid.gov](http://www.usaid.gov)



**COMMENTS BY THE UNITED STATES AGENCY FOR INTERNATIONAL DEVELOPMENT  
(USAID) ON THE U.S. GOVERNMENT ACCOUNTABILITY OFFICE (GAO) DRAFT REPORT  
- “MARITIME ADMINISTRATION: DOT Needs to Expediently Finalize the Required  
*National Maritime Strategy for Sustaining the U.S. Flag Fleet*”  
(GAO-18-478)**

Thank you for the opportunity to provide USAID’s perspective on the impact of cargo-preference requirements on our global food-assistance programs. Sustaining the U.S. Flag Fleet and sufficient mariners to crew such vessels to meet national defense needs involves costs and trade-offs of which policy-makers must be aware.

As the report recognizes, cargo-preference requirements have created serious challenges for programs managed by non-defense Federal Departments and Agencies, including USAID’s food-assistance programs. U.S.-flagged vessels are more expensive than similar foreign-flagged ships, which directly affects USAID’s ability to reach hungry and malnourished people. The conclusions of the GAO’s report are consistent with USAID’s experience: When compared to U.S.-flagged vessels, freight costs on foreign carriers are approximately 60-percent lower for bulk commodities (the majority of U.S. commodities shipped overseas for food-assistance programs are bulk), and 40-percent lower for processed foods shipped on liners in containers.

Further, cargo-preference requirements have significant logistical effects on humanitarian programs. Quite often, the U.S.-Flag Fleet cannot provide the service necessary to meet the transportation requirements for our U.S. global food-assistance programs. In Fiscal Year 2017, for example, USAID’s Office of Food for Peace did not receive a single offer from a U.S.-flagged vessel for over 253,620 metric tons of food assistance. The lack of regular direct-shipping services by U.S. companies to certain regions is also an obstacle. Food for Peace’s destinations and the routes served by U.S.-flagged vessels are not always well-matched, as regular, direct, U.S.-flagged services do not exist to most of the destination ports we use.

While GAO finds that cargo-preference requirements have helped to support the financial viability of U.S.-flagged vessels that participate in the Maritime Security Program (MSP) managed by the United States Department of Transportation, the vast majority of U.S. food-assistance cargo travels on vessels that are not useful for possible military purposes (*i.e.*, vessels the United States Department of Defense has not included in the MSP). Consistent with previous reports from 1994, 2011, and 2015, the GAO acknowledges in this latest report that the role of cargo-preference requirements for food aid in supporting the U.S.-Flag Fleet is unclear. USAID’s own analysis indicates that increases to cargo-preference requirements as applied to global food assistance would not likely increase the availability of militarily useful vessels, or mariners to crew them, but would have significant cost implications that would decrease the total amount of U.S. agricultural commodities we use in our programs, and the total number of beneficiaries we could reach with our assistance.

The report has no recommendation for USAID.

U.S. Agency for International Development  
1300 Pennsylvania Avenue, NW  
Washington, DC 20523  
[www.usaid.gov](http://www.usaid.gov)

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## Appendix IV: GAO Contacts and Staff Acknowledgments

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### GAO Contact

Andrew Von Ah, (202) 512-2834, or [vonaha@gao.gov](mailto:vonaha@gao.gov)

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### Staff Acknowledgments

In addition to the individual named above, Alwynne Wilbur (Assistant Director), Stephanie Purcell (Analyst in Charge), Amy Abramowitz, David Ballard, Geoff Hamilton, Bonnie Ho, Christopher Jones, Josh Ormond, Amy Rosewarne, and Kelly Rubin made key contributions to this report.

## Appendix V: Accessible Data

### Data Tables

**Accessible Data for Figure 1: U.S. Sealift Capacity, as of March 2018**

Total Government owned vessels	61
Military Sealift Command	15
Maritime Administration	46
Total U.S.-flag oceangoing commercial vessels	113
Internationally sailing	81
Other	13
Maritime Security Program	60
MSC Charter	8
Jones-Act eligible	32
MSC Charter	1
Other	31
Vessels enrolled in VISA	99

**Accessible Data for Figure 2: U.S.-flag, Oceangoing, Internationally Trading Fleet, End of Calendar Year 1990 through 2017**

Year	Total
1990	199
1991	188
1992	188
1993	176
1994	166
1995	151
1996	126
1997	121
1998	118
1999	110
2000	92
2001	95

Year	Total
2002	95
2003	96
2004	101
2005	100
2006	96
2007	100
2008	100
2009	104
2010	106
2011	106
2012	95
2013	89
2014	81
2015	76
2016	79
2017	82

**Accessible Data for Figure 3: Metric Tons of Government Cargo Shipped on Vessels in the Maritime Security Program in Fiscal Year 2016, by Vessel Type, for DOD, Food Aid, and Civilian Agencies' Non-Food Aid**

	DOD	Food aid	Civilian agencies' non-food aid cargo
General cargo (6)	27.4601	58.7324	4.43446
Roll-on/roll-off (16)	254.607	0	15.1186
Tanker (2)	0	0	291.487
Containership (35)	530.497	193.861	75.8248

**Accessible Data for Figure 5: Total U.S. Government Cargo, in Metric Tons, Fiscal Years 2004 through 2014**

Fiscal year	Humanitarian Food Aid	Civilian Agencies	Military Cargoes
2004	4.26245	1.07835	9.9082
2005	3.77884	0.929336	8.20584
2006	3.6549	0.60108	7.61719
2007	2.55376	0.531208	8.74693

Fiscal year	Humanitarian Food Aid	Civilian Agencies	Military Cargoes
2008	2.79482	0.486855	5.61172
2009	2.89885	0.52166	5.70352
2010	2.38753	0.56275	5.25443
2011	1.8545	0.585509	7.17047
2012	1.98234	0.684262	6.20867
2013	1.5561	0.719401	5.03744
2014	1.42982	0.495199	5.19428

**Accessible Data for Figure 6: Authorized Annual Stipend per Vessel in the Maritime Security Program, Fiscal Years 1996 through 2021**

Fiscal Year	Per Vessel Stipend (dollars in millions)
1996	2.1
1997	2.1
1998	2.1
1999	2.1
2000	2.1
2001	2.1
2002	2.1
2003	2.1
2004	2.1
2005	2.1
2006	2.6
2007	2.6
2008	2.6
2009	2.9
2010	2.9
2011	2.9
2012	3.1
2013	3.1
2014	3.1
2015	3.1
2016	3.5
2017	4.99995
2018	5
2019	5

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Fiscal Year	Per Vessel Stipend (dollars in millions)
2020	5
2021	5.23346

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## Agency Comment Letters

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### Accessible Text for Appendix II: Comments from the Department of Transportation

Andrew Von Ah

JUL 26 2018

U.S. Government Accountability Office (GAO)

441 G Street NW

Washington, DC 20548

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We appreciate the opportunity to respond to the GAO draft report. Please contact Madeline M. Chulumovich, Director, Audit Relations and Program Improvement, at (202) 366-6512 with any questions or if you would like to obtain additional details.

Sincerely,

Keith Washington,

Deputy Assistant Secretary for Administration

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Accessible Text for Appendix III: Comments from the U.S.  
Agency for International Development

Page 1

JUL 26 2018

Andrew Von Ah Director,

Physical Infrastructure Issues

United States Government Accountability Office

441 G Street, N.W.

Washington, D.C. 20548

Re: MARITIME ADMINISTRATION: Department of Transportation (DOT)  
Needs to Expediently Finalize the Required National Maritime Strategy  
for Sustaining the U.S.- Flag Fleet (GAO-18-478)

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Sincerely,

Angelique M. Crumbly

Acting Assistant Administrator

Bureau for Management

Enclosure: a/s



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Page 2

COMMENTS BY THE UNITED STATES AGENCY FOR  
INTERNATIONAL DEVELOPMENT (USAID) ON THE U.S.  
GOVERNMENT ACCOUNTABILITY OFFICE (GAO) DRAFT REPORT

- "MARITIME ADMINISTRATION: DOT Needs to Expediently Finalize  
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478)

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While GAO finds that cargo-preference requirements have helped to support the financial viability of U.S.-flagged vessels that participate in the Maritime Security Program (MSP) managed by the United States Department of Transportation, the vast majority of U.S. food- assistance cargo travels on vessels that are not useful for possible military purposes (i.e., vessels the United States Department of Defense has not included in the MSP). Consistent with previous reports from 1994, 2011, and 2015, the GAO acknowledges in this latest report that the role of cargo-preference requirements for food aid in supporting the U.S.-Flag Fleet is unclear. USAID's own analysis indicates that increases to cargo-preference requirements as applied to global food assistance would not likely increase the availability of militarily useful vessels, or mariners to crew them, but would have significant cost implications that would decrease the total amount of U.S. agricultural commodities we use in our programs, and the total number of beneficiaries we could reach with our assistance.

The report has no recommendation for USAID.

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## Congressional Relations

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